User Guide

X1D II 50C

2020-11-20

HASSELBLAD

Contents

1.1 WELCOME

Equipped with a brilliant 50-megapixel CMOS sensor, the X1D II 50C Mirrorless Medium Format Digital camera is the next instalment in the X System. Packed into the award-winning design of the first generation, the X1D II 50C continues to keep medium format photography portable with its compact build. Its upgraded electronic platform includes an enlarged 3.6-inch touch display and an enhanced EVF, a faster live view refresh rate, and an intuitive and even quicker user interface control. Connection via USB-C or Wi-Fi to Hasselblad's Phocus Mobile 2 allows for the ultimate, portable workflow. And with a huge range of high-quality optics to shoot with, including XCD, HC/HCD, XPan and V System Lenses, the creative possibilities are endless.

1.2 X1D II 50C FEATURES

MEDIUM FORMAT ADVANTAGES

Large sensor for unbeatable image resolution.
Super smooth colour and tone rendition.
Enlargements in breathtaking quality.
Shallow depth of field.

HASSELBLAD NATURAL COLOUR SOLUTION (HNCS)

HNCS technology integrated into the camera's system provides superb colour quality for skin tones and specific product hues, delivering exceptional, true-to-life colours that match what the human eye sees.

JPEG & RAW FILES

The JPEG files are HNCS-profiled so you can print straight from your folder for amazing quality. RAW files are retained for your final masterpieces.

DIGITAL LENS CORRECTION

Digital Lens Correction, applied at the file editing stage, takes a discerning look at any colour aberration, distortion and light fall-off however minor (which is inherent in any lens, anywhere) and resolves the situation automatically.

HASSELBLAD PHOCUS DIGITAL IMAGING SOFTWARE

The Hasselblad Phocus Digital Imaging Software is a Capture Processing and File Management Application aimed primarily at Hasselblad 3F file handling.
Phocus Mobile 2 offers advanced image editing, remote viewing and control when shooting tethered. Phocus Mobile 2 is free to download at Apple´s App Store for iPad Pro and iPad Air (2019 or later).

Note!
The X1D II 50C is not compatible with the previous version of Phocus Mobile.

FLASH

Nikon Flash Product range can be used in TTL-mode.
See Flash Compatibility on "X1D II Technical Specifications" on page 13 for details.

XCD SYSTEM LENSES

There are 10 new designed high performance lenses. All have a built-in lens shutter capable of flash sync up to 1/2000 sec.

XCD 21
XCD 30
XCD 45
XCD 45P
XCD 65
XCD 80
XCD 90
XCD 120 Macro
XCD 135 + X Converter 1,7
XCD 35-75 Zoom

XCD 21

XCD 30

XCD 45

XCD 45P

XCD 65

XCD 80

XCD 90

XCD 120 Macro

XCD 135 + X Converter 1,7

XCD 35-75

For more info, see page 25.

H SYSTEM LENSES

All H System lenses can be used with the optional XH Lens Adapter (see page 150). Autofocus functionality requires firmware version 18.0.0 or later in the H System Lens. Lenses with older firmware cannot be updated to AF functionality.

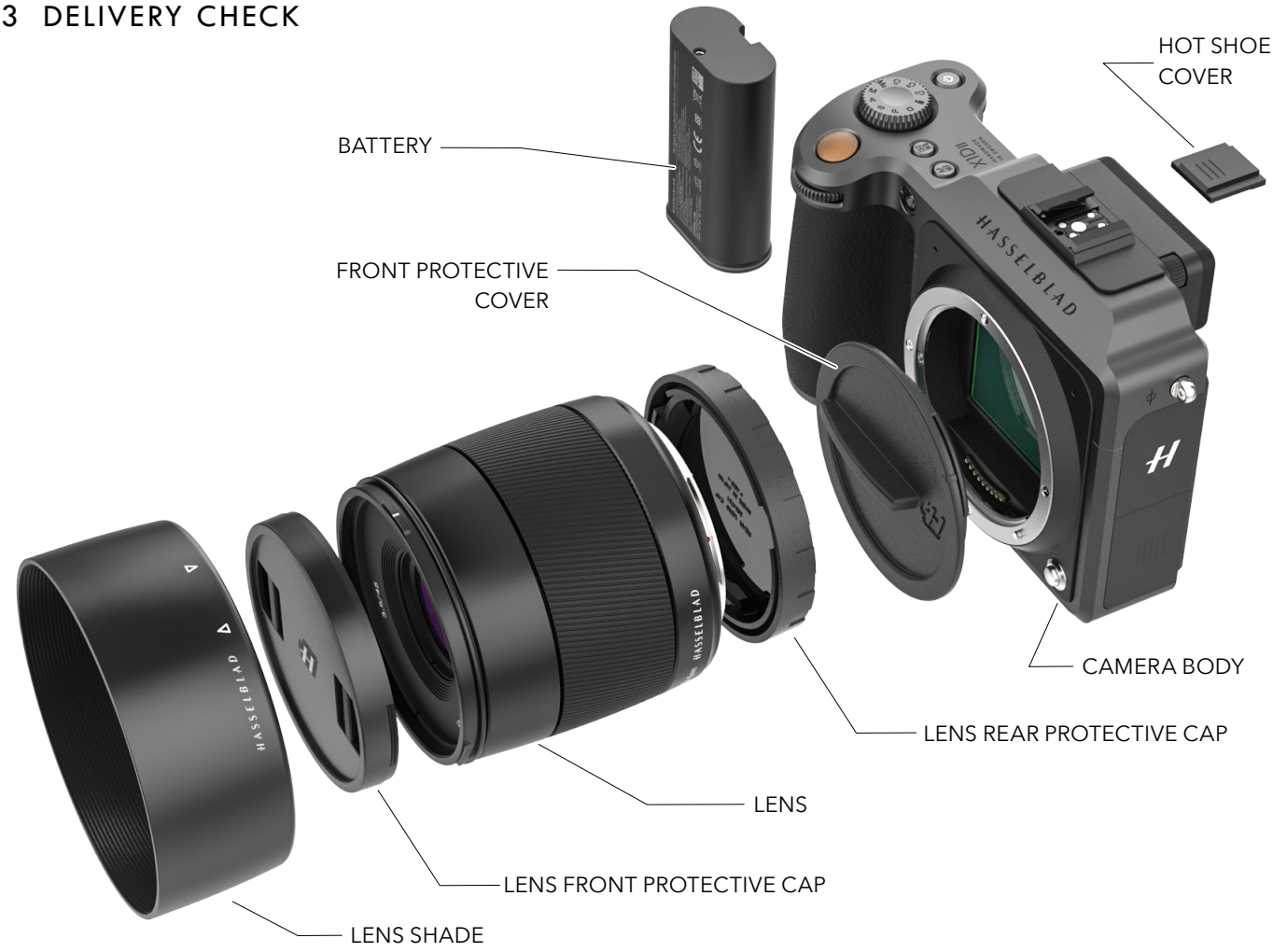
V SYSTEM AND XPAN SYSTEM LENSES

With the optional XV Lens Adapter and XPan Lens Adapter, the X1D II can use all lenses from the V System and XPan System in electronic shutter mode.

OTHER LENSES

There are a great number of 3rd party adapters available that will allow most other lenses to be used on the X1D II in electronic shutter mode.

1.3 DELIVERY CHECK



In the package

Camera Body.

Camera Front Protective Cover

Lens (if included in purchase)
- Lens Hood (Not the XCD 45P).
- Lens Protection Caps x2

3400 mAh rechargeable battery

Battery Protective Cap

Battery Charger (included in some countries)

USB 3 Cable Type A-C, 80 cm

Shoulder Strap

In the Box document

Disclaimer and Safety Guidelines

Warranty Leaflet

1.4 X1D II TECHNICAL SPECIFICATIONS

Camera Type	Medium Format Mirrorless Digital camera with Autofocus, Auto exposure, interchangeable lenses.
Construction	Machined aluminium. Tripod socket 1/4".
Sensor Type	CMOS, 50 megapixels (8272 × 6200 pixels, 5.3 × 5.3 µm).
Sensor Dimensions	43.8 × 32.9 mm
Image Size	Stills: 3FR RAW capture 106 MB on average. JPEG: Up to 22 MB, TIFF 8 bit: 154 MB. Video: 2.7K (2720 x 1530) and HD (1920 x 1080), max 29:59 minutes/clip). Video covers the full sensor width in a 16:9 ratio.
File Format	Hasselblad 3FR RAW, Full size JPEG. Video: H.264 Compressed (29.97 fps). 4:2:0 8 bit color.
Shooting Mode	Single shot stills, Video. Single and Continuous Drive, Self Timer, Interval Timer, Exposure Bracketing and Focus Bracketing.
Colour Definition	16-bit; Dynamic range up to 14 stops.
ISO Speed Range	ISO Auto, 100, 200, 400, 800, 1600, 3200, 6400, 12800, 25600.
Storage Options	Dual UHS-II SD cards or tethered to Mac or PC. Max 1 TB. SD Cards can be used in Overflow or Backup mode (images only). Recommended cards are listed below.
Colour Management	Hasselblad Natural Colour Solution (HNCS)
Storage Capacity	A 64 GB card holds approximately 600 RAW or 6000 JPEG High Quality images on average.
Capture Rate	2.7 frames per second (RAW)
User Interface	Touch interface including swipe, scroll and pinch/spread to zoom. Camera grip with buttons and Scroll Wheels. Many camera functions and settings can be controlled from a tethered computer or iPad Pro/iPad Air (2019) over Wi-Fi or tethered.
Display	3.6-inch TFT type, 24-bit colour, 2.36-million-dot; Touch functionality: Full support
Live View	On camera and host computer with high frame rate.
Viewfinder	OLED, 3.69-million-dot Electronic Viewfinder (EVF). Viewing Area : 100%. Magnification: 0.87x
Histogram Feedback	Yes, in Browse Mode on rear display and in EVF.
IR Filter	Mounted in front of sensor.
Acoustic Feedback	Yes
Software	Phocus for Mac and Windows. Compatible with Adobe Photoshop Lightroom® and Adobe Camera Raw® Phocus Mobile 2 for iPad Pro, iPad Air (2019) and iPhone (iOS 12 or later)
Platform Support	Macintosh: OS X version 10.12.2 or later. PC: XP/Vista/Windows 7 (32 and 64 bit)/ 8 / 10.
iOS device Support	iPad Pro, iPad Air (2019 or later) and iPhone (iOS 12 or later)
Host Connection Type	USB 3.0 (5 Gbit/s) Type-C connector.
Additional Connections	Audio In/Out.
Operating Temperature	-10 to 45 ˚C. 14 to 113 ˚F.
Wi-Fi & GPS	802.11 b, g, n, a, ac (a and ac depending on region). GPS built-in.

Continued on the next page.

X1D II TECHNICAL SPECIFICATIONS

Lenses	Hasselblad XCD lenses with built in electronically controlled shutter and aperture. Automatic or manual focusing with instant manual focus override. Lens shades can be mounted in reverse for transport. Compatible with all H System lenses and some H System accessories using an XH Lens Adapter. Also compatible with V System and XPan Lenses using a XV or XPan Lens Adapter. Many other lenses via 3rd party lens adapters (E-shutter only).
Shutter	Electronically controlled lens shutter with speeds up to 1/2000 s. Flash sync at all speeds. Optional electronic shutter
Shutter Speed Range	68 minutes to 1/2000 s with XCD Lenses. 1/800 s or 1/2000 s with HC/HCD Lenses. Electronic shutter 68 min to 1/10000 s.
Flash Sync Speed	Flash can be used at all shutter speeds. Mechanical shutter only.
Flash Control	TTL centre weighted system. Compatible with Nikon™ System flashes. ISO range 100 to 6400. Flash output can be adjusted (-3 to +3 EV) for fill-in purposes independent of ambient light. Sync at all shutter speeds. Mechanical shutter only.
Flash Compatibility	In TTL-mode, the following Nikon Flash products can be used: SB-300, SB-500, SB-5000, SB-700, SB-900, SB-910. The following Profoto products can be used in TTL-mode: A1, B1 and B2 with Nikon interface.
Focusing	Automatic and manual focusing. Instant manual focus override. Automatic focusing using contrast detection. 100% zoom or Focus Peaking available in manual focus. Up to 117 selectable autofocus points. Distance scale available in Live View.
Exposure Metering	Spot, centre weighted and centre spot.
Power Supply	Rechargeable Li-ion battery (7.27 VDC/3400 mAh). Compatible with the 3200 mAh battery. Can be charged in camera via USB or with optional external charger.
Dimensions	Complete camera with XCD 45P lens: 148 x 97 x 102 mm [W x H x D]. Camera Body only: 148 x 97 x 70 mm
Weight	1086 g (Complete camera with XCD 45P lens, Li-ion battery and card). 650 g (Camera Body). 766 g (Camera Body with Li-ion battery and SD Card).

1.5 SYSTEM REQUIREMENTS

Storage and editing of images requires certain minimum computer capabilities. Large images require a reasonably high performance computer with sufficient memory, advanced graphics capabilities and a recent operating system.
It is recommended that the computer has a USB 3 connector, which will allow you to load images more quickly from the camera. Requirements for iPad/iPhone are listed on page 12.

1.6 NEW IN THIS VERSION

This User Guide describes the functionality available with X1D II 50C firmware version 1.4.0 or later.

- **New Accessory**
  A new accessory, the XH Converter 0,8 is introduced. See more on page 150.
- **Distance scale in live view**
  A new distance scale overlay is added to live view. This function requires firmware version 0.6.0 for XCD lenses (0.1.26 for the XCD 45P). See pages 81 and 83.
- **New setting**
  The language setting has been changed to include a unit of distance. See page 135.
- **New function in Interval Timer**
  It is now possible to select exposure metering for each frame or for first frame only. Metering for each frame improves Time Lapse photography in changing lighting conditions. See pages 58 and 60.
- **New option for Interval Timer**
  The number of frames setting has been changed.
  Before: 2, 3, 4, ..., 97, 98, 99, No Limit
  Now: 2, 3, 4, ..., 23, 24, 25, 30, 35, ..., 95, 100, 150, 200, ..., 900, 950, 1000, No Limit. See page 60.
- **New features with Phocus Mobile 2**
  - Increased Live View quality.
  - A change in White Balance setting in Phocus Mobile 2 will be synchronized to the camera.
  See separate User Guide for Phocus.
- **EV value**
  Added information about EV (Exposure Values) on page 157.

1.7 ABOUT THIS USER GUIDE

The X1D II User Guide is designed for on-screen PDF reading to take advantage of the interactivity functions and search tools.

INTERACTIVE PDF

You can navigate the User Guide by selecting a chapter in the Table of Contents. This interactive feature is available on nearly all PDF readers, computer platforms and web browsers. All pages contain a link to the Table of Content and most page references also work as a link.

SEARCH TOOLS

On most PDF readers you can use the Search Tool to find a specific subject, function or setting.

PRINTING THE X1D II USER GUIDE

Please note that the format is A4 to conform with the most common standard. Therefore if printing to US Letter format or similar please ensure you select “Fit to Printable Area” in the page scaling dialogue.

1.8 GLOSSARY

In this User Guide a few different terms are used:

Tap: This means to touch a value or icon on the display with your finger briefly. This only works with a bare finger or when special touch-display gloves are used.
Double-tap: Quickly tap the same location on the display within 1 second. This is mainly used to zoom in an image or Live View.
Long-press: Press and hold for one second.
Swipe: A sliding movement is when you press and hold the finger and slide in one direction. This is typically used when selecting a value from a list or when panning in a zoomed-in image.
Spread: Place two fingers on the display and move them apart. Typically used for zoom in.
Pinch: Place two fingers on the display with a distance between and move the fingers together. Typically used when zooming out.
Tethering: When the Camera is connected with a USB cable to a computer or an iPad Pro/iPhone with a USB cable or Wi-Fi.

1.9 UPDATE X1D II CAMERA FIRMWARE

The X1D II Camera system can be updated with improvements and new functions.

Before you start to use your new X1D II camera, please visit www.hasselblad.com and download the latest X1D II camera firmware and update the camera system to make sure you get the latest functionality.
See page 137 for an in-depth description on how to download the camera firmware and update your X1D II camera.

Photo Credits
Ian Lawson: 93, 94, 95, 96, 97, 100, 147, 150.
Mads Selvig: 146, 147.
Mattias Hammar: 69, 113.
Jens Karlsson: 95.
Philip Liljenberg: 116.

1.10 BATTERY

Rechargeable Battery
The environmentally approved Battery is the standard Power Source for the X1D II Camera (1). It is advisable to keep an extra fully recharged battery on hand. As is the case with most batteries, problems might be encountered when used in very low temperatures. In this situation it is advisable to keep the reserve battery inside a warm pocket, for example, to maintain it near body temperature.

How to remove a Battery

1 Remove the battery **(1)** from the camera by rotating the battery lever **(2)**.
2 The battery will move up a bit **(3)** automatically.
3 Then press the battery in a bit but not all the way, to release it from the camera completely.
4 Remove the battery **(4)**.
5 The first time you use the camera after unboxing, please remove the plastic tab **(5)** on the battery before re-inserting.

How to mount a Battery

1 Align the battery with the contacts facing the lens and push it into the battery compartment until it locks into place.

Note!
When the battery is inserted, the rear Status LED will show a blink sequence once to indicate the current battery charge level. See next page for details.

Note!
If the camera doesn't start up when a new battery is inserted, connect the camera via USB to a computer or a charger.
You can also remove the battery and place it in the optional Charging Hub accessory.

1.11 CHARGING THE BATTERY

BATTERY CHARGER

The X1D II is supplied with a USB power adapter for charging the camera battery through the USB port of the camera.

CHARGE THE BATTERY

Turn off the camera and insert the USB-C plug from the battery charger into the USB socket on the camera **(A)**. Insert the battery charger into a standard (100–240V~ /50–60 Hz) domestic socket.

CHARGING FROM THE USB PORT

When the battery is charging, the Status Led **(B)** indicates the current charge level by blinking with Orange color. See illustration to the right. E.g. if the battery has about 50% charge level, the LED will blink two times and then be turned off for a short period. The blinking sequence is repeated.

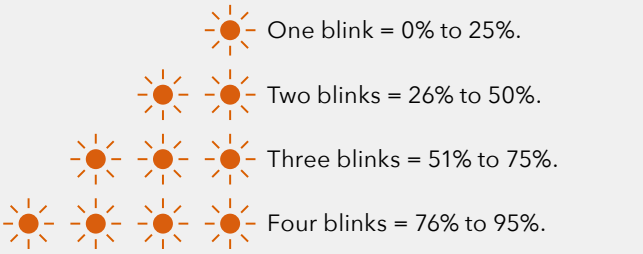
See also Battery Charging Hub accessory on page 153.

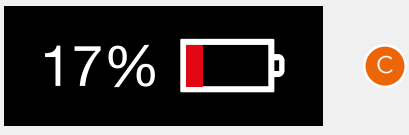
BATTERY WARNING AND CAMERA SHUT-DOWN

When capacity battery reaches 17%, the battery symbol on the control screen and in live view will change to red color **(C)**.

At 0%, the camera will shut down completely.

Note!
The camera can show current battery capacity in % on the control screen by activating the setting as described on page 131.





1.12 ATTACHING THE SHOULDER STRAP

Attach the included shoulder strap to the camera by following these instructions:

A Attach the leather end **(1)** of the strap to the metal strap lug **(2)**.

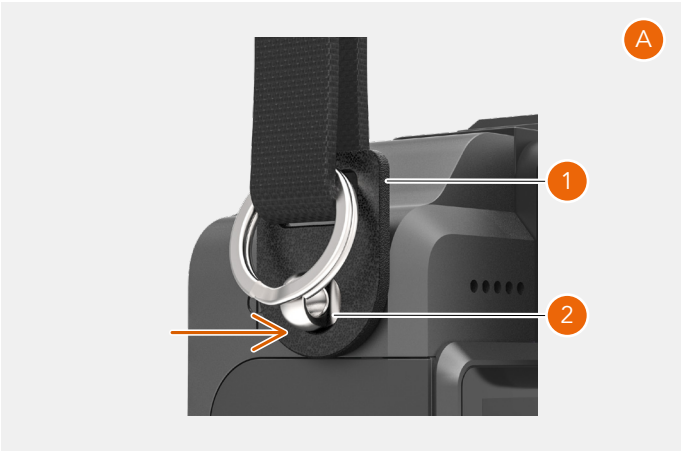
B Open the metal ring **(3)** with a sharp tool. E.g. a screwdriver or a small knife. Be careful not to scratch the camera.

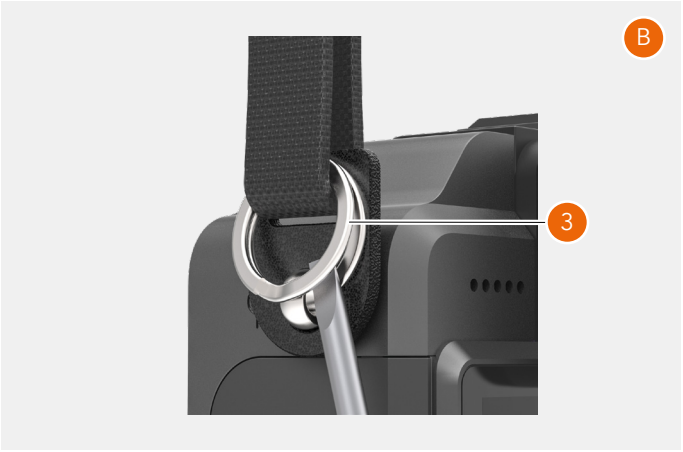
C Insert the open end of the metal ring into the hole of the strap lug. Rotate the ring one full turn and make sure it is fully attached to the strap lug.

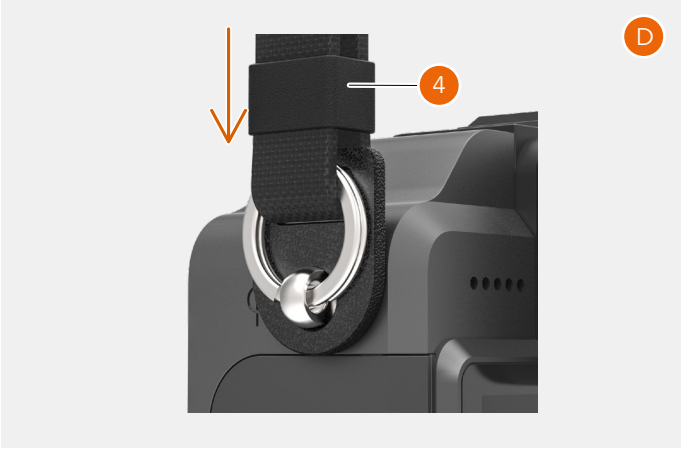
D Finally, slide the plastic fastener **(4)** down.

Repeat the process for the other side of the camera.

Note!
If the strap is exposed to strong pulling force there is a risk that the metal rings or the strap itself can be damaged. Regularly check the condition and replace the rings or the entire strap if necessary.







2.1 SAFETY GUIDELINES

CAMERA

Usage

- Only place the camera on a flat and stable surface. Otherwise, the camera or lens may fall, causing serious damage to the apparatus.
- DO NOT use the camera in environments that are wet, smoky, dusty, or contain inflammable gases or materials.
- Make sure to waterproof the camera during thunderstorms. Otherwise, it may lead to a fire hazard.
- DO NOT use the camera where the temperature is too high or too low. Otherwise, the performance of the camera may be affected and the service life may be decreased.
- Immediately power off the camera and remove the battery if there is any abnormality including, but not limited to, smoke and strange odors. Contact Hasselblad or Hasselblad authorized dealers for further assistance.
- DO NOT disassemble or modify the camera. Otherwise, the warranty will be invalidated.
- DO NOT stand too close in front of the flash when the flash unit is activated. Otherwise, your eyesight may be temporarily affected.
- Make sure the SD card is in good condition. DO NOT insert or remove the SD card when the status LED of the camera is blinking. Otherwise, the data may be lost, and the SD card may be damaged.
- Make sure to respect and abide by people's privacy rights when using this camera.
- Make sure to use a compatible battery to supply power.
- Storage and Transportation
- In humid conditions, it is recommended to use a camera dry box, humidity cabinet, or silica gel sachets.
- Place the camera out of the reach of small children.
- DO NOT place heavy objects on the camera.
- DO NOT store the camera in a place where the temperature of the environment is too high or too low.

MAINTENANCE

- Keep the camera clean and free of dirt and buildup. Attach the protection cover lid to the camera when the lens is detached. Otherwise, dust and dirt may be attracted to the sensor.
- This product is delicate. Strictly follow the instructions in the user guide to clean the camera.
- Contact Hasselblad or Hasselblad authorized dealers for professional assistance to clean the camera.

BATTERY

Usage

- DO NOT allow the battery to come into contact with any liquid. DO NOT drop the battery into water. If the inside of the battery comes into contact with water, corrosion may occur, potentially resulting in the battery catching on fire, and may even lead to an explosion.
- DO NOT use or charge a leaky or damaged battery. If a battery is abnormal, contact Hasselblad or a Hasselblad authorized dealer for further assistance.
- The battery should be used in temperatures ranging from -10° to 40° C (14° to 104° F). Use of the battery in environments above 50° C (122° F) can lead to a fire or explosion. Use of battery below -10° C (14° F) can lead to permanent damage.
- DO NOT disassemble or pierce the battery in any way or the battery may leak, catch fire, or explode.
- Electrolytes in the battery are highly corrosive. If any electrolytes contact your skin or eyes, immediately wash the affected area with fresh running water for at least 15 minutes, and then see a doctor immediately.
- DO NOT use the battery if it was involved in a collision or heavy impact.
- DO NOT put batteries in a microwave oven or a pressurized container.
- DO NOT put loose cells in a pocket, bag, or drawer where they may short-circuit against other items or where the battery terminals may be pressed against each other.
- DO NOT drop or strike batteries.
- DO NOT place heavy objects on the batteries or charger.
- Clean battery terminals with a clean, dry cloth.

Battery Charging

- DO NOT charge the battery near flammable materials or on flammable surfaces (e.g., carpet or wood).
- Charging the battery outside of the temperature range of 5° to 40° C (41° to 104° F) may lead to leakage, overheating, or damage to the battery. The ideal charging temperature is 15° to 25° C (59° to 77° F).
- Disconnect the charger when not in use. Check the charger regularly for damage to the cord, plug, enclosure, or other parts. DO NOT use a damaged charger.

Battery Storage

- Keep batteries out of the reach of small children and animals.
- Remove the battery from the camera if you intend to store the camera for an extended period. Discharge the battery to a power level between 30 and 60% and place the battery at room temperature. The battery power level can be checked through the touch screen of the camera.
- DO NOT leave the battery near heat sources such as an open fire or heater. DO NOT leave the batteries inside a vehicle on hot days.
- Keep the battery dry. DO NOT drop the battery into water.
- DO NOT drop, strike, impale, or manually short-circuit the battery.
- If a battery is damaged, dispose of it in a suitable recycling container by strictly following your local regulations. DO NOT transport a damaged battery.
- DO NOT store the battery for an extended period after fully discharging it. Otherwise, the battery may over-discharge and cause irreparable damage to the battery cell.
- The battery enters hibernation mode if depleted and stored for an extended period. Recharge the battery to bring it out of hibernation.

Battery Disposal

- Dispose of the battery in a suitable recycling container only after fully discharging it. DO NOT place the battery in a regular trash container. Strictly follow your local regulations regarding the disposal and recycling of batteries.

Battery Maintenance

- Fully charge and discharge the battery at least once every three months to maintain the performance of the battery.
- DO NOT store the battery in environments with a temperature higher than 45° C (113° F) or lower than 0° C (32° F). Before carrying the battery on an airline flight, it must first be discharged to a power level below 30%. Only discharge the battery in a fireproof location.

FCC COMPLIANCE NOTICE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: **(1)** This device may not cause harmful interference, and **(2)** This device must accept any interference received, including interference that may cause undesired operation.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF EXPOSURE INFORMATION

This device (X1D MARK II; model: X1D MARK II) is compliance with SAR for uncontrolled FCC exposure limits and had been tested in accordance with the measurement methods and Procedures specified in IEEE1528 and IEC 62209, this equipment should be installed and operated with minimum distance 1 cm between the radiator and your face when close to eye operation. And minimum distance 20 cm between the radiator and your body when hand-held operation.
This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED WARNING

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: **(1)** This device may not cause interference. **(2)** This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : **(1)** L'appareil ne doit pas produire de brouillage; **(2)** L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

INFORMATIONS SUR L'EXPOSITION RF

Ce dispositif (X1D MARK II; modèle X1D MARK II) est conforme aux normes SAR pour les limites d'exposition ISED non contrôlées et a été testé conformément aux méthodes et procédures de mesure spécifiées dans IEEE1528 et IEC 62209, cet équipement doit être installé et fonctionne avec une distance minimale de 1 cm entre le radiateur et votre visage lorsque le fonctionnement est proche de l'œil. Et distance minimale 20 cm entre le radiateur et votre corps lors de l'opération manuelle.
Cet appareil et son (ses) antenne (s) ne doivent pas être co-localisés ou fonctionner en conjonction avec une autre antenne ou émetteur.

KCC WARNING MESSAGE

"해당무선설비는 운용 중 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다."
"해당 무선설비는 운용 중 전파혼신 가능성이 있음"

NCC WARNING MESSAGE

低功率電波輻射性電機管理辦法
第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

EU COMPLIANCE STATEMENT

VICTOR HASSELBLAD AKTIEBOLAG hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the Directive 2014/53/EU.
EU contact address: Utvecklingsgatan 2, 41756 Göteborg, Sweden.

DECLARACIÓN DE CUMPLIMIENTO UE:

VICTOR HASSELBLAD AKTIEBOLAG por la presente declara que este dispositivo cumple los requisitos básicos y el resto de provisiones relevantes de la Directiva 2014/53/EU.
Dirección de contacto de la UE:
Utvecklingsgatan 2, 41756 Göteborg, Sweden

EU-VERKLARING VAN OVEREENSTEMMING:

VICTOR HASSELBLAD AKTIEBOLAG verklaart hierbij dat dit apparaat voldoet aan de essentiële vereisten en andere relevante bepalingen van Richtlijn 2014/53/EU.
Contactadres EU: Utvecklingsgatan 2, 41756 Göteborg, Sweden

DECLARAÇÃO DE CONFORMIDADE DA UE:

A VICTOR HASSELBLAD AKTIEBOLAG declara, através deste documento, que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes da Diretiva 2014/53/EU.
Endereço de contacto na UE: Utvecklingsgatan 2, 41756 Göteborg, Sweden

DICHIARAZIONE DI CONFORMITÀ UE:

VICTOR HASSELBLAD AKTIEBOLAG dichiara che il presente dispositivo è conforme ai requisiti essenziali e alle altre disposizioni rilevanti della direttiva 2014/53/EU.
Indirizzo di contatto UE: Utvecklingsgatan 2, 41756 Göteborg, Sweden

DÉCLARATION DE CONFORMITÉ UE :

Par la présente, VICTOR HASSELBLAD AKTIEBOLAG déclare que cet appareil est conforme aux principales exigences et autres clauses pertinentes de la directive européenne 2014/53/EU.
Adresse de contact pour l'UE : Utvecklingsgatan 2, 41756 Göteborg, Sweden

EU-COMPLIANCE:

Hiermit erklärt VICTOR HASSELBLAD AKTIEBOLAG., dass dieses Gerät den wesentlichen Anforderungen und anderen einschlägigen Bestimmungen der EU-Richtlinie 2014/53/EU entspricht.
Kontaktadresse innerhalb der EU: Utvecklingsgatan 2, 41756 Göteborg, Sweden

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Environmentally friendly disposal

Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.

Umweltfreundliche Entsorgung

Elektro-Altgeräte dürfen nicht mit gewöhnlichem Abfall entsorgt werden und müssen separat entsorgt werden. Die Entsorgung an kommunalen Sammelstellen ist für Privatpersonen kostenlos. Die Eigentümer der Altgeräte sind für den Transport zu den Sammelstellen verantwortlich. Durch diesen geringen Aufwand können Sie zur Wiederverwertung von wertvollen Rohmaterialien beitragen und dafür sorgen, dass umweltschädliche und giftige Substanzen ordnungsgemäß unschädlich gemacht werden.

Tratamiento de residuos responsable con el medio ambiente

Los aparatos eléctricos viejos no pueden desecharse junto con los residuos orgánicos, sino que deben ser desechados por separado. Existen puntos limpios donde los ciudadanos pueden dejar estos aparatos gratis. El propietario de los aparatos viejos es responsable de llevarlos a estos puntos limpios o similares puntos de recogida. Con este pequeño esfuerzo estás contribuyendo a reciclar valiosas materias primas y al tratamiento de residuos tóxicos.

Mise au rebut écologique

Les appareils électriques usagés ne doivent pas être éliminés avec les déchets résiduels. Ils doivent être éliminés séparément. La mise au rebut au point de collecte municipal par l'intermédiaire de particuliers est gratuite. Il incombe au propriétaire des appareils usagés de les apporter à ces points de collecte ou à des points de collecte similaires. Avec ce petit effort personnel, vous contribuez au recyclage de matières premières précieuses et au traitement des substances toxiques.

Smaltimento ecologico

I vecchi dispositivi elettrici non devono essere smaltiti insieme ai rifiuti residui, ma devono essere smaltiti separatamente. Lo smaltimento da parte di soggetti privati presso i punti di raccolta pubblici è gratis. È responsabilità del proprietario dei vecchi dispositivi portarli presso tali punti di raccolta o punti di raccolta analoghi. Grazie a questo piccolo impegno personale contribuirete al riciclo di materie prime preziose e al corretto trattamento di sostanze tossiche.

Milieuvriendelijk afvoeren

Oude elektrische apparaten mogen niet worden weggegooid samen met het restafval, maar moeten afzonderlijk worden afgevoerd. Afvoeren via het gemeentelijke inzamelpunt is gratis voor particulieren. De eigenaar van oude toestellen is verantwoordelijk voor het inleveren van de apparaten op deze of vergelijkbare inzamelpunten. Met deze kleine persoonlijke inspanning lever je een bijdrage aan de recycling van waardevolle grondstoffen en de verwerking van giftige stoffen.

Eliminação ecológica

Os aparelhos elétricos antigos não podem ser eliminados juntamente com os materiais residuais. Têm de ser eliminados separadamente. A eliminação no ponto de recolha público através de entidades particulares é gratuita. É da responsabilidade do proprietário de aparelhos antigos levá-los a estes pontos de recolha ou a pontos de recolha semelhantes. Com este pequeno esforço pessoal, contribui para a reciclagem de matérias-primas úteis e para o tratamento de substâncias tóxicas.

Thailand Warning message

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามข้อกำหนดของ กทช.

Mexico Warning message

“La operación de este equipo está sujeta a las siguientes dos condiciones: **(1)** es posible que este equipo o dispositivo no cause interferencia perjudicial y **(2)** este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.”

Brazil Warning message

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário

3.1 XCD LENSES

The XCD Lenses feature a built-in Central Lens Shutter, providing shutter speeds up to 1/2000 second. Flash sync is possible at all shutter speeds. They also feature a manual focusing ring that can be used at all times when the camera is powered on. The Lens comes with a metal Lens Shade that can be mounted in reverse for transport.

For more information about the XCD Lens Range, please see page 30. You can also download technical data sheets from the Hasselblad website, www.hasselblad.com.

1 Lens shade index for reverse mount
2 Lens shade index
3 Focusing ring
4 Lens index

3.2 REMOVE AND ATTACH A LENS

REMOVE THE LENS

Caution!
Be careful when you attach/remove the components to/from the camera. This will help prevent damage to the data bus connections.

Caution!
Do not insert fingers into the camera body. This can cause damage to the equipment.

1 Hold the lens **(C)** with one hand and hold the camera body **(A)** still.
2 Push the lens removal button **(B)**.
3 Rotate the lens counter clockwise.
4 Push the lens **(C)** away from the camera body.
5 Attach the protection cover **(D)** on the camera body directly.
6 Attach the lens protection caps on the detached lens to prevent damage.
7 Store the lens with both lens protection caps on and the lens hood inverted over the lens instead of in front of the lens **(E)**.

ATTACH THE LENS

Caution!
Be careful when you attach/detach the components to/from the camera. This will help prevent damage to the data bus connections.

Caution!
Do not insert fingers into the camera body. This can cause damage to the equipment.

1 Push the lens removal button **(A)** and remove the protection cover **(B)** from the camera body.
2 Rotate the lens so that the red mark on the lens **(C)** lines up with the red mark **(D)** on the camera body.
3 Mount the lens **(E)** into the camera body **(F)** and then turn the lens clockwise to lock its position.
4 Make sure the lens is locked to the camera body before using or moving the camera.

REMOVE THE LENS CAP

1 Insert thumb and index finger into the recesses **(A)**.
2 Pinch the recesses together.
3 Remove the front lens cap.

ATTACH THE LENS CAP

1 Insert thumb and index finger into the recesses **(A)**.
2 Pinch the recesses together.
3 Attach the front lens cap on the lens until it snaps into place.

REMOVE THE LENS SHADE

All lenses are supplied with lens shades that additionally provides extra protection for transport and storage when mounted in reverse.

1 Turn the lens shade **(A)** counter-clockwise.
2 Remove the lens shade.

ATTACH THE LENS SHADE

All lenses are supplied with lens shades that additionally provides extra protection for transport and storage when mounted in reverse.

1 Place the lens shade on the lens.
2 Make sure that the index on the lens shade **(A)** aligns with the index on the front of the lens **(B)**.
3 Turn the lens cap clockwise until it snaps into place.

3.3 XCD LENS RANGE

XCD 4/21

The XCD 21 is the ultra wide-angle lens for the X1D II. Its extremely short focal length provides a 17 mm full frame equivalent lens, making it perfect for landscape and architecture photography.

XCD 3.5/30

The XCD 30 is a wide-angle lens for the X1D II. Its focal length provides a 24 mm equivalent field of view, making it the perfect landscape, reportage and travel lens.

XCD 3.5/45

The XCD 45 is the ideal standard lens for the X1D II. Its moderate wide-angle focal length provides a 35 mm equivalent field of view, making it the perfect general purpose lens.

XCD 4/45P

The XCD 45P is a highly compact lens for the X1D. Its focal length provides a 35 mm equivalent field of view, making it a perfect general purpose and travel lens.

XCD 2.8/65

The XCD 65 mm is a normal lens for the X1D II. Its focal length provides a 50 mm equivalent field of view. Its high aperture and excellent close-range performance makes it perfect for general type of photography as well as for reproduction.

XCD 1.9/80

The XCD 80 is a high-aperture lens, providing very short depth-of-field with beautiful Bokeh, especially useful for available light portrait photography. It has a 63 mm equivalent field of view.

XCD 3.2/90

The XCD 90 is a light and compact short telephoto lens for the X1D II. Its moderate focal length provides a 71 mm equivalent field of view, making it a perfect all-round lens.

XCD 3.5/120 MACRO

The XCD 120 is the ideal macro lens for the X1D II. It is suitable for both close-up work and for portrait or other photography requiring a longer focal length. Focuses down to an image scale of 1:2. It has a 95 mm equivalent field of view.

XCD 2.8/135 AND X CONVERTER 1.7

The XCD 135 is a moderate tele-photo lens with a dedicated 1.7x converter, providing a 4.8/230mm lens. 35 mm equivalent focal lengths are 107 and 181 mm.

XCD 3.5-4.5/35-75

This Zoom lens is ideal for photographers who are looking to keep the amount of equipment they carry when travelling to a minimum but don't want to compromise on image quality. Focuses down to 0.42m (W) / 0.6m (T). It has a 28-58 mm equivalent field of view.

FILTERS

The XCD Lenses have a threaded filter mount with diameter as shown in the table to the right.

As there is no rotation of the front section of the lens when the focus is changed, the filter do not rotate either. This is particularly useful when using polarizing or graduated filters where the orientation is critical.

LENS	FILTER DIAMETER
XCD 21	ø 77mm
XCD 30	ø 77mm
XCD 45	ø 67mm
XCD 45P	ø 62mm
XCD 65	ø 67mm
XCD 80	ø 77mm
XCD 90	ø 67mm
XCD 120 Macro	ø 77mm
XCD 135	ø 77mm
XCD 35-75	ø 77mm

4.1 PARTS, COMPONENTS, BUTTONS AND CONTROLS

All parts listed in this chapter, are described in detail in other specific sections.

1 Mode Dial
2 Shutter Release Button
3 Front Scroll Wheel
4 AF Illuminator LED
5 Camera Grip
6 Stop Down Button

7 AE Lock Button
8 AF Drive Button
9 Rear Scroll Wheel
10 Browse Button
11 Rectangle Button
12 Star Button
13 Cross Button/Delete Image
14 Menu Button

15 Electronic Viewfinder EVF
16 Speaker
17 Strap Lug
18 Eye Sensor
19 Touch Display
20 Status LED

1 Flash Hot Shoe
2 Shutter Release Button
3 Mode Dial
4 On / Off Button
5 Strap Lug

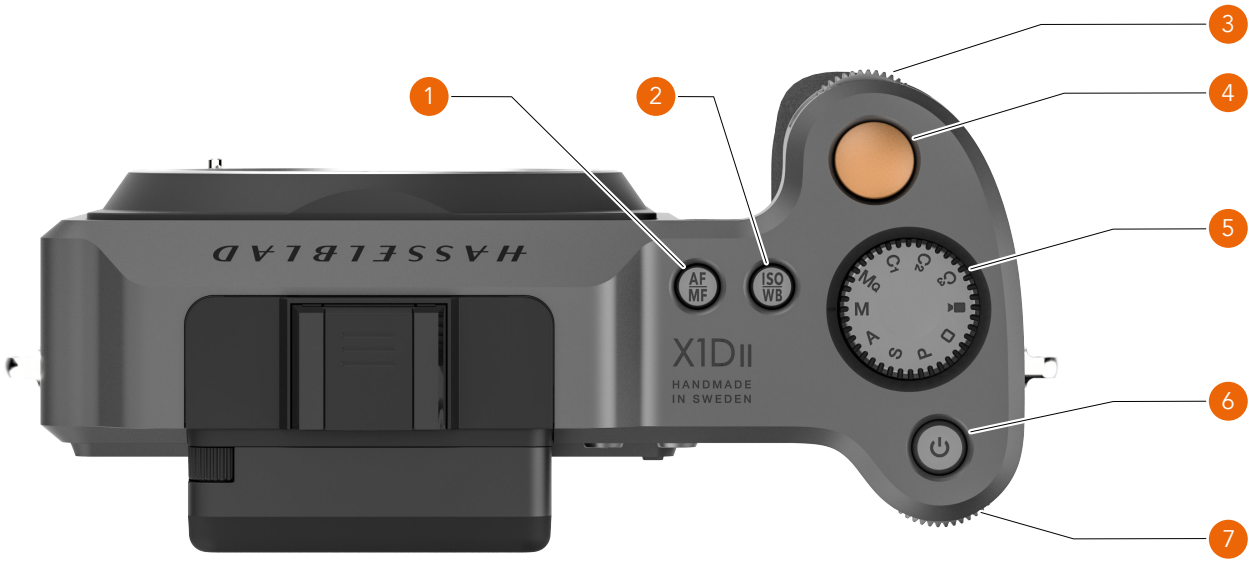
6 Microphone Right
7 Microphone Left
8 Image Plane Mark
9 SD Cards Slot Lid
10 Connectors Slot Lid
11 Lens Release Button

Adjust Dioptre

1 Dioptre Adjustment Wheel.
2 Rotate the Dioptre Adjustment Wheel to adjust to desired setting.

3 Tripod Thread 1/4”
4 Battery Release Lever
5 Battery

4.2 GRIP BUTTONS AND CONTROLS



1 **AF/MF button**
The AF/MF button toggles between Autofocus and Manual Focus.
Can be reprogrammed as described on 126.

2 **ISO/WB button**
This button provides direct access to the ISO and WB settings. Press one time to change ISO settings. Press again to change WB settings.
Can be reprogrammed as described on 126.

3 **Front Scroll Wheel**
The front and Rear Scroll Wheels are used to make changes in exposure settings, navigate the Touch Display Menu as well as acting as browse controls.

4 **Shutter Release Button**
This button has two positions. Press half way (or soft) to activate the camera, auto focus function and exposure meter. Press all the way down (or more firm) to release the shutter. The chosen exposure procedure and the self timer are also activated with this button.

5 **Mode Dial**
Select any of the 10 programs. MQ, M, A, S, P , Full Automatic mode, Video mode and 3 Custom modes C3, C2 and C1.

6 **ON / OFF button**
Press the button for 1 second to turn on the camera. The X1D II start up logo will appear and then the Control Screen. After a few seconds (customizable) of inactivity the camera will enter Display Off mode. A long press on the button turns the camera off completely (even from Display Off mode). A short press on the button toggles Touch Display On and Off.

7 **Rear Scroll Wheel**
The scroll wheel is used to make changes in exposure settings, to navigate the Camera menus as well as acting as browse control.

Note!
Some of the buttons have multiple functions according to the settings made.

Note!
Some of the buttons can be reprogrammed to a different function. See 126.

Note!
In addition to the release button, the X1D II camera can also be remotely released using the X System Release Cable. See 75 and 153.

4.3 CAMERA BODY BUTTONS AND CONTROLS

1 **AE-L Button**
This button activates AE-L that locks a light reading made in both automatic and manual exposure modes. It also acts as a Zoom out button when browsing or as Exit button when making a setting change on the Camera, according to mode.

2 **AF-D Button**
The AF Drive button (AF-D) starts the Autofocus process. Press to start Autofocus and release to stop the Autofocus function. The rectangle in the centre of the Viewfinder changes colour depending on the Autofocus process.

Black - Normal mode. Autofocus is not analysing the subject.
White - Autofocus is ongoing and analysing the subject.
Green - Autofocus performed and focus is set correct.
Red - Autofocus failed to focus and is not set correct.

3 **Rear Scroll Wheel**
The Rear Scroll Wheel controls different settings according to the selected function.

4 **Shutter Release Button**
This button has two positions. Press half-way (or soft) to activate the camera, auto focus function and exposure meter. Press all the way down (or firm) to release the shutter. The chosen exposure procedure and the self timer are also activated with this button.

5 **Front Scroll Wheel**
The Front Scroll Wheel controls different settings according to the selected function.

6 **Stop Down Button**
Press to make a visual check of the depth-of-field on the viewfinder screen at the chosen aperture. The aperture will close according to the setting and remain closed as long as the pressure is maintained. You can alter the aperture at the same time to see the changes taking place.
Can be reprogrammed as described on 126.

4.4 MODE DIAL

Mode Dial Selector
The Mode Dial Selector **(1)** displays the Camera Mode in use. There are 10 different programs selectable on the Mode Dial.

The Different Camera Modes

Mᴏ	Manual Quick Mode.
M	Manual Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.
Rectangle	Automatic Mode (ISO and WB are also automatically set).
Video	Video Recording Mode.
C3	Custom Program 3.
C2	Custom Program 2.
C1	Custom Program 1.

How to lock the Mode Dial
The Mode Dial Selector can be locked by pushing it down **(2)**.

Mode Dial Unlocked (Up)

How to unlock the Mode Dial
When in locked mode, push once to unlock the Mode Dial Selector **(3)**.

Mode Dial Locked (Down)

4.5 EXPOSURE PROGRAM MODES

There are 7 different fixed programs and 3 Custom Programs, C3, C2 and C1. The Programs can be selected by turning the Mode Dial **(1)**. In the illustration to the right, the camera is set to Manual Exposure mode (M).

Programs

Mᴑ	Manual Quick Mode.
M	Manual Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.
Rectangle	Full Automatic Mode (ISO and WB are also automatically set).
Video	Video Recording Mode.
C3	Custom Program 3.
C2	Custom Program 2.
C1	Custom Program 1.

In Manual Mode, Aperture is set by the Front Scroll Wheel and the Shutter Speed by the Rear Scroll Wheel.

In the Automatic Modes, the Aperture and Shutter Speed settings are controlled by the Camera, either partially or completely according to setting. There are four automatic modes: A, S, P and Full Automatic Mode (Rectangle).

MODE	FRONT WHEEL	REAR WHEEL
M, Mᴑ	Aperture	Shutter Speed
A	Aperture	Quick Adjustment
S	Shutter Speed	Quick Adjustment
P	Program Shift	Quick Adjustment
▭	No function	No function
Video	Aperture	Shutter Speed
C1	Depends on Mode	
C2	Depends on Mode	
C3	Depends on Mode	

MANUAL EXPOSURE MODE

Manual mode provides total user control of the shutter and aperture settings. In this mode the aperture settings and shutter speed are manually chosen by turning the front and rear scroll wheels.

The standard exposure setting is obtained when the pointer over the exposure scale is positioned above the central index (in the viewfinder display).

Any deviation from this standard setting is displayed by:

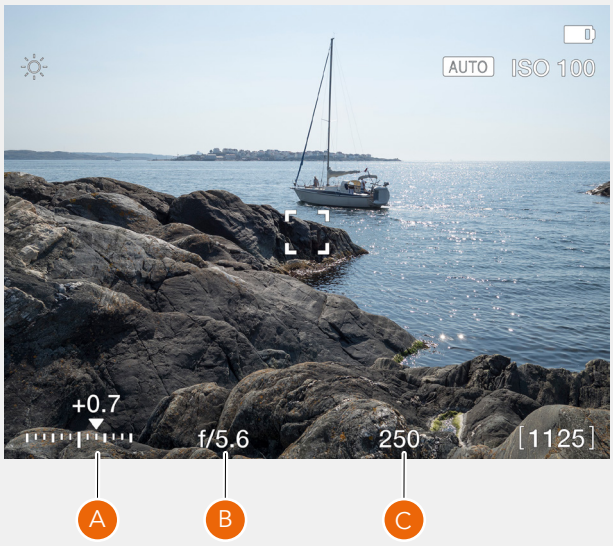
- The pointer appearing elsewhere than above the central index
- Figures above the scale representing the amount of adjustment in EV steps.

A '+ 0.7' above the scale in the display **(A)**, would indicate a '0.7 EV overexposure' setting. Conversely, a '-2', for example, would indicate a '2EV underexposure' setting. Note that the appearance of a +/- symbol on the display and in the viewfinder, in manual mode, means that a change has been made to the exposure compensation setting. See later section on Exposure compensation.

The actual aperture settings **(B)** and shutter speed **(C)** are indicated to the right of the exposure scale in the conventional manner.

Note!
Full-stops, half-stops and third-stops are also displayed, according to setting (see increment setting on 104). For example, a setting between f/8 and f/11 will appear as f/9,5 if half-stop is chosen.

Exposure Mode M



MANUAL QUICK EXPOSURE MODE

MQ mode is a Manual mode where the camera performs as fast and quiet as possible. In this mode, the Shutter is always closed and the Live View is disabled. This mode works best when the X1D II Camera is used on a fixed Tripod.

1 First set the Focus and Image Composition in another Program mode like Manual mode (M) for example. MQ mode does not support Live View.
2 Use the X1D II Camera on a fixed stable Tripod.
3 Select MQ mode on the Mode Dial.

MQ MODE FEATURES

- MQ mode saves Power because the Live View is Off.
- MQ mode is faster because the Shutter is already closed and ready for exposure.
- MQ mode is more silent due to the fact that the Camera uses less Shutter movements.

Exposure Mode MQ

AUTOMATIC EXPOSURE MODES

Select Exposure Mode by turning the Mode Dial **(1)**.

Automatic exposure provides a choice of two ways to control the shutter speed and aperture settings semi automatically and two ways fully automatically.

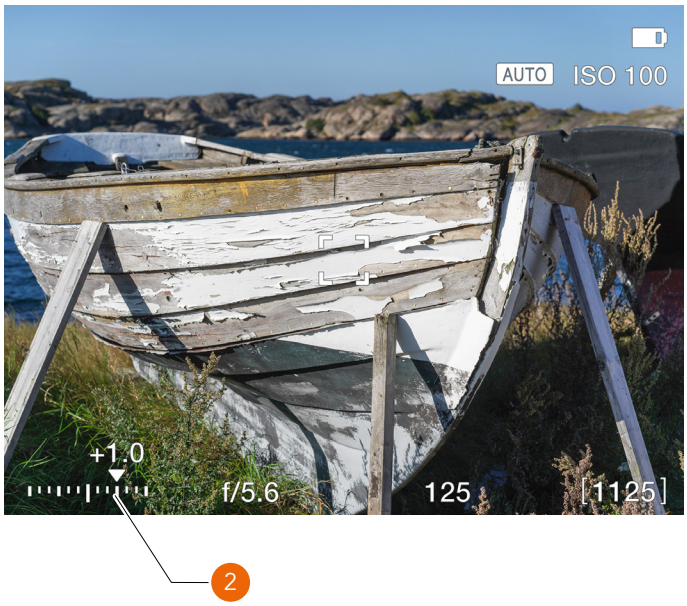
Aperture priority A
The aperture is manually chosen by turning the Front Scroll Wheel, and the shutter speed is automatically chosen by the camera.

Shutter priority S
The shutter speed is manually chosen by turning the Front Scroll Wheel, and the aperture is automatically chosen by the camera.

Programmed P
In this mode, an aperture/shutter combination is chosen by the camera according to the EV measured (metering method remains as your choice), though only within pre-set appropriate limitations to suit various requirements and applications. The aperture and shutter speed combination chosen by the camera can be shifted by turning the Front Scroll Wheel.

Full Auto
In this mode, an aperture and shutter combination is set by the camera. The camera is always in AF Mode and no adjustments can be made. White Balance is set to Auto, Metering Method is Centre Weighted and Drive Mode is set to Single Drive Mode.

Exposure Mode A



Note!
In Automatic mode the Front Scroll Wheel selects alternative aperture/shutter combinations while maintaining the same EV and the Rear Scroll Wheel alters the amount of exposure compensation (Quick Adjust). The compensation amount is shown on the scale **(2)** in Live View Mode. Note that you can control if Quick Adjust will be reset by an exposure or not. See 107.

Note!
Aperture and shutter speed settings can both be changed even while the red "busy light" on the Touch Display is flashing.

Note!
In Camera Settings, the Quick Adjust function can be set to either adjust the following exposure only (default) or on all future exposures.

CUSTOM MODES

The three Custom Modes C1, C2 and C3 can be used to save your favourite settings and recall them instantly at any time.

HOW TO SET A CUSTOM MODE

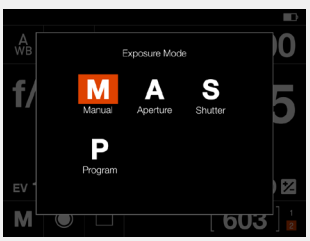
1 Select a mode on the Mode Dial.
M, A, S or P. M is selected in this case **(A)**.
2 Make the changes to the Camera Settings.
Set desired ISO, AF/MF and WB for example.
3 Press the Menu Button to the right of the Touch Display to display the Main Menu. See also 127.
4 Select General Settings.
5 Select Custom Modes.
6 Select Save to C1, C2 or C3.
7 Select Save to save and Exit or select Exit to exit without saving.
8 All the settings you made will now be easily accessed from the Custom Mode C1.
9 Turn the Mode Dial to select C1 **(B)**.
10 You can now use the Camera with all the specific settings made in stage 2 of this instruction.

Repeat the steps 1 to 10 to create and use your 3 different Custom Modes, C1, C2 and C3.

When the Mode Dial is set C1, C2 or C3, it is possible to change exposure mode from the control screen by tapping the Exposure Mode Icon in the lower left corner. This will bring up a screen as shown in (C) where a new exposure mode is selected by tapping the corresponding icon.

Note!
An example how to use C1-C3 is to set Primary Slot to SD1 in C1 and SD2 in C2. Now you can easily direct images to different cards just by choosing C1 or C2. If two persons share the same camera, this can be a simple way to avoid images being mixed up.

Exposure Modes M, MQ, A, S and P mode.



AE-L BUTTON

In Live View mode and in the automatic modes (A, S, P and ▭), this button **(1)** is used for locking the exposure. In Manual mode, it will lock the aperture and shutter speed combination, allowing you to shift aperture and shutter speed combination without changing the exposure with the scroll wheels.

In Browse mode it is used to zoom out in the image (AF-D zooms in).

In Menu mode it is used to exit one level up in the menu (AF-D enters one level down).

Lock an EV setting in manual and automatic modes
When the button is pressed, the light metering facility is locked to the EV setting at that moment. An AE-L icon appears to the left of the aperture indication on the Touch Display and Electronic Viewfinder Display to confirm the status. Press the AE-L button again to unlock (a toggle function).

In the locked setting, the aperture and shutter speed become interlocked. In this way, a new aperture/shutter combination that still represents the same EV (exposure), can be rapidly chosen. For example, if the shutter is set to 1/125s and the aperture to f/8 and are locked together, you can access new EV-equivalent combinations of, for example, 1/30s a f/16 or 1/500s at f/4 just by moving the front scroll wheel.

In practice this means that you can, for example, in auto mode position the metering area (spot setting) over an area in the subject that you determine to be equivalent to a mid-grey and lock it with the AE-L button. You can then recompose the picture with the metering zone positioned over an area much brighter or darker while still retaining the original exposure setting and choose a new combination of aperture and shutter speed settings.

4.6 THE X1D II INTERACTION DISPLAYS

Electronic Viewfinder Display, EVF

Touch Display

Electronic Viewfinder Display, EVF
The EVF on the Camera displays ISO, Focus action, Exposure compensation, Aperture, Shutter and Captures remaining. Press the MF/AF and the ISO/WB buttons to change settings. Use the Front Scroll Wheel or the Rear Scroll Wheel to select desired settings. Press the same button again to Exit and Save.

Touch Display
The X1D II display is touch sensitive and you can use it in the same way you navigate on a smartphone. For example Swipe, Select, Pinch and Spread to Zoom. You can also navigate by using the 5 buttons to the right of the Touch Display and Scroll Wheels on the Camera.

4.7 TOUCH DISPLAY NAVIGATION

The Touch Display on the X1D II Camera is similar to a Phone or Tablet with touch sensitivity. The following gestures can be used to navigate and control the camera:

Action	**Function**
Swipe Right	Move back / Move image right.
Swipe Left	Move image left. Only in Browse mode.
Swipe Down	Display Control Screen.
Swipe Up	Hide Control Screen.
Tap/ Press	Select action / button / setting.
Double Tap	Zoom in to 100%. Double Tap again to Zoom out to full View.

Function	**Action**
Select	Tap / Press with one finger.
Display Control Screen	Swipe down from the top of the screen.
Hide Control Screen	Swipe up.
Move back	Swipe right.
Zoom in	Spread (move two fingers apart).
Zoom out	Pinch (move two fingers together).

Display Control Screen

1 Swipe down from top of the rear display or press the Menu Button to show the Control Screen.

2 The Control Screen displays the Camera Settings.

3 Most settings can be changed by tapping the value or setting within the Control Screen Interface.

4 Swipe Up or press the Menu Button to hide the Control Screen and display the Main Menu.

Note!
The Control Screen is interactive and you can change most settings. Settings that can be changed, depends on the active Shooting Mode. See more on 52.

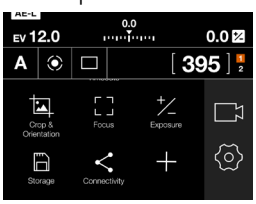
Swipe Right

Swipe Left

Swipe Down

Swipe Up

1 Swipe Down



Main Menu

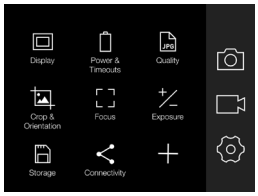
2

Control Screen

3 Adjust settings

Control Screen

4 Swipe up



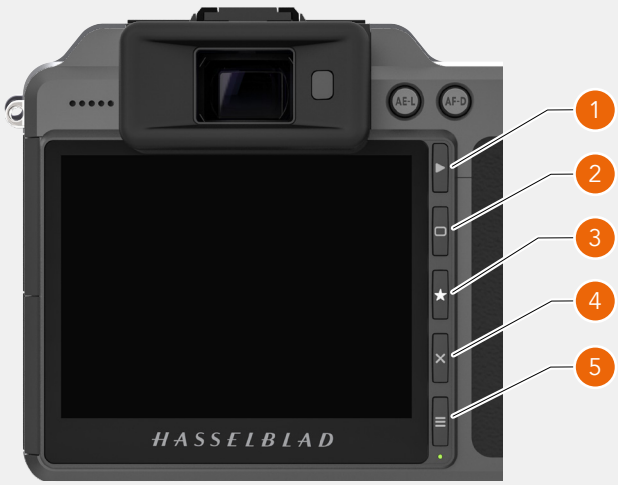
Main Menu

4.8 NAVIGATING THE MENUS

DESCRIPTION OF THE TOUCH DISPLAY MENU ITEMS

The X1D II Display Screen is Touch Sensitive. You can tap with one finger to select and swipe in different directions to move up, down, forward and backward through the user interface.

Button		Screen function
1	Browse Button	Go to image browse
2	Rectangle Button	Up
3	Star Button	Select
4	Cross Button	Down
5	Menu Button	Back to Main Menu



1 **Browse Button**
Activates the display and shows the last image. The user can review images, browse and zoom as described in “4.21 Browsing, Preview and Histogram” on page 93.

2 **Rectangle Button**
Function depends on screen information. The button changes the overlay in Live View and Browse Mode. The button moves the selector up when scrolling in menus. When the Control Screen is active, the button selects parameter that can be changed with the Scroll Wheels.

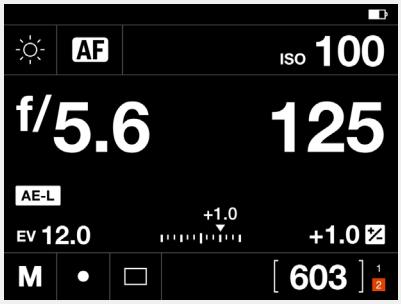
3 **Star Button**
The Star Button will zoom out to 9-view in Browse Mode. In Live View the Star Button will zoom in to 50 or 100% depending on setting. See 114. When Image Rating is enabled, this button is used in Browse mode to rate images. See 100.

4 **Cross Button**
Function depends on screen information. The button acts as Delete Image button in Browse Mode. The button moves the selector down in menus. In Control Screen it selects parameter that can be changed with the Scroll Wheels.

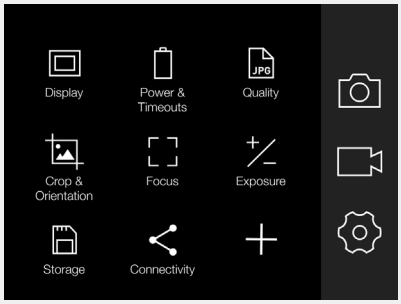
5 **Menu Button**
This button opens the Main Menu. If the Main Menu is already active, the Control Screen is shown.

Using the buttons on the control panel and the scroll wheels on the grip, you can navigate through the various levels in the menu. The following pages show an overview of the available setting options.

Control Screen



Main Menu



OVERVIEW OF MENUS AND SETTINGS ON TOUCH DISPLAY

Settings can be controlled directly on the touch sensitive screen by pressing the menus and icons. You can scroll up, down and from left to right as described in previous chapters. You can also navigate the on screen menus by using the following buttons and scroll wheels:

1 Control buttons next to the Touch Display. For example Menu Button.
2 Front Scroll Wheel.
3 AE-L Button.
4 AF-D Button.
5 Rear Scroll Wheel.

Navigation using buttons is described on 95 (Using Buttons).

The Menu Button (1) navigates back to Main Menu or the Control Screen.

4.9 TOUCH DISPLAY MAIN MENU

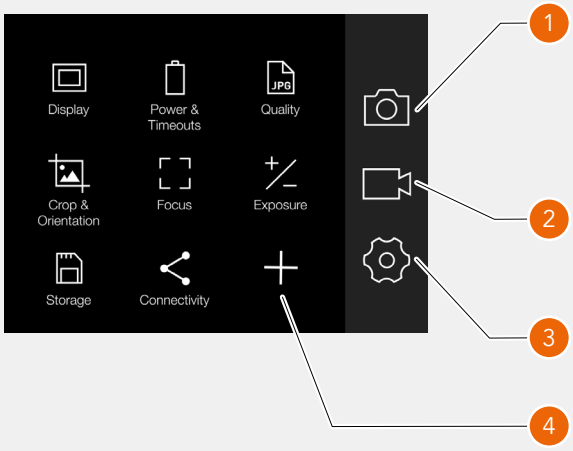
MAIN MENU

In the Main Menu there are 3 different Main Settings. Camera Settings **(1)**, Video Settings **(2)** and General Settings **(3)**. The placement of these 3 Settings are fixed and cannot be changed.

The icons on the left part of the Main Menu are Favourite Shortcuts to Functions. In this example, they are:

Display.
Power & Timeouts.
Quality.
Crop & Orientation.
Focus.
Exposure (+/-).
Storage.
Connectivity.

Main Menu



1 Camera Settings.
2 Video Settings.
3 General Settings.
4 + (Plus) symbol (Add Setting).

ADD SHORTCUTS TO MAIN MENU FAVOURITES

To speed up your own workflow you can add in the settings you use more frequently in the Favourite settings. These functions will then be displayed on the Main Menu until you remove them and replace them with other Favourite settings. To add, remove or move a shortcut, tap the plus icon **(4)**. See the instructions on the following page.

The available Shortcuts to add are:

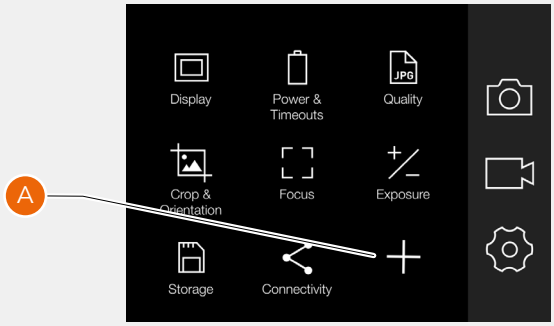
Exposure
Image
Quality
Focus
Custom Buttons
Configuration
Wi-Fi
Display
Touch
Custom Modes
Storage
Sound
Date & Time
Power & Timeouts
Spirit Level
Language
Service
About

See detailed description on how to add and remove shortcuts to your Favourite list on the following page.

HOW TO ADD SHORTCUTS TO MAIN MENU

1 Select the + icon **(A)** on the Main Menu.
2 The Add Favourite Pop up screen displays the available options to add in a scroll list.
3 Select for example Custom Buttons **(B)**.
4 The Custom Buttons icon is displayed on the Main Menu and the action is saved in the Camera Memory.

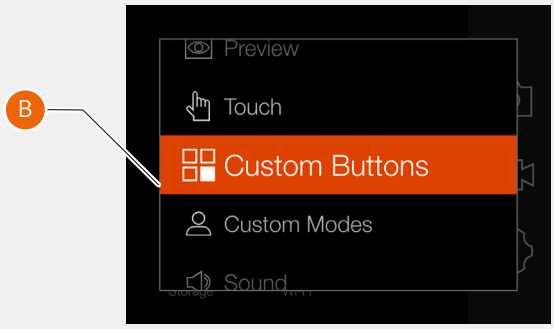
Main Menu



HOW TO REMOVE SHORTCUTS ON THE MAIN MENU

1 Press and Hold on the icon you would like to remove from the Main Menu Favourites. Custom Buttons **(C)** in this example.
2 The close symbol, X, is displayed on the upper right corner of the selected shortcut **(D)**.
3 Select / Press the X in the orange circle to delete the icon and remove the function from the Main Menu Favourites.
4 The Custom Buttons icon is no longer displayed in the Main Menu Favourites list. You can add the same function later at any time.

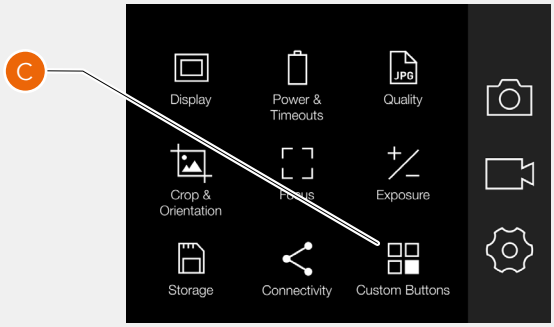
Add Favourite Pop up screen



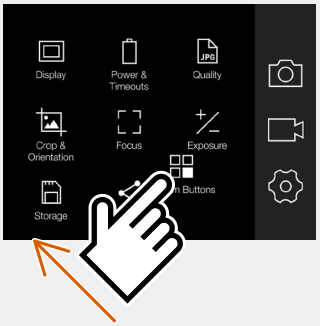
HOW TO MOVE SHORTCUTS ON THE MAIN MENU

1 Press and Hold on the icon you want to move until the close symbol, X, appears **(D)**.
2 Press and hold the icon and drag it to a new location. Icons will automatically rearrange.

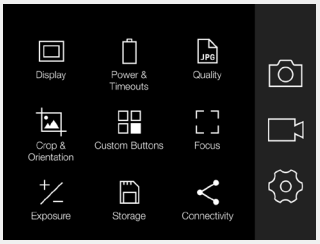
Main Menu with Custom Buttons added



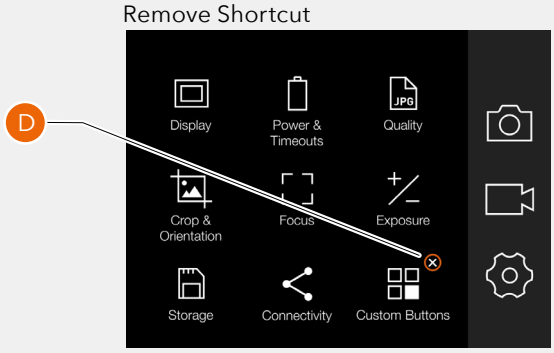
Move Shortcut



Shortcut moved



Remove Shortcut



4.10 CONTROL SCREEN

You can access the most common settings using the Control Screen. You can easily change these settings by tapping on any function and adjust directly.

Display Control Screen
From any screen you can swipe down from the top of the Touch Display or press the menu Button once or twice to display the Control Screen.

Close the Control Screen
Swipe up from the bottom of the Touch Display or press the Menu Button to show the main menu.

Note!
When Control Screen is displayed, there is no light metering ongoing. The sensor is inactive to save battery power.

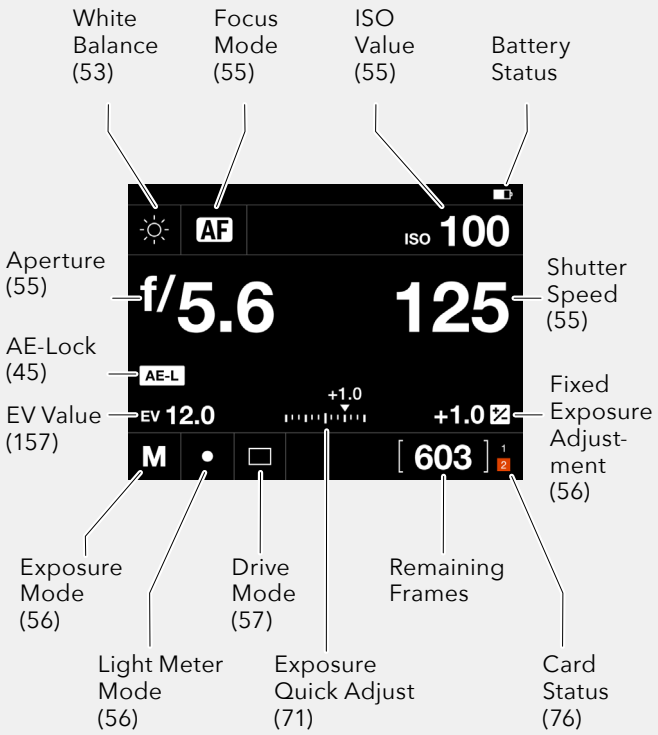
LOCKED EXPOSURE PARAMETERS ON THE CONTROL SCREEN

A Mode
For Aperture priority (A) you can change the Aperture value and the Shutter value will be automatic and displayed in grey.

S Mode
For Shutter priority (S) you can change the Shutter value and the Aperture value will be automatic and displayed in grey.

P Mode
When you select P Mode the Aperture (5) and Shutter (100) are automatic and displayed in grey colour that indicates that you cannot change these settings by touch. Note that you can use the Front Scroll Wheel to shift aperture and shutter speed combination and Rear Scroll Wheel to add an exposure adjustment.

Control Screen indications

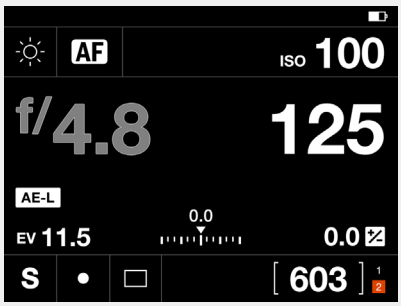


Numbers within parenthesis are links to pages with more info.

Control Screen

S Mode

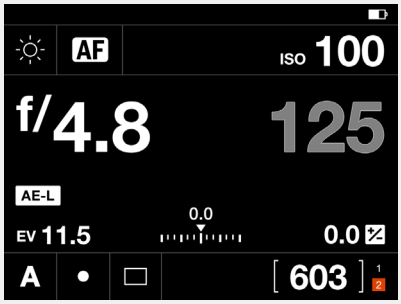
Aperture is automatic.



Control Screen

A Mode

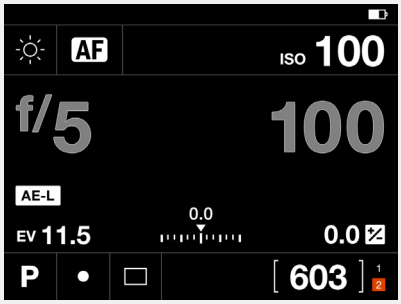
Shutter Speed is automatic.



Control Screen

P Mode

Aperture and Shutter Speed are automatic.



SETTINGS ON THE CONTROL SCREEN

White balance
- Auto white balance AWB.
- Cloudy.
- Shade.
- Daylight.
- Tungsten.
- Fluorescent.
- Flash.
- Manual white balance MWB
- Picker (select white balance from image).

Change white balance preset
On the control screen, tap the white balance icon in the top left corner. This brings up the white balance setting screen (**1**). Tap on one of the white balance icons to select it (**A**). The right frame of the screen (**B**) will show the values for Temperature and Tint associated with the selected white balance. Tap the white balance icon again to select it and return to the control screen.

Setting manual white balance values
From white balance setting screen (**1**), change value for Temperature or Tint by tapping in the right frame (**B**).

Tap the value (**C**) to change and select a new value from the list (**D**).

Tap the left arrow (**E**) to return to the white balance setting screen (**1**). Finally, tap the manual white balance icon again to select it and return to the control screen (**2**). White balance has now been set to Manual mode.

Note!
You can also set ISO and white balance from the Live View screen. See 83.

Note!
When working with flash in situations where the subject is lit with a different color temperature it is a good practice to set the camera to Auto white balance.

	Temp [°K]	Tint
Cloudy	6500	10
Shade	7500	10
Daylight	5500	10
Tungsten	2850	0
Fluorescent	3800	21
Flash	5500	0
Manual	Variable 2000 to 10000	Variable -100 to 100

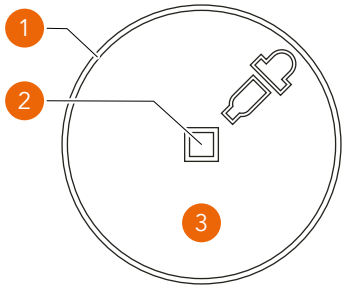
SETTINGS ON THE CONTROL SCREEN

Set White balance from image (Picker)
Tap the white balance icon on the control screen to bring up the settings screen. Tap the Picker icon (**A**).

The screen will show the last captured image with a white balance picker tool (**B**).

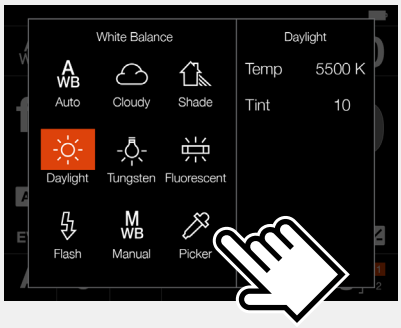
If the center of the image is not neutral, move the picker tool by touching anywhere inside the circle (**1**) and sliding so that the measuring area (**2**) falls over a neutral area (**C**). The status bar will show the actual values for Temp and Tint. To accept these values, press the rectangle button (**4**). To exit without saving the values, press the cross button (**5**).

The control screen (**D**) will now show the new value for Temp and it will be used together with Tint for following images.



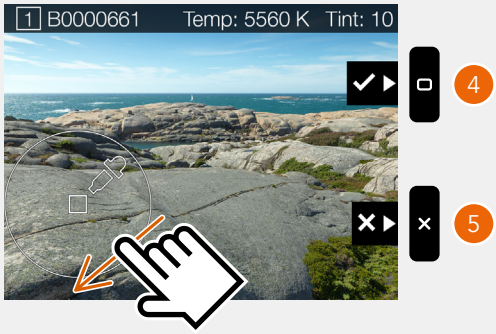
1 Active area for moving the tool by touch.
2 Active area for calculating Temperature and Tint.

A

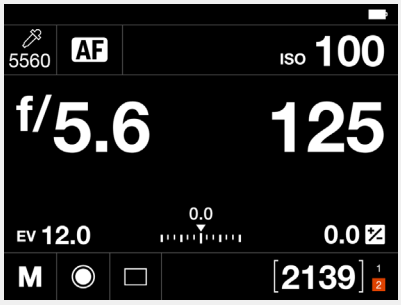


B

C



D



Note!
You can change to another image by turning the front scroll wheel or by swiping the image outside of the picker tool area.

Note!
You can fine-tune the position by tapping inside the circle. E.g., if you tap at point (**3**), the picker will move a small increment down.

Note!
To simplify using the Picker tool, you can add it as a short-cut to the main menu screen or program one of the custom buttons as described on 126.

This chapter continues on the next page.

SETTINGS ON THE CONTROL SCREEN

Focusing
- AF Autofocus.
- MF Manual Focus.

ISO
- Select ISO value.

Note!
ISO can also be set by touch from the Live View screen. See 83.

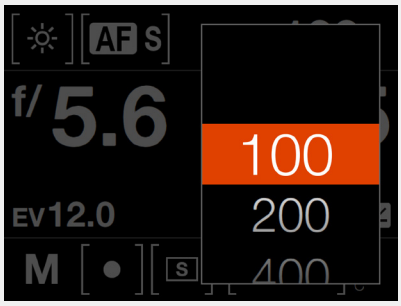
Aperture
- Select Aperture value.

Shutter Speed
- Select Shutter Speed value.

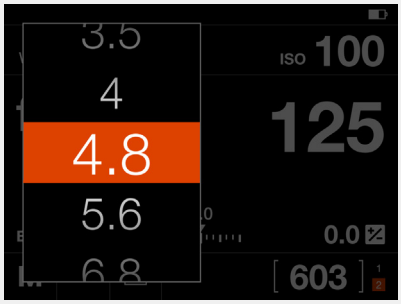
This chapter continues on the next page.

Focusing

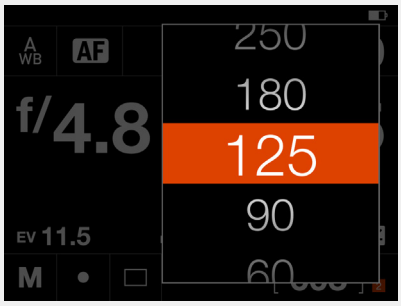
ISO



Aperture



Shutter



SETTINGS ON THE CONTROL SCREEN

Exposure Adjust
- Adjust Flash Exposure by sliding right or left.
- Adjust Exposure by sliding right or left.

Tapping the line to the left or right of the dot, will increase or decrease the value with the value set in **Main Menu > Camera Settings > Exposure > Increment Step Size > exposure Adjust**.

Reset the value to zero by double-tapping the icon to the left of the line.

Exposure Mode

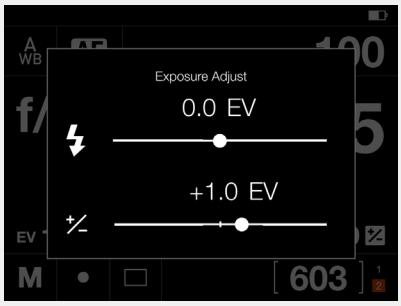
M	Manual Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.

Note!
Exposure Mode can only be set from the Control Screen when the Mode Dial is set to C1, C2 or C3.

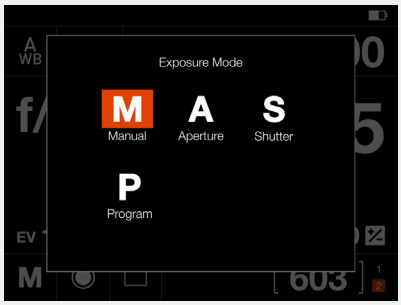
Metering Mode
- Centre Weighted.
- Spot.
- Centre Spot.

This chapter continues on the next page.

Exposure Adjust



Exposure Mode



Metering Mode

SETTINGS ON THE CONTROL SCREEN

Drive Mode

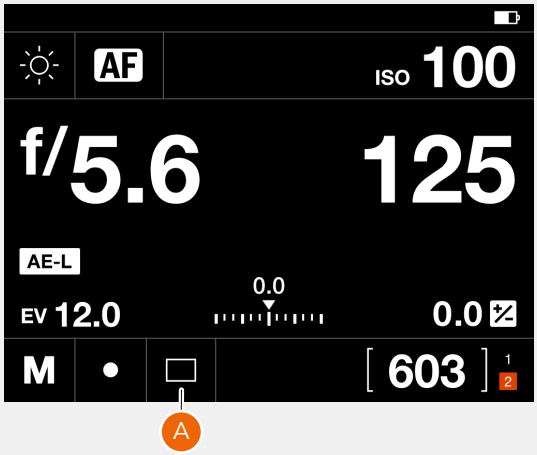
By tapping the Drive Mode Icon (**A**) on the control screen, you can select the following modes:

- **Single**
  The camera will only make one exposure regardless how long the Shutter Release Button is pressed.
- **Continuous**
  The camera will make exposures as long as the Shutter Release Button is pressed.

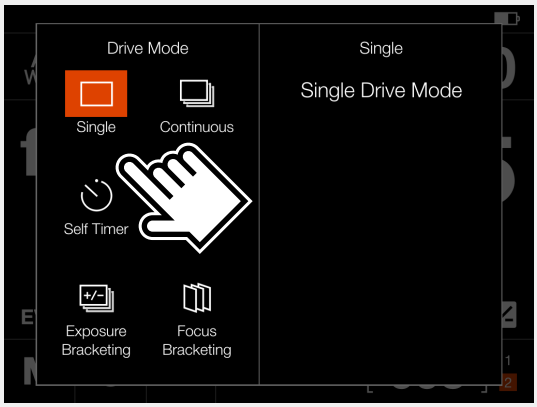
Tap the desired function again to close the dialogue make it active.

Continued on the next page.

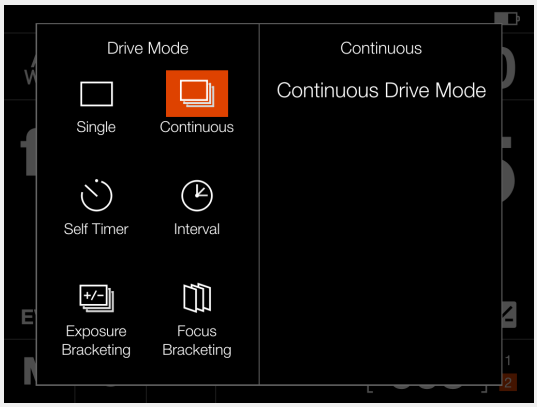
Control Screen



Single frame Drive mode



Continuous Drive mode



- **Self Timer**
  The camera will wait a pre-set time to make the exposure after the Shutter Release Button is pressed.
  Time: Delay between Shutter Release and exposure.
  LED Blink: Controls if the front LED shall be used to indicate Self Timer operation.
  When Finished: Determines if the function shall be active after a completed cycle or not. If set to **Exit**, the Self Timer is disabled after the exposure.

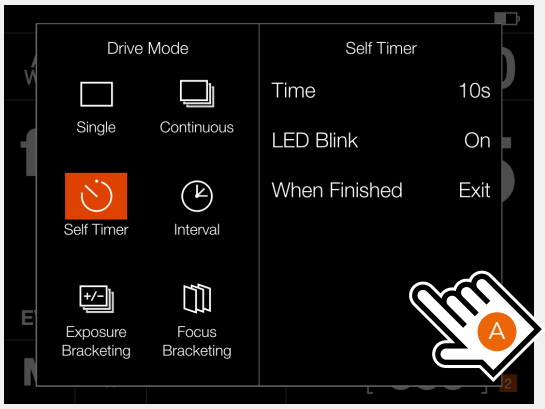
- **Interval**
  The camera will make a pre-determined number of exposures with a pre-set interval time.
  Time: The time between exposures.
  Frames: How many exposures will be made.
  Initial Delay: A Delay between Shutter Release and first exposure.
  Metering: Exposure metering for all frames or first frame only.
  When Finished: Determines if the function shall be active after a completed cycle or not.

- **Exposure Bracketing**
  The camera will automatically make a pre-determined number of exposures with a pre-set exposure adjustment difference between each frame.
  Amount: How much exposure difference between each exposure.
  Frames: The number of exposures in the sequence.
  Initial Delay: A Delay between Shutter Release and first exposure.
  Param in M: Which of Aperture or Shutter Speed to change if Exposure bracketing is used in Manual mode.
  When Finished: Determines if the function shall be active after a completed cycle or not.

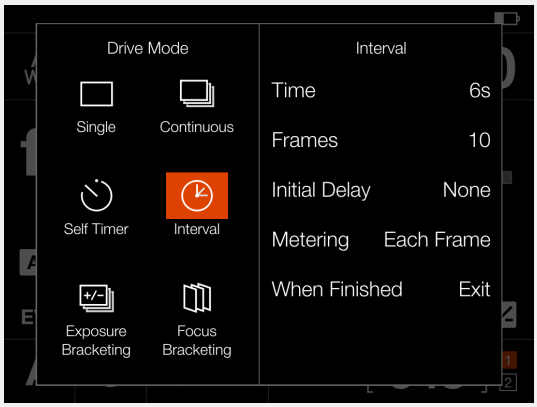
- **Focus Bracketing**
  The camera will automatically take a pre-set number of images and calculate a focus shift between each capture.
  Step Size: Amount of focus position change between each capture.
  Frames: The number of exposures in the sequence.
  Initial Delay: A Delay between Shutter Release and first exposure.
  Exposure Delay: A delay between exposures.
  Sequence: The order in which captures are made.
  When Finished: Determines if the function shall be active after a completed cycle or not.

For **Self Timer**, **Interval**, **Exposure Bracketing and Focus Bracketing** the left part of the panel displays the current setting. If no changes are required, tap the function icon again to make it active.
To change any of the parameters, tap the right part of the screen (**A**). This will bring up the dedicated settings for the function.

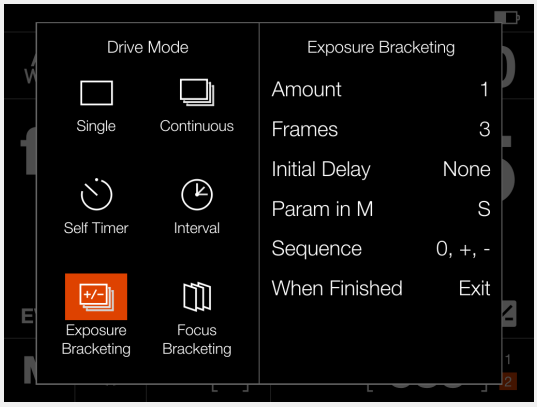
Self Timer



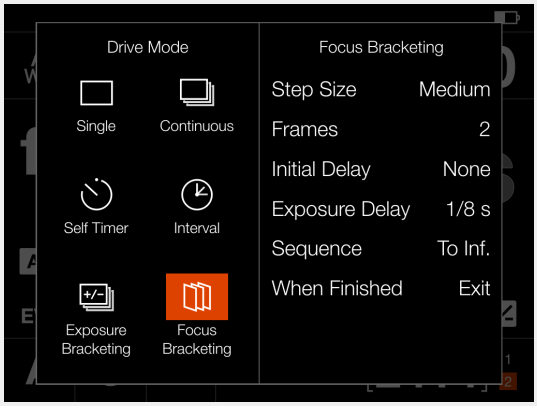
Interval



Exposure Bracketing

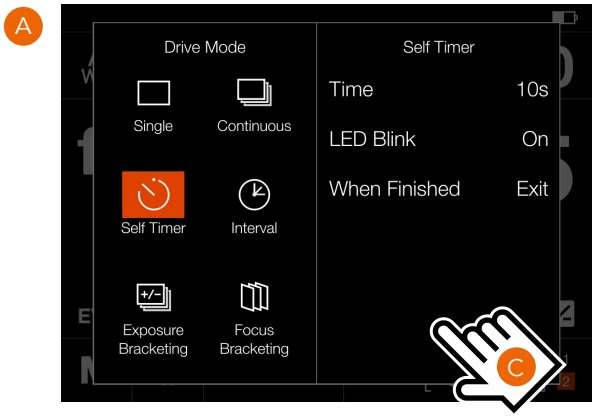


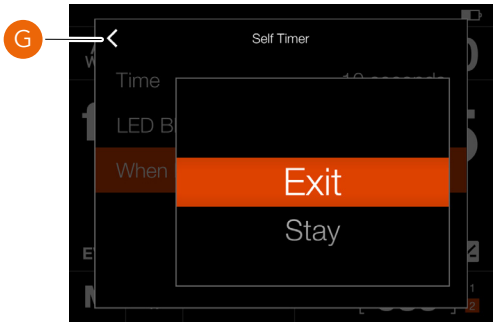
Focus Bracketing

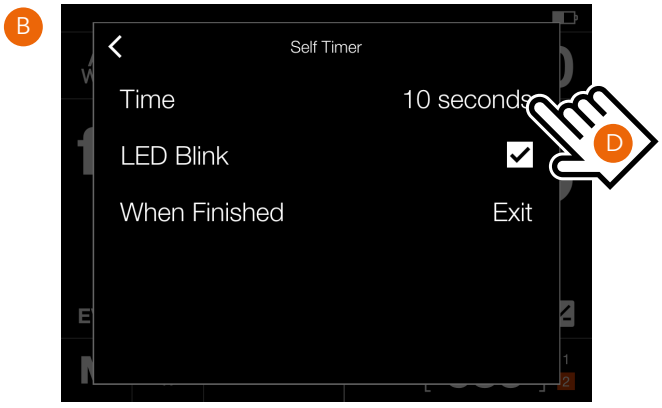


SELF TIMER SETTINGS

On the Control Screen tap the Drive Mode icon which brings up the settings screen **(A)**. Tap the Self Timer icon. To change settings, tap the right panel **(C)** to show the Settings Menu **(B)**. To change any of the settings, tap the value to bring up any of the screens **(E)** or **(F)**.
When the settings are made, tap the left arrow **(G)** to return to the Drive Mode settings screen.
When the Shutter Release is fully pressed, the rear screen or EVF will show the count down **(H)**. After the pre-set time is elapsed, the exposure will be made.





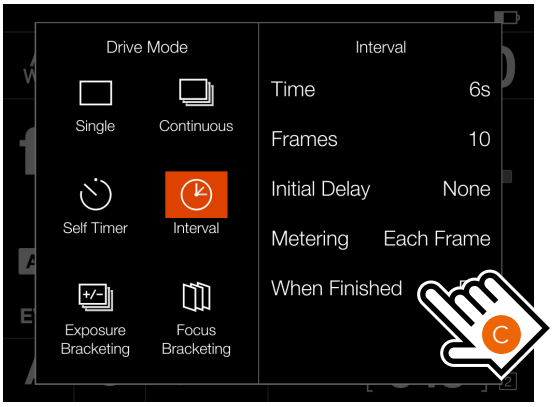


Time: Self timer delay
LED Blink: Use front LED to indicate activity.
When Finished: What to do after a completed sequence.

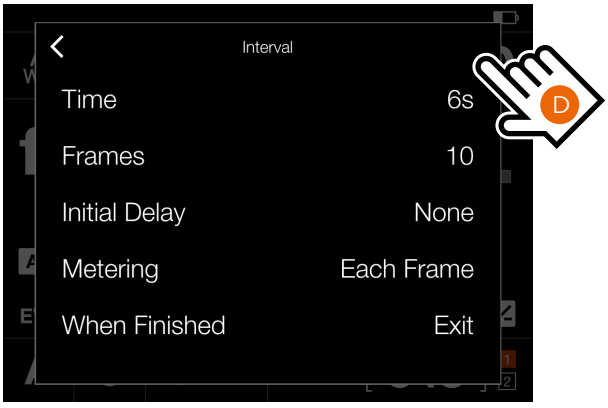
INTERVAL SETTINGS

On the Control Screen tap the Drive Mode icon which brings up the settings screen **(A)**. Tap the Interval icon. To change settings, tap the right panel **(C)** to show the Settings Menu **(B)**. To change any of the settings, tap the value to bring up any of the screens **(E)** to **(H)**.
When the settings are made, tap the left arrow **(J)** to return to the Drive Mode settings screen.

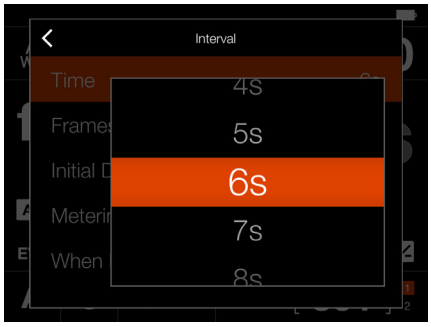
A



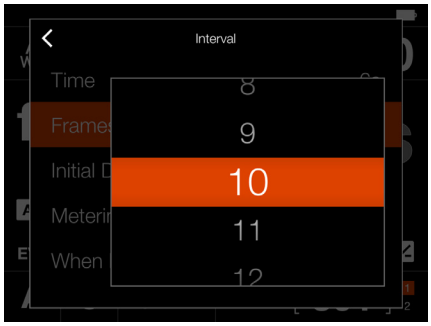
B



E

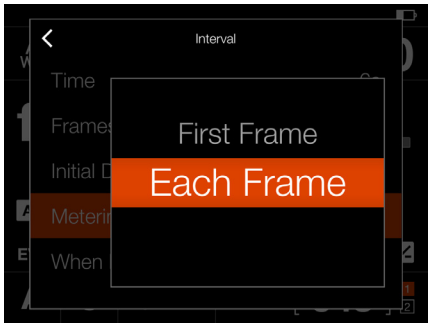


F



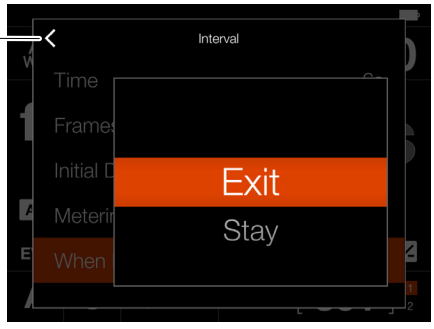
G

H



I

J



Continued on the next page.

INTERVAL OPERATION

An active and pending Interval Timer, is indicated both on the Control Screen and in Live View.

The Control Screen shows the Interval Icon **(A)** and the Interval Time **(B)**. To see all settings, tap the Interval Icon to show the settings screen as described on the previous page.

Live View and preview Screens show the same information with the addition of remaining number of captures **(C)** and **(D)**.

To start the sequence, press the shutter release. If you have set an initial delay to prevent camera shake, the camera will first wait the pre-set number of seconds showing a black screen with a count-down timer, and then start the Interval sequence.

After a capture, the image will show up on the rear screen, together with the Interval information.

To end the sequence before all captures have been made, press **Exit** (the Star Button).

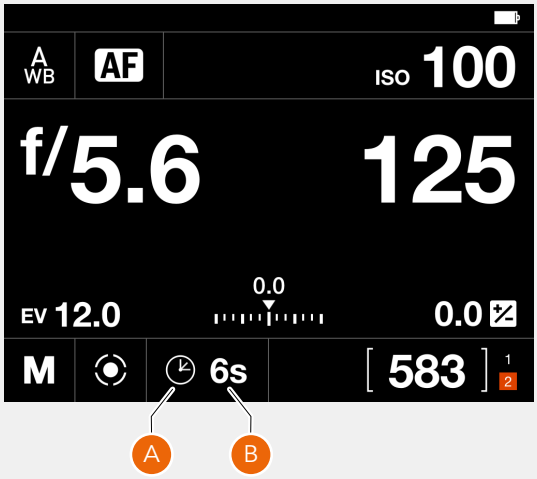
Note!
Live View is turned off during an Interval sequence.

Note!
The preview can be turned off in the "**General Settings > Preview > Rear Screen**" setting.

Note!
Interval is not supported in Phocus Mobile 2 or when tethered to Phocus. For tethered operation, use the Capture Sequencer function in Phocus.

Note!
During a running Interval Sequence, you can press the Menu Button to activate the Control Screen to check current status.

Control Screen



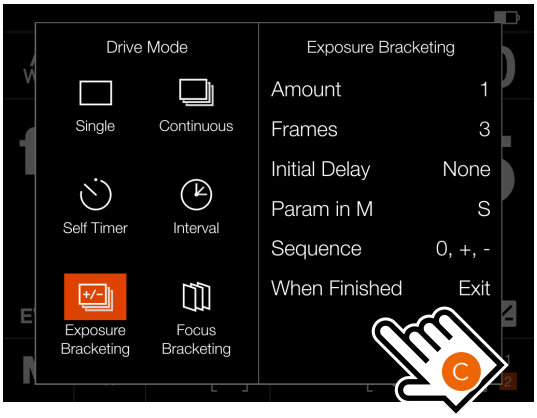
Live View

Preview Screen after a capture

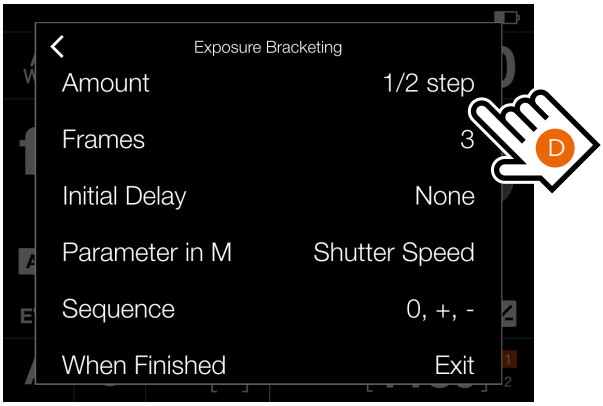
EXPOSURE BRACKETING SETTINGS

On the Control Screen tap the Drive Mode icon which brings up the settings screen **(A)**. Tap the Exposure Bracketing icon. To change settings, tap the right panel **(C)** to show the Settings Menu **(B)**.
To change any of the settings, tap the value to bring up any of the screens **(E)** to **(J)**.
When the settings are made, tap the left arrow **(K)** to return to the Drive Mode settings screen.

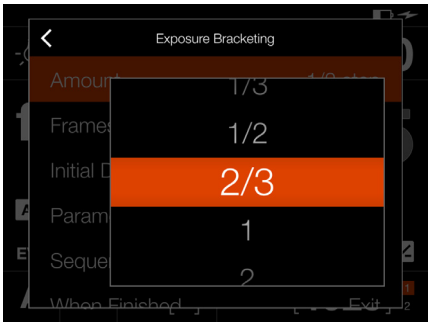
A



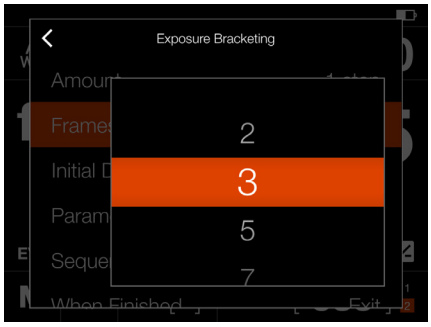
B



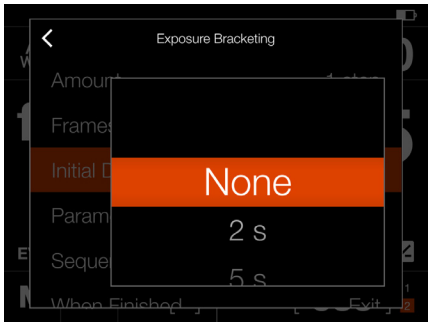
E



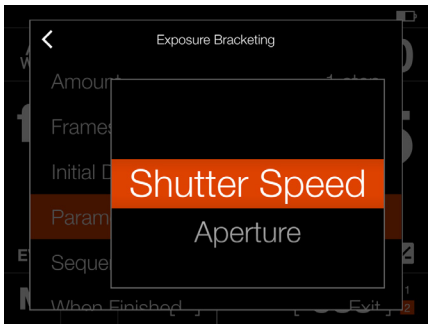
F



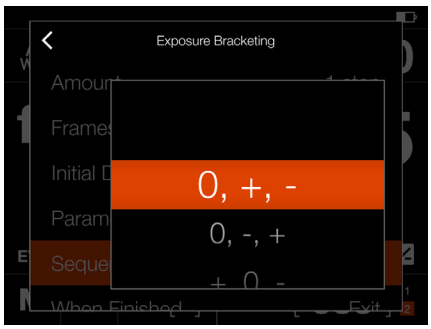
G



H

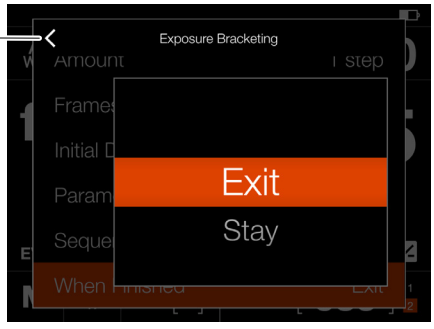


I



K

J



EXPOSURE BRACKETING OPERATION

An active and pending Exposure Bracketing function, is indicated both on the Control Screen and in Live View.

The Control Screen and Live View will show the Bracketing Icon and the number of captures in the sequence. To see all settings, tap the Interval Icon to show the settings screen as described on the previous page.
In the example to the right, the Exposure Bracketing sequence will use 3 images.

To start the sequence, press the shutter release. If you have set an initial delay to prevent camera shake, the camera will first wait the pre-set number of seconds showing a black screen with a count-down timer, and then start the Interval sequence.

During the Exposure Bracketing sequence, the rear screen and EVF will show an information overlay, as shown in **(A)**.

To exit from the sequence before it has been completed, press the Cross Button.

After a capture, the last image will show up on the rear screen

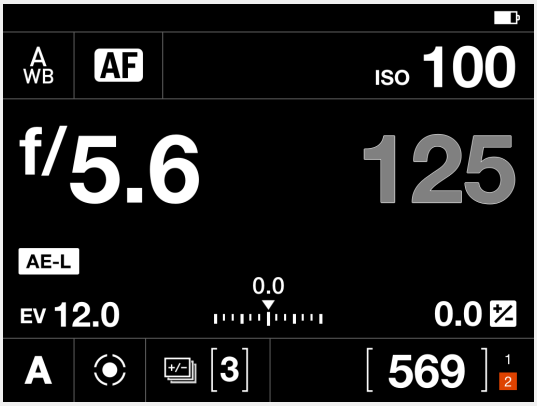
LONG EXPOSURE SCREEN

If the Shutter Speed is 1 second or longer, the Long Exposure Screen **(B)** will be shown during the exposure. After about 5 seconds the display will be turned off and the camera will enter a power-save mode. You can re-activate the screen to monitor exposure progress by moving your hand in front of the EVF without touching the camera.

Note!
Exposure Bracketing is not supported in Phocus Mobile 2 or when tethered to Phocus. For tethered operation, use the Capture Sequencer function in Phocus.

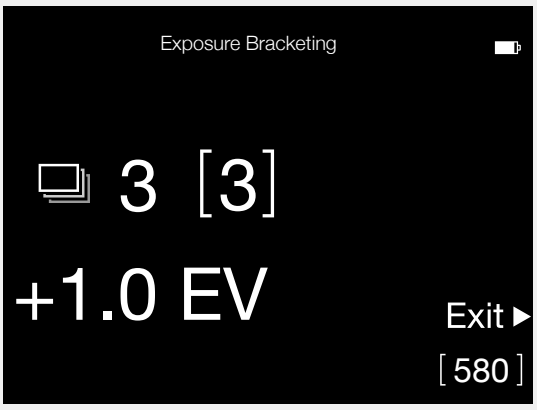
Note!
Light measurement, focusing and Auto White Balance are performed before the first exposure and is applied to all images in the sequence.

Control Screen



Live View

Screen during Bracketing operation



A

Screen when shutter speed is 1 sec or longer.

B

FOCUS BRACKETING

Focus Bracketing can be used for different purposes. The most obvious is to achieve a larger depth-of-field by stacking images with different focus positions together in post-production. You can also use it to pick the best image from a batch.

In Focus Bracketing mode, the camera will automatically take a pre-set number of images with and calculate focus shift between each capture. The images will be stored on the card as separate files and you can edit them manually or use a 3rd party software (e.g. Helicon Focus™) to merge them together into a final stacked image.

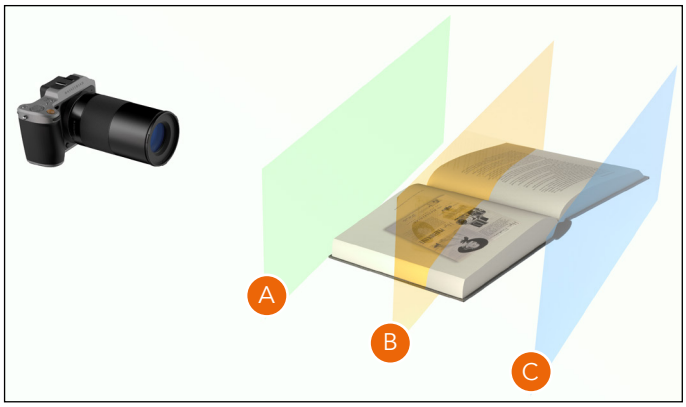
It is difficult to give detailed guidelines on which settings to use, but look at the examples in this section as a starting point for your own experiments.

The camera offers three different modes in which the images will be taken.

1 **Towards Infinity**
Set focus manually or by using AF. If AF is used, remember to deactivate it before starting the sequence. In this mode, focus should be set on a point (**A**) that is closer to the camera than the main subject. When the sequence is started, focus will be shifted towards infinity until the sequence is finished or the lens reaches infinity position.

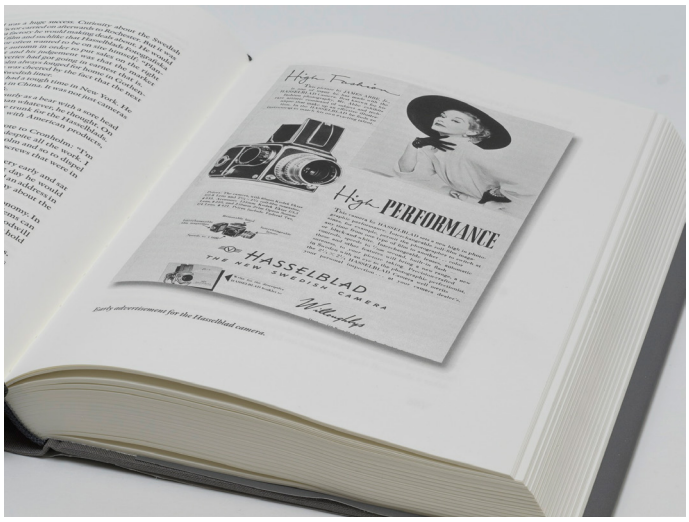
2 **Symmetric**
In this mode, focus should be set on the main subject (**B**). When the sequence is started, the camera will first take an image and then move to a focus point closer to the near limit and take all the images in the sequence, shifting focus towards infinity. The first image is an extra exposure made to ensure that there is one image of the main subject with perfect focus.

3 **Towards Near Limit**
Set focus on a point (**C**) behind the main subject. During the sequence, the camera will shift focus closer and closer to the camera. The sequence will stop after the pre-set number of images has been captured or the lens has reached near limit.



Single image, XCD 120 f/6.8

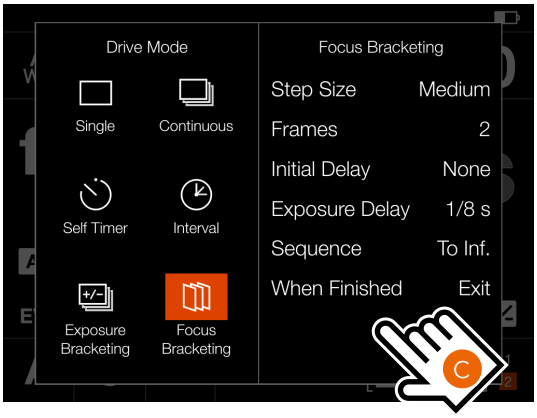
Stacked from 40 images. XCD 120, f/6.8, Step = Medium



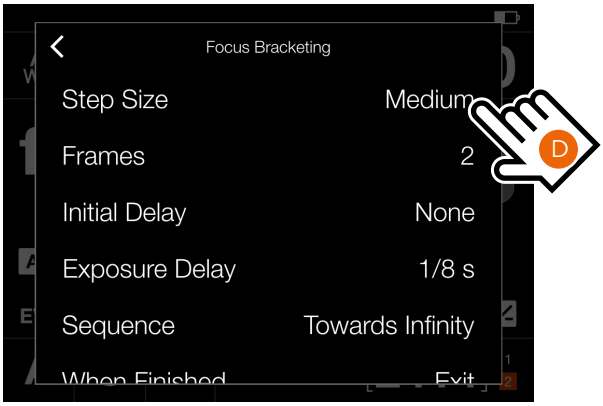
FOCUS BRACKETING SETTINGS

On the Control Screen tap the Drive Mode icon which brings up the settings screen **(A)**. Tap the Focus Bracketing icon. To change settings, tap the right panel **(C)** to show the Settings Menu **(B)**.
To change any of the settings, tap the value to bring up any of the screens **(E)** to **(J)**.
When the settings are made, tap the left arrow **(K)** to return to the Drive Mode settings screen.

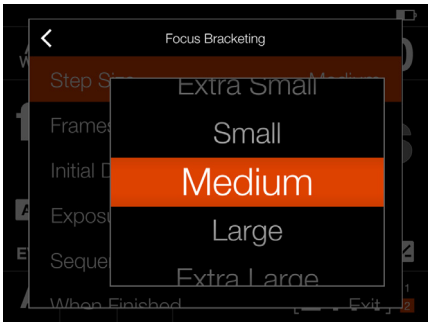
A



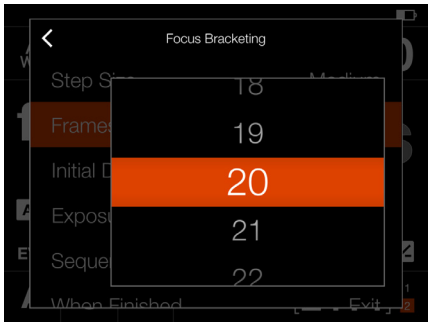
B



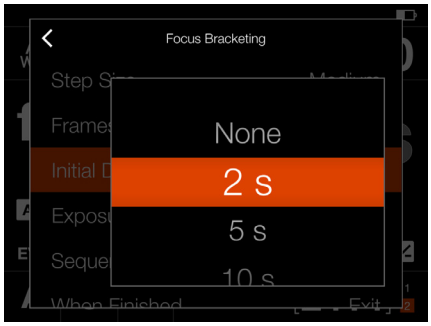
E



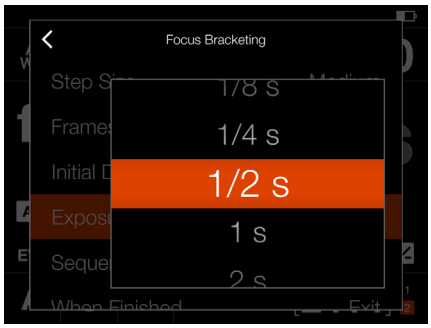
F



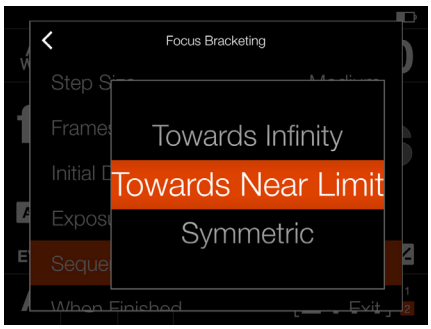
G



H

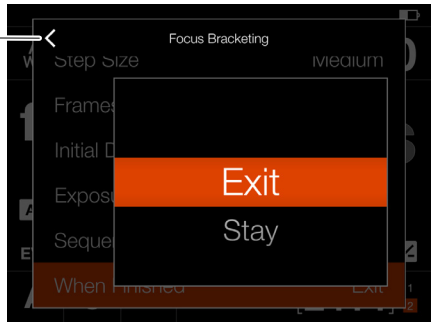


I



K

J



FOCUS BRACKETING OPERATION

An active and pending Focus Bracketing function is indicated both on the Control Screen and in Live View (**A**).

In the example on the right, the Focus Bracketing sequence will take 40 images.

To start the sequence, simply press the shutter release and all captures will be made automatically. If required, you can set a delay before the first capture. A separate delay can also be set between frames to minimize vibration or to allow a flash to charge.

The live view screen will indicate a pending focus bracketing sequence (**B**).

During the Focus Bracketing sequence, the rear screen and EVF will show the selected Browse Overlay with an extra information overlay, as shown in (**C**).

1 Focus Bracketing Icon.
2 Remaining captures.
3 Number of captures in the sequence.
4 Focus adjustment step between captures.

To exit from the sequence before it has been completed, press the Cross Button (**5**).

After a completed sequence, the last image will show up on the rear screen.

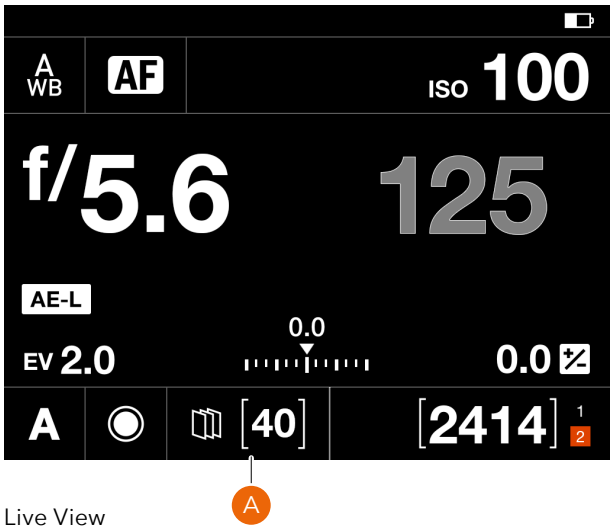
Note!
The Focus Bracketing function requires a firmware update for the Lens. Use version 0.5.33 or later for XCD lenses. The XCD 45P requires 0.1.24 or later.

Note!
HC/HCD lenses cannot be used for Focus Bracketing.

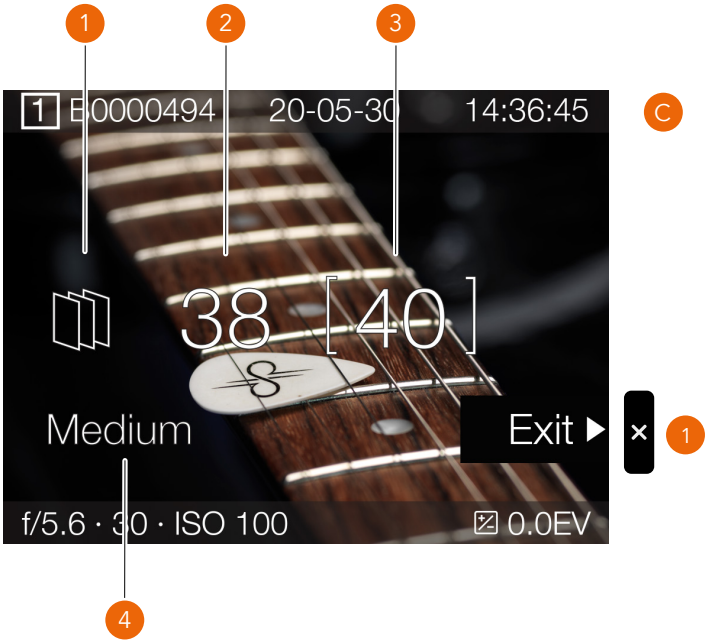
Note!
Focus Bracketing is not supported in Phocus Mobile or when tethered to Phocus.

Note!
Light measurement, focusing and Auto White Balance are performed before the first exposure and are applied to all images in the sequence.

Control Screen



Live View



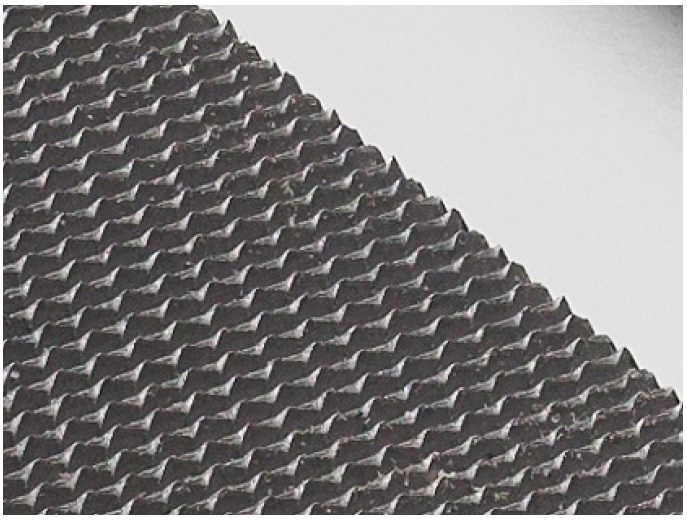
STEP SIZE

For high-quality work you should normally select Small or Medium step size. For less critical work you can also use Large or Extra Large. Large or Extra Large can also be used in certain situations when the type of subject allows.
To find what works best for your situation, we encourage you to make experiments.

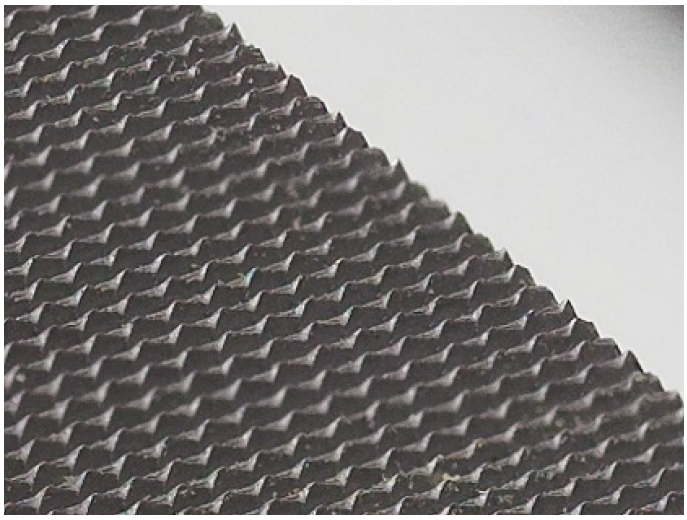
For this test two different step sizes was used , Small and Extra Large. In the resulting image from the Extra Large setting, there are clearly visible unsharp areas. The image using Small is perfectly sharp in all areas.

Test image. F/5.6. 80 images.

Magnified part from image using Small step size.



Magnified part from image using Extra Large step size.



Continued on the next page.

The step size is related to the depth of field (DoF) produced by the camera at a given aperture. This means that the actual focus shift in the subject will be larger with a higher aperture number. E.g. f/4 will give a smaller step than f/11. However, before each exposure, the camera will automatically calculate the actual step size using the current focus position, focal length of the lens, aperture and pixel dimensions of the sensor.

In the subject, the DoF will grow as the focus point is moved away from the camera. The distribution of the DoF around the focus point will also be more uneven. The DoF on the far side of the focus point will grow more than the DoF in front of the focus point.

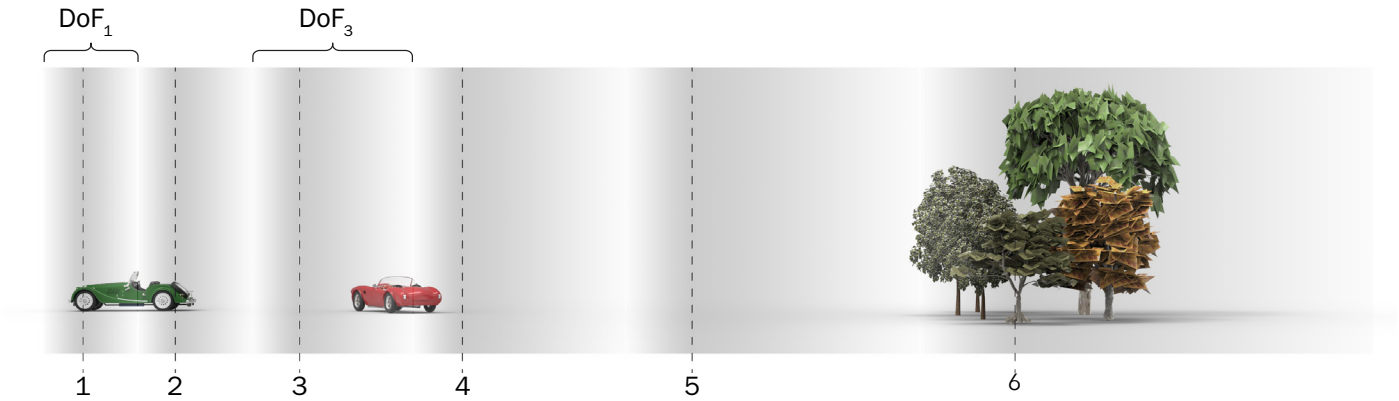
As the camera will automatically make all the calculations for you, the only thing that really needs consideration is how many images to make in the sequence. In most cases, it is best to set a number that is too high rather than too low. The camera will automatically stop when the lens cannot be focused further or closer.

DOF AND STEP SIZE VISUALIZED

To the right is a typical subject where Focus Stacking could be used.

With step size set to Medium, there will be no unsharp areas between each image. Please note that DoF is relative and how it is perceived greatly depends on the viewing magnification of the final result. The circle of confusion (CoC) is used to determine the depth of field, see also https://en.wikipedia.org/wiki/Circle_of_confusion.

The bottom image shows how the DoF will change between captures and also how the focus step in the subject will automatically increase as the DoF is increased.



The table to the right shows the actual Circle of Confusion (CoC) used for the different step sizes. PP is the Pixel Pitch of the sensor which is the distance between two adjacent pixels.

STEP SIZE	CoC
Extra Small	1 × PP = 5,3 µm
Small	4/3 × PP = 7,1 µm
Medium	2 × PP = 10,6 µm
Large	4 × PP = 21,2 µm
Extra Large	6 × PP = 31,8 µm

EXAMPLES

This page shows a few examples to give you a starting point for which settings to use. Best results will always be achieved from your own experiments.
Use the zoom feature of the PDF reader to study the images closer.

EXAMPLE 1 – KNIFE

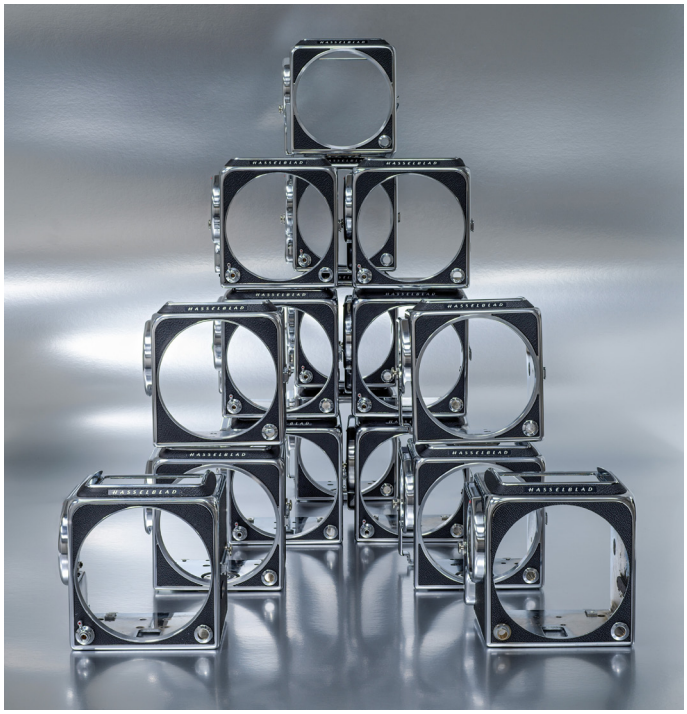
X1D-50c with an XCD 120 Macro lens.
Subject distance: 80 cm
Aperture: f/8
Number of images: 50
Step Size: Medium

EXAMPLE 2 – SPIRAL STAIRCASE

X1D-50c with an XCD 35-75 lens @35mm.
Subject distance: 75 cm
Aperture: f/8
Number of images: 15
Step Size: Medium

EXAMPLE 3 – V CAMERA SHELLS

X1D-50c with an XCD 65 lens.
Subject distance: 120 cm
Aperture: f/8
Number of images: 35
Step Size: Small



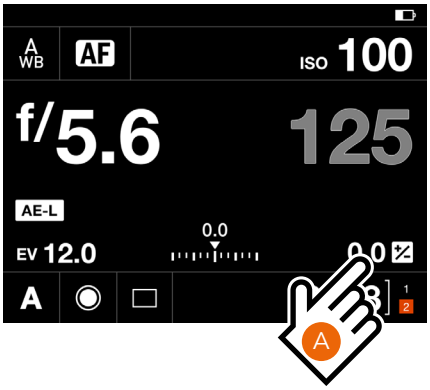
EXAMPLE 4 – WATCH

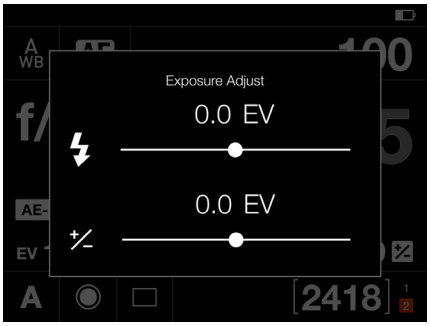
X1D-50c with an XCD 120 Macro lens.
Subject distance: 50 cm
Aperture: f/6.8
Number of images: 80
Step Size: Medium

FIXED EXPOSURE COMPENSATION SETTING

Exposure compensation can be set separately for Flash and automatic exposure by using the following method.

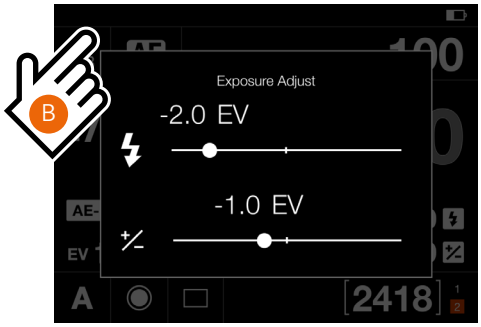
1 Tap the Exposure Adjust setting on the Control Screen **(A)**.
2 Slide the white dot to the left or right to set the desired value for Flash Exposure compensation (top slider) and Fixed Exposure compensation (bottom slider).
Tapping the line to the left or right of the dot, will increase or decrease the value with the value set in **Main Menu > Camera Settings > Exposure > Increment Step Size > exposure Adjust**.
Alternatively, you can use the Front Scroll Wheel to set Flash compensation and the Rear Scroll Wheel to set Fixed compensation.
The setting is saved as soon as it is changed.
3 Tap outside the rectangle **(B)** to return to Control Screen or Half-Press the Shutter Release to return to Live View.
4 The amount of compensation is shown on the Control Screen **(C)**. In Live View, a '±' symbol **(D)** is displayed between the aperture and shutter speed setting as confirmation of the setting.

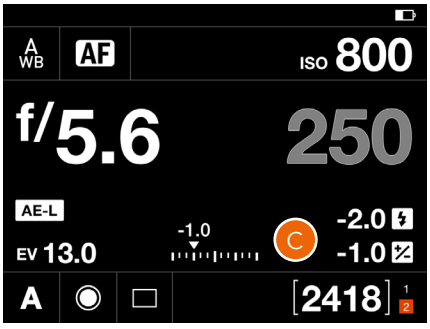


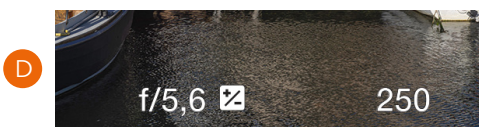


Note!
In the adjustment setting screen you can double-tap the flash or the ±⁄ icon to reset the setting to 0.

Tapping the line to the left or right of the dot, will increase or decrease the value with the value set in **Main Menu > Camera Settings > Exposure > Increment Step Size > exposure Adjust**.







EXPOSURE COMPENSATION / QUICK ADJUST

The exposure compensation function, for both manual and automatic modes can be set from -5 to +5 EV, in 1/3, 1/2 or 1 EV increments and is visible above the scale in the viewfinder and as a ± symbol on the Touch Display Control Screen.

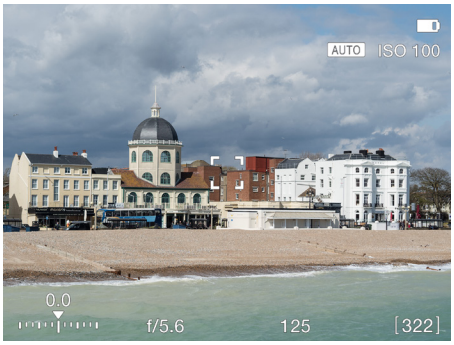
The quickest way to make an adjustment in auto exposure mode is to use the Rear Scroll Wheel **(A)**.
Temporary compensation setting in an auto-exposure mode using the Quick Adjust function:

Turn the rear scroll wheel **(A)** to select the chosen amount of compensation.

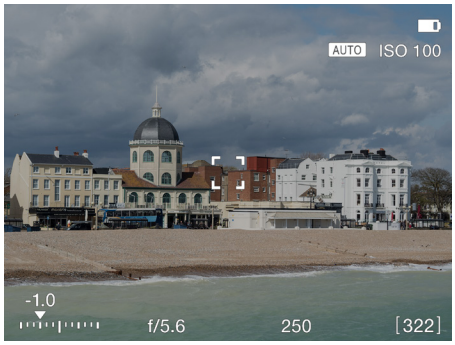
The amount is displayed as both an EV figure complete with a 'minus' or 'plus' prefix and as a marker above a 'minus' to 'plus' scale.
If a fixed exposure compensation value set, the sum of Fixed compensation and Quick Adjust value is displayed on the scale.

Default settings provide 1/3 EV compensation and an immediate clearing of the setting after capture.
See settings on 104 and 107.

Live View with no Quick Adjust



Live View with Quick Adjust -1 EV



Live View with Quick Adjust +1 EV

Note!
Make sure that the setting **Allow Quick Adjust** in the **Camera Settings > Exposure** menu is checked. To see the effect of an adjustment also the **Exposure Simulation** setting in the **General Settings>Live View** menu must be checked.

LIGHT METER MODE

The Light Meter Mode can be changed on the Control Screen.
Tap the desired mode or use the Rear Wheel to select Mode.

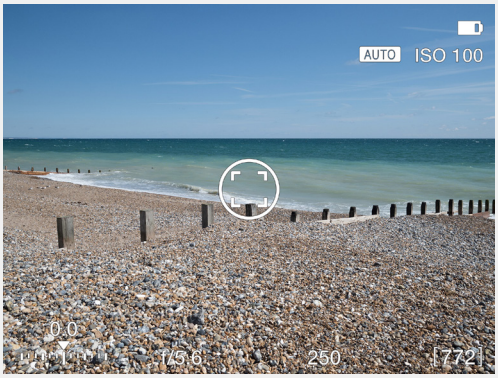
Different Light Metering Modes
There are three reflective metering modes available.

Centre Weighted.
Spot.
Centre Spot.

Metering Modes

Symbol	Light Metering Modes
◯	**Centre Weighted** Used for light situations where there is no particular dominance of light or dark areas across the tonal range. Takes into account approximately 25% of the image seen in the viewfinder.
•	**Spot** The sensitive area is equivalent to approximately 2.5% of the image area (the central spot on the viewfinder screen). Any parts of the image outside of this area will not affect the exposure reading. This provides a very accurate measurement of specific tones. Also excellent for tonal comparison measurements. Spot area is marked in Live View screen. The Spot area will follow any movement of the AF area.
◎	**Centre Spot** Emphasizes the central section of the focusing screen equivalent to approximately 25% of the image. This provides a balanced assessment and is a typical choice where the main subject is in the centre of the image.

Live View with Spot area



4.11 VIDEO RECORDING

HOW TO RECORD VIDEO

- For best result, use a stable tripod with the camera when recording video.
- Quality of the recorded sound can be improved if using an external active microphone.
- The maximum length of one video clip is 29:59 minutes. The number of video clips possible to save, depends on the capacity of the inserted SD memory card. Remaining capacity is displayed on the control screen (**H**).

Select video settings in the video settings menu. See 118.

1 Select Video mode on the mode dial (**C**).

2 The video control screen is displayed on the touch display.

3 Start the video live view by half-pressing the shutter release button (**B**). To stop live view,use one of the following methods:
- Pressing the menu button ☰ or the browse button ▶.
- Swipe down to show the video control screen.
- Go to stand-by mode by pressing the on/off button (**D**).

4 The video live view screen is displayed on the rear screen or in the EVF.

5 Video recording is manual exposure mode only. Set aperture with the front scroll wheel (**A**) and shutter speed with the rear (**E**) until the rear screen or EVF shows the desired exposure. Shutter speed is limited to 1/30 second or shorter. You can press the AE-L button (**G**) to lock aperture and shutter speed together. Then use the scroll wheels to change combination without changing the exposure.

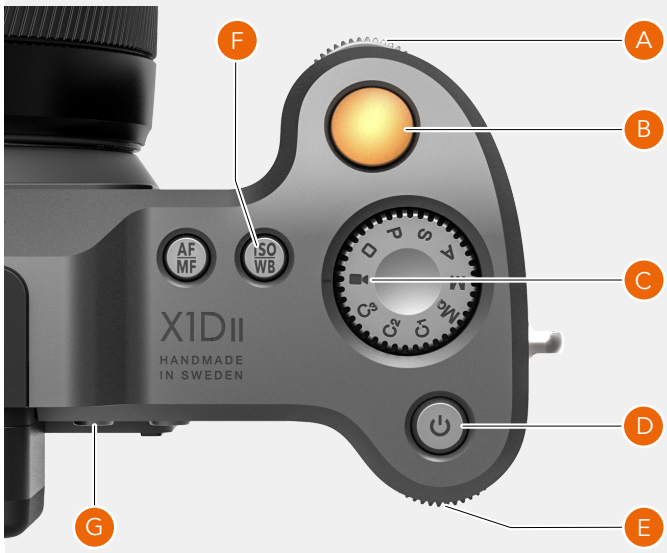
6 Focusing is manual mode only. Use the focus peaking overlay (described on 119) to assist focusing. For precise focusing, double-tap the screen or press the star button ★ to zoom in. Half-press the shutter release button (**B**) to zoom out. You can select zoom-in level in the settings as described on 114.

7 Start recording by fully pressing the shutter release button (**B**) or by pressing the recording icon (**I**) on the touch display. The recording icon is replaced by a stop icon (**J**) during recording.

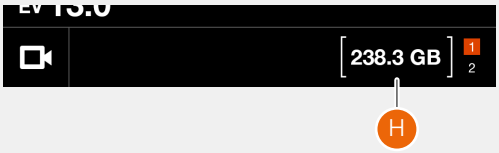
8 Stop the recording by pressing the shutter release button (**B**) or by pressing the stop icon (**J**) on the touch display.

Note!
You can change ISO and white balance from both video control Screen and video live view screen by tapping the values or by pressing the ISO/WB button (**F**).

Note!
Video recording is not possible in tethered mode.



Video control screen



Video live view screen

Video display when capturing video

HOW TO VIEW RECORDED VIDEO

Press the browse button (**A**). The recorded videos are displayed with a Poster Frame (preview image) and a play icon. Press the play icon (**B**) on the Touch display (white triangle) to playback the selected video.

To pause the video, tap the screen again. Tap the pause icon (**C**) to start again.

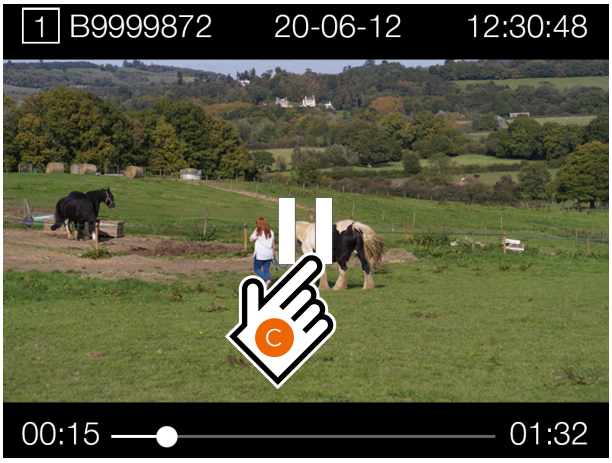
By sliding the white marker (**D**) in the progress bar to the left or right, you can fast forward or reverse to quickly view other parts of the video.

Note!
Videos can be previewed on the rear screen or in the EVF, depending on which is active when the browse button (**A**) is pressed. Video playback in the EVF can only be started and paused by pressing the browse button again.

Note!
Video files cannot be rated.

Screen during video playback

Screen when video is paused



4.12 CONNECTOR PORTS

1 SD Card Slot 1

2 SD Card Slot 2

3 Audio in
Connector for Microphone Audio In.
3.5 mm stereo plug.
This port is also used to connect the Release Cord X for vibration free remote release of the camera. See 153.

4 USB-C Port
Port for USB-C plug for USB 3 tethering with a Mac, PC or iPad.

5 Audio Out
Connector for Audio Out.
3.5 mm Stereo Plug.

4.13 MEMORY CARDS

The X1D II camera uses SD cards only. There are two SD Card slots on the X1D II Camera, slot no 1 **(1)** and slot no 2 **(2)**.

The file counter (**3**) is an estimate of how many more captures can be made on the active card

Note!
All cards must be formatted in the X1D II camera before first use.

SD Memory Card Status Display

The symbols in the status group **(4)** on the Control Screen:

No Card is inserted.

Card #1 is inserted and ready for captures.

Card #1 is inserted and is locked for captures as indicated by the secondary Lock Icon.
Additional secondary icons:

The Card is full.

Card error.

Card read/write speed is slow.

Status group **(3)** normally displays the remaining captures, but can also show:

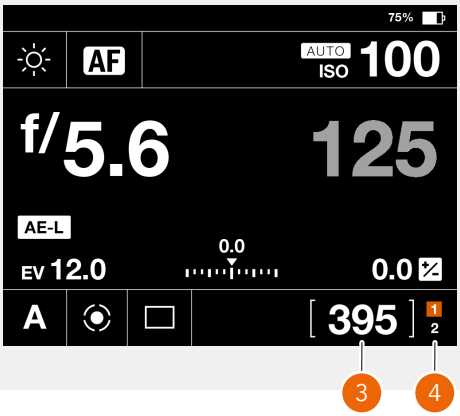
No Card.

The Card is locked.

The Card is full.

Card error.

Backup mode selected, but no second card is inserted.



Live View when no card is inserted

INSERT A MEMORY CARD

Insert SD card

1 Open the Memory Card Slot Cover by sliding it towards the back of the Camera and then rotate it clockwise.
2 When the card slot cover door is opened, mount the SD card in the SD card slot no 1 **(A)** or no 2 **(B)**.
3 Close the slot cover by rotating it counter clockwise and pushing it in place towards the front of the camera **(C)** to lock it into position.

RECOMMENDED MEMORY CARDS

For optimal performance of the X1D II 50C, the following SD memory cards are recommended to use:

- UHS-II, 260MB/s or faster

Note!
Avoid using Micro SD/TF memory cards with SD card sets. Some Sony high-speed SF-G UHS-II SD 300MB/s memory cards might have poor compatibility, and therefore, might not be able to write image data properly.

REMOVE SD MEMORY CARDS

Note!
Do not remove a memory card from the Camera if the 'ready' light is blinking (placed in the lower right corner on the Touch Display), as this will corrupt the files on the card and result in data loss.

Remove SD card

1 Open the memory card slot cover on the Camera **(A)**.
2 Press the SD card no 1 **(B)** or no 2 **(C)** a little way in and then release it. The SD card will then move out from the SD card slot.
3 Grab the card and pull it away from the Camera.
4 Close the slot cover **(D)** by rotating it counter clockwise and pushing it in place towards the front of the camera to lock it into position.

FORMAT SD CARDS

MAIN MENU > GENERAL SETTINGS > STORAGE > FORMAT

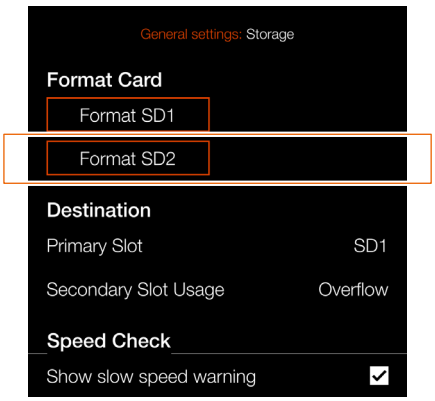
Note!
All SD Memory Cards should be formatted in the X1D II Camera before using them the first time.

FORMAT MEMORY CARDS ON THE TOUCH DISPLAY

MAIN MENU > GENERAL SETTINGS > STORAGE > FORMAT

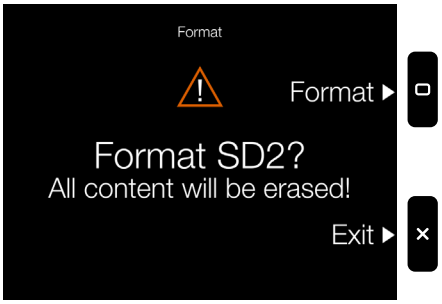
1 Press MENU.
2 Navigate to Storage.
3 Navigate to Format.
4 Navigate to Format SD card.
5 Select “Format SD 1” or “Format SD 2”.
6 A Format Card Dialogue appears.
7 To confirm, select Format by pressing the rectangle Button **(A)**. To exit without formatting, press the Cross Button **(B)**.

Storage Menu



Note!
You can place the Storage icon as a shortcut on the Main Menu screen to simplify the formatting process.

Format Card Dialogue Display



4.14 STOP DOWN BUTTON

STOP DOWN / DEPTH-OF-FIELD PREVIEW

Stop Down functionality
The Aperture normally stops down only during the exposure. In all other situations the Aperture is completely open.

The Viewfinder and the Touch Display will, as a result, show a narrow depth-of-field regardless of the current Aperture setting.

How to preview the depth-of-field
A visual depth-of-field preview check can be made by following these instructions.

1 Press the STOP DOWN button **(A)**.
2 Hold the button **(A)** pressed down.
3 The lens is stopped down to the current Aperture setting.
4 A depth-of-field preview is displayed in the Viewfinder and on the Touch Display screen, as long as the STOP DOWN button **(A)** is completely pressed down.
5 Verify the depth-of-field optically in the Viewfinder or on the Touch Display screen.
6 Release the STOP DOWN button **(A)** to open up the Aperture fully again.

Note!
Depth-of-field is not absolute. Perception of it depends on several factors and so it should be seen only as a rough guide.

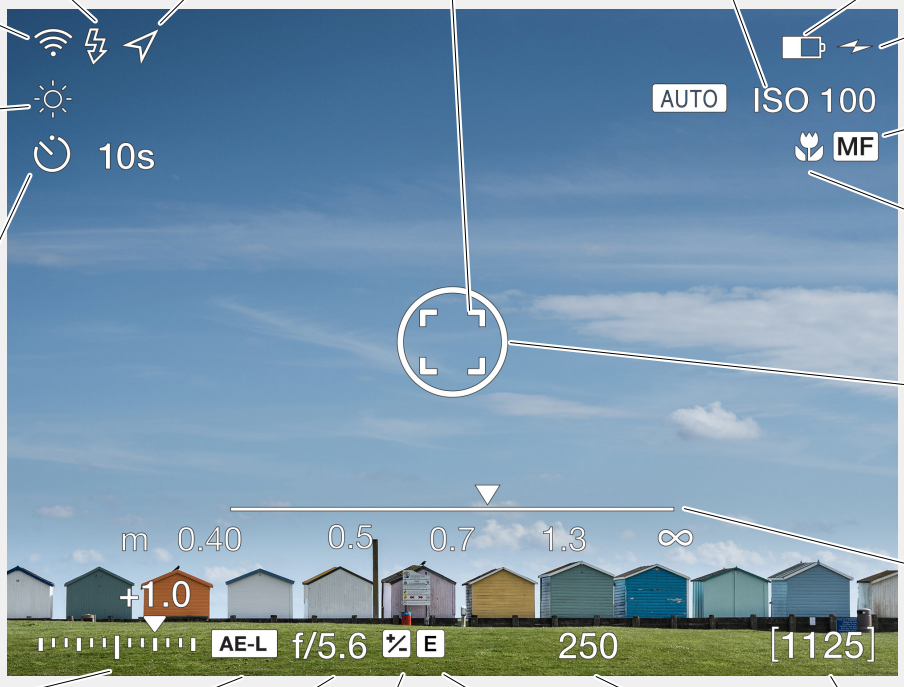
4.15 LIVE VIEW INDICATIONS

The Touch Display and the EVF show identical screens. This page lists the possible display information.

Touch Display

Electronic Viewfinder Display (EVF)

LIVE VIEW DISPLAY



AF INDICATIONS

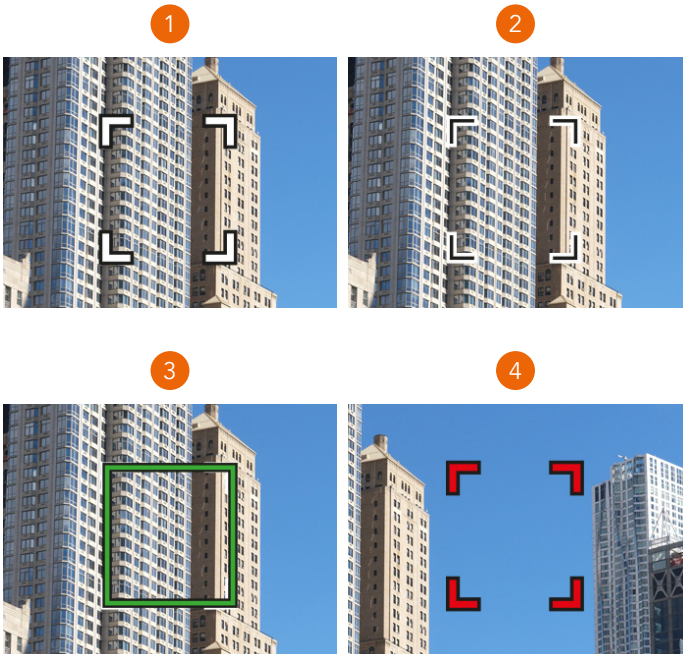
The AF indicator in the Live View centre indicates status of the AF system. Start the Autofocus function by a soft half-press on the Shutter Release Button or by pressing the AF Drive button (AF-D).

1 White, black outline **(1)**
Normal mode. Autofocus is not analysing the subject.

2 Black, white outline **(2)**
Autofocus is ongoing.

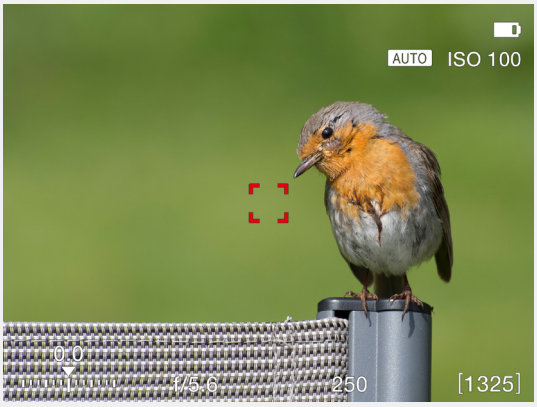
3 Green **(3)**
Autofocus performed and focus is correctly set.

4 Red **(4)**
Autofocus failed to focus and is not correctly set.



White AF indicator. Normal mode.

Green AF indicator. AF is correctly set.



Red AF indicator. AF analysis failed to focus.

LIVE VIEW OVERLAYS

1 The Camera displays Live View when you half-press Shutter Release Button.
2 Press the Rectangle Button **(B)** to step to the next overlay.
3 Press button **A**, or **E**, to Exit Live View.

Note!
If you activate the EVF (Electronic Viewfinder) by approaching the EVF with your eye and start looking into it, the Live View function for the Touch Display will turn off the Touch Display (to save battery) with the help of a proximity sensor to the right of the EVF display. If you switch back again and look at the Touch Display, the EVF is turned off and the Touch Display is activated.

Live View Settings

Overlay
Select Overlay displayed during Live View. Cycle between options with button (B).

- Exposure information **(F)**.
- Exposure information + Grid **(G)**.
- Exposure information + Spirit Level **(H)**.
  See chapter Spirit Level on 132 for details.
- Exposure information + Distance scale **(I)**.
  See 81 and 135
- None **(J)**.

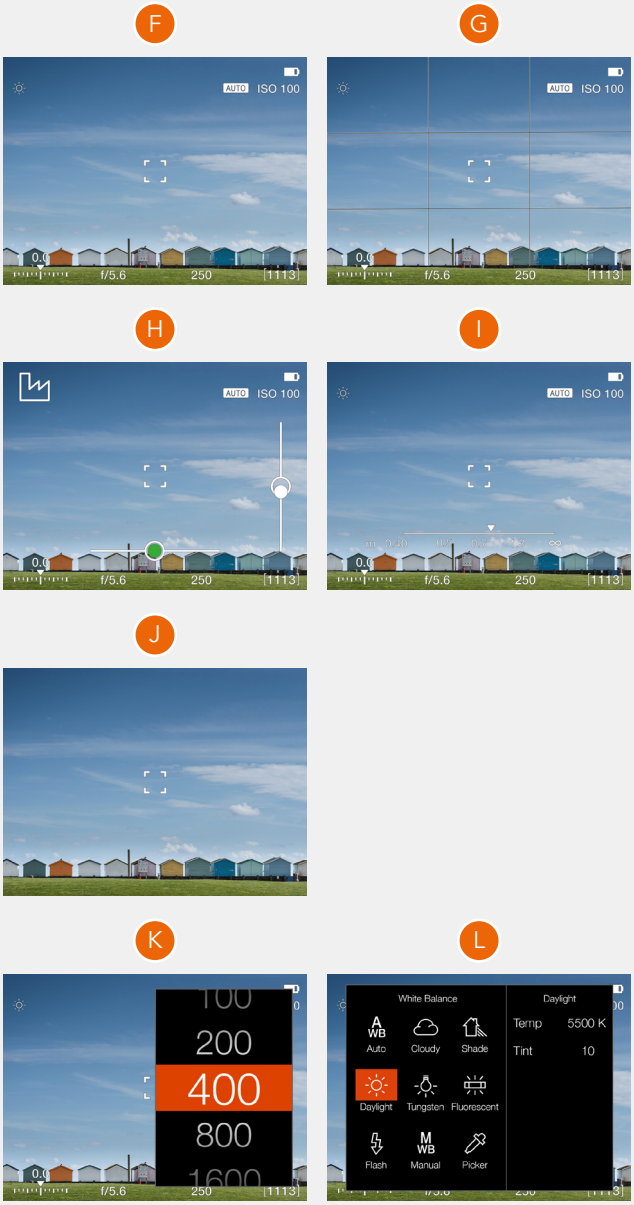
ISO
In Live View, you can tap the ISO value to change **(K)**.

White Balance
In Live View screens **(F)**, **(G)** and **(I)**, you can tap the White balance icon to change **(K)**. See more on 53.
If Auto White balance (AWB) is set and no icon is shown, you can still tap in the upper left corner to bring up the WB setting screen **(L)**.

ZOOMING IN LIVE VIEW

1 Double tap the Touch Display, or press the Star Button **(C)** to Zoom in to 50% or 100% to that specific area. Magnification factor is set in the **Camera Settings > Focus** menu. Note that when using the EVF you must press the Star Button to zoom in.
2 Double tap or press on the Star Button again to Zoom out to display the entire Capture.
3 You can pan the image when zoomed in by swiping. If using the EVF you can pan the image by swiping the Touch Display.

Note!
Live View demands higher power consumption than normal operation. Working with Live View will shorten the usage time of the Camera.



4.16 FOCUSING

AUTOFOCUS

Autofocus is activated by pressing the shutter release to the half-press position or by pressing the AF-D button.

The operative range is from EV 1 to EV 19 at ISO 100.

Focus is determined by maximizing the contrast within the central marked area.

Depending on situation, the indicated AF Area looks different. See illustrations to the right and 82.

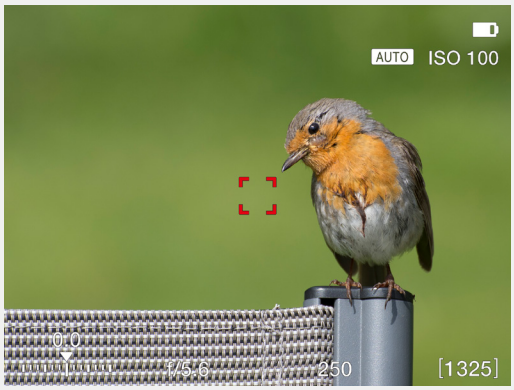
AF Assist Light
AF Assist Light **(A)** is automatically activated if selected. The operative distance is approximately up to 4 metres from the camera.

Note!
You can select position of the AF point. See 88.
It is also possible to choose from three different sizes. See 89.

Note!
H System lenses whose firmware version is older than 18.0.0 cannot be updated with AF functionality. The camera will default to Manual Focus mode for such lenses.

White AF indicator.

Green AF indicator. AF set correct.



Red AF indicator. AF analysis failed to focus.

At AF setting, the shutter release will be blocked until the camera finds the optimum focus setting. This ensures that no captures are made that are not finely focused.

Note!
In this mode the lens will focus at one distance and will remain focused at that distance while pressure remains on the Shutter Release button **(A)**.

In this way, you can focus on a object, temporarily positioned within the focusing zone on the viewing screen and then without releasing pressure on the Shutter Release button **(A)**, recompose knowing that the focus remains on the object chosen even though it is now outside the focusing zone.

Note!
For objects close to the camera and with wide-angle lenses it is better to move the AF point as described on 90.

Releasing the pressure on the Shutter Release button **(A)** and pressing again (half-press) would now change the focus setting to the distance of the object within the focusing zone.

See manual focus mode on 86 for a useful way of working with manual and autofocus settings combined.

Focus

MANUAL FOCUS

Manual focus setting
Manual focus can be used at any time even in Auto Focus Mode. You can also switch to Manual Focus Mode and only use the Focus Ring manually on the lens.

For users who prefer manual focus control but would like the benefits of autofocus, one method is to use the AF-D button set to AF Drive. Align the AF area with the subject and press the AF-D Button. The camera uses the Autofocus system to set correct focus and reverts immediately to manual focus control when the button is released. Therefore, you can recompose the picture without having to maintain pressure on the release button in order to retain the newly automatically made focus setting.

Manual Focus in Live View

1 Double tap the Touch Display, or press the Star Button **(C)**, to Zoom in to selected Focus Area.
2 Adjust Focal Point manually on the Lens.
Note that you have two Focus Assist options to help you set focus accurately.

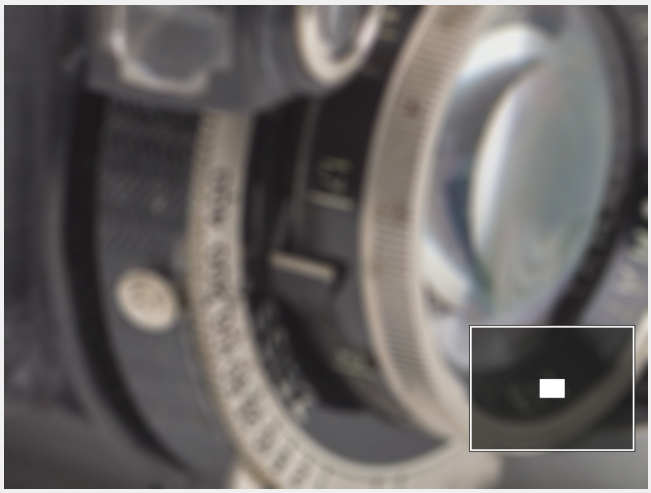
- Auto Zoom to 50% or 100%.
- Focus Peaking (see next page).

In Auto Zoom Live View will automatically zoom to 50% or 100% when the focus ring is turned. After a few seconds of inactivity, Live View returns to full image.
Also see 114.
3 Double tap or press on the Star Button again to Zoom out to Display the entire Capture.

Using these modes will ensure accurate and precise focusing. Auto Zoom is the most accurate and Focus Peaking is the fastest to use.

Live View

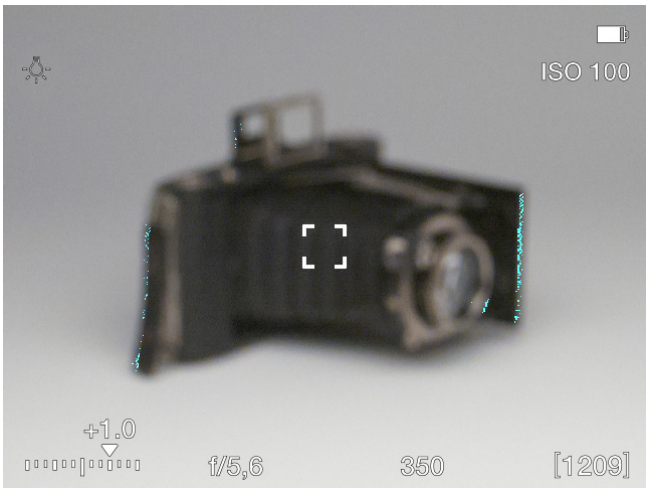
Auto Zoom to 50%. Subject not in focus.



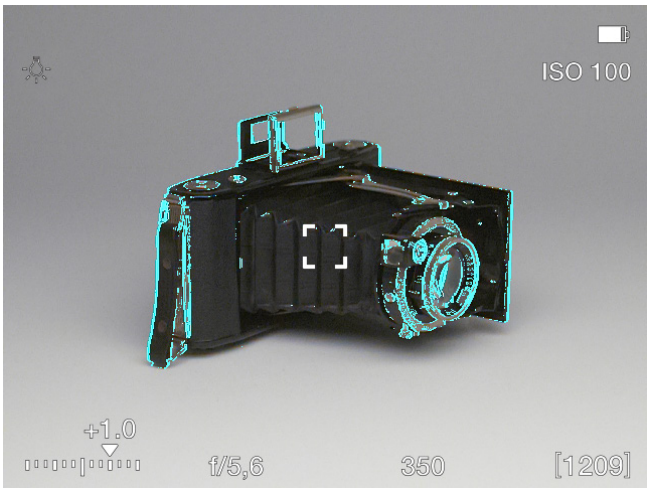
Auto Zoom to 50%. Focus set correctly.

FOCUS PEAKING

Subject not in focus when Focus Peaking is active



Focus Peaking display when subject is in focus

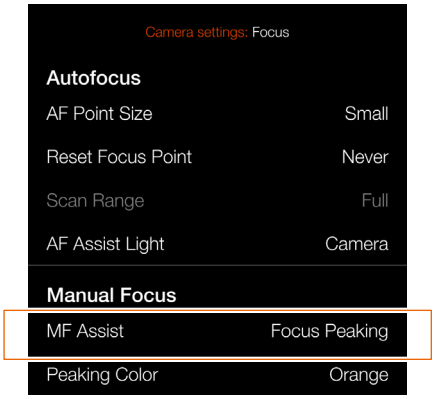


How to use Focus Peaking

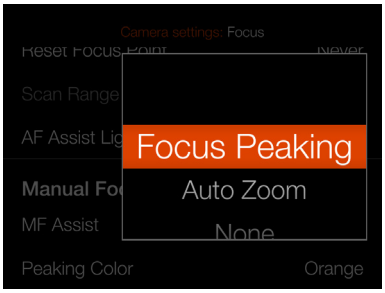
The Focus Peaking function is a Manual Focus tool to help you identify what areas of the subject are in focus. Focus Peaking is not active in Auto Focus mode.

When Focus Peaking is active and you adjust the focus manually, the focused area of the subject (orange in this case) moves in depth as you move the focus.

Manual Focus Settings Menu



MF Assist dialogue

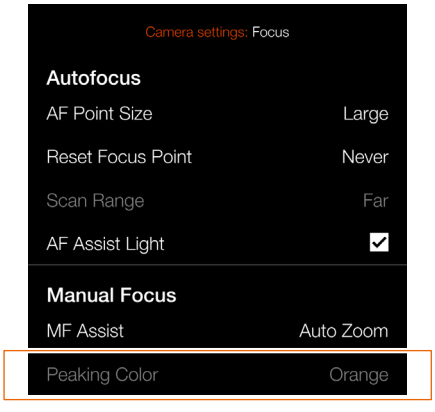


Manual Focus Settings Menu Contents

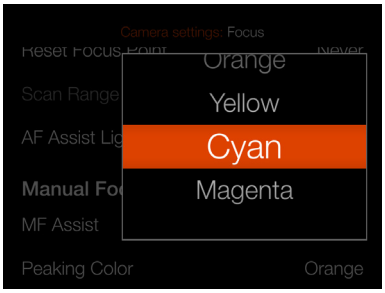
MF Assist
Manual Focus Assist. Choose between:
- Focus Peaking.
- Auto Zoom.
- None.

Peaking Colour
Select Focus Peaking Colour.
- Orange.
- Yellow.
- Cyan.
- Magenta.

Manual Focus Settings Menu



Peaking Colour dialogue



4.17 MOVE AUTOFOCUS POINT

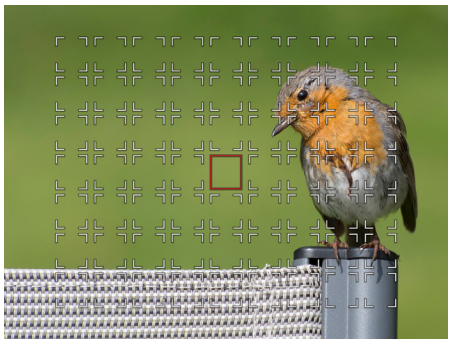
The Autofocus point (A) can be moved, and selected manually, to any one of the available points (B). The size of the AF point can be set to 4 mm, 2.8 mm or 2 mm. See 89 for details on how to resize. Also see 90 on how to move point while looking through the EVF.

A

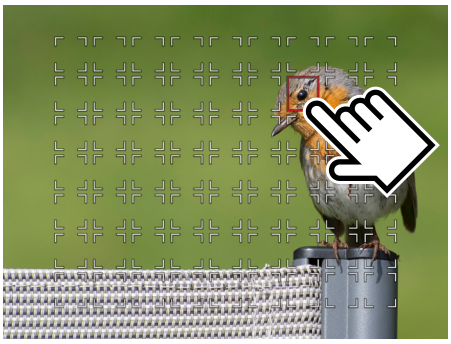
B

C

D



E



F

Move by Touch

If **Move AF Point** in **Main Menu > General Settings > Touch** is checked, you can tap the new location **(B)** where you want to focus when Live View is active.

Move the Autofocus point on the Touch Display in Live View Mode or in the Electronic Viewfinder EVF

1. Start Live View Mode or use the EVF.
2. Press and hold the AF/MF button for 1 second.
3. All focus points are now displayed as an overlay **(D)**.
4. Select one of the AF points by tapping on the Touch Display or Rotate the Rear Scroll Wheel to move the AF point up/down and the Front Scroll Wheel to move left/right **(E)**.
5. Save and exit by a half-press on the Shutter Release button. The AF point is now in the new selected location **(F)**.

How to use the Scroll Wheels to move the AF point

AF point	**Rear Scroll Wheel**
Move up	Rotate left
Move down	Rotate right

AF point	**Front Scroll Wheel**
Move left	Rotate left
Move right	Rotate right

Save the new point with a Half-press on the Shutter Release button.

Note!
If Spot Metering is selected and the AF point is moved, the sensitive light metering area will follow the AF Point.

Note!
To reset the AF point back to the centre position, press the Cross Button. The Focus Point can also be reset to centre in Live View by pressing the Cross Button.

Note!
You can set the camera to automatically reset the Focus point to the centre position after a capture, or maintain the selected position, in **Main Menu > Camera Settings > Focus > Reset Focus Point**.

4.18 RESIZE AUTOFOCUS POINT

The Autofocus point can be removed and resized in the Focus menu as described on 112.

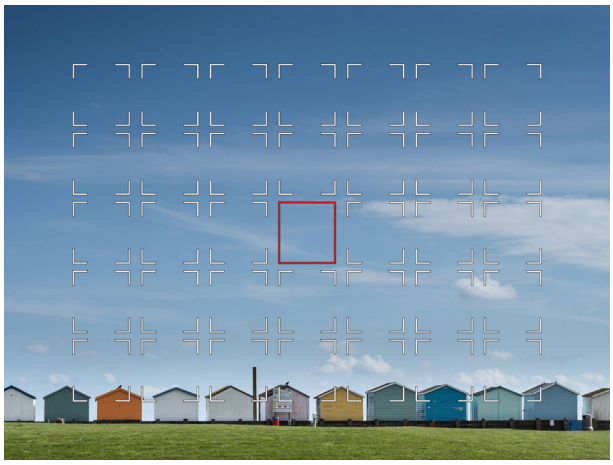
Resize by Touch

If **Move AF Point** in **Main Menu > General Settings > Touch** is checked, you can use pinch and spread gestures to change the size of the AF point when Live View is active.
Note that the AF point can also be moved by touch in this case.

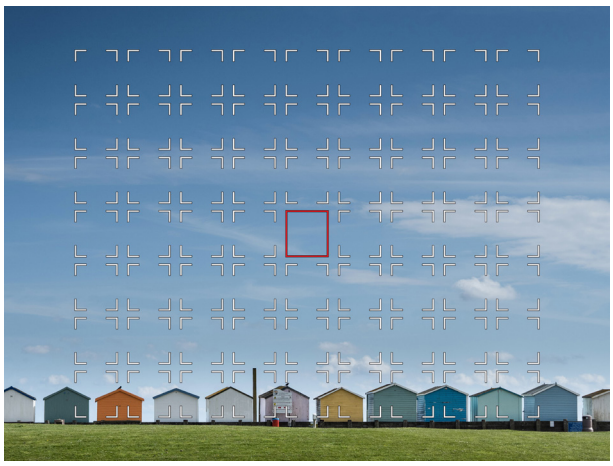
Resize in Grid View.

Start Live View Mode or use the EVF.

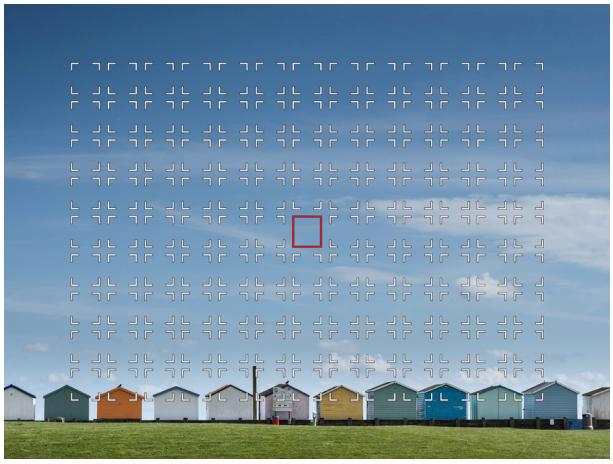
1 The single AF point is displayed in the centre position.
2 Press and hold the AF/MF button **(A)** for 1 second.
3 A grid with possible AF points is now shown.
4 Press the Rectangle Button **(B)** to cycle through the different sizes.
5 If required, you can select an AF point by touch or by using the scroll wheels.
6 Save and exit by a half-press on the Shutter Release button.



Large



Medium



Small

4.19 MOVE AUTOFOCUS POINT USING TOUCHPAD

The position of the Autofocus point can be changed while viewing through the EVF by sliding a finger on the rear display.
Make sure that the setting "Touchpad for EVF" in the **General Settings > Touch** menu is set to the desired option. See details on 125.

Possible settings are:

- Right
- Left
- Top-Right
- Top-Left
- Bottom-Left
- Bottom-Right

Which setting you should use, mainly depends on which eye you use when looking through the EVF. If the right eye is used, a good starting point is to set "Right". This will use the right half of the screen as a touchpad for moving the AF point.

Moving the AF point
In this example, the "Touchpad for EVF" is set to "Right".

While looking through the EVF, place your finger on the right part of the rear display and slide upwards and slightly to the left. In the EVF you will see the AF point moving, and when you have the desired position, you can release the finger from the rear display. However, it is not necessary to release the finger before the exposure. The AF point will stay in its position until changed. If the option "Reset Focus Point" is set to "After Exposure" (See 112), the Focus Point will return to center after the exposure.

Note!
The movement of the AF point is relative, similar to a touchpad on a laptop computer. This means that if you cannot move the AF point far enough in one movement, lift the finger and return to the starting point and repeat the movement.

AF Point in the center

Slide the finger on the rear display to move AF point

AF Point moved

4.20 CHANGE SETTINGS ON THE GRIP

How to change AF/MF and ISO/WB settings

AF / MF modes

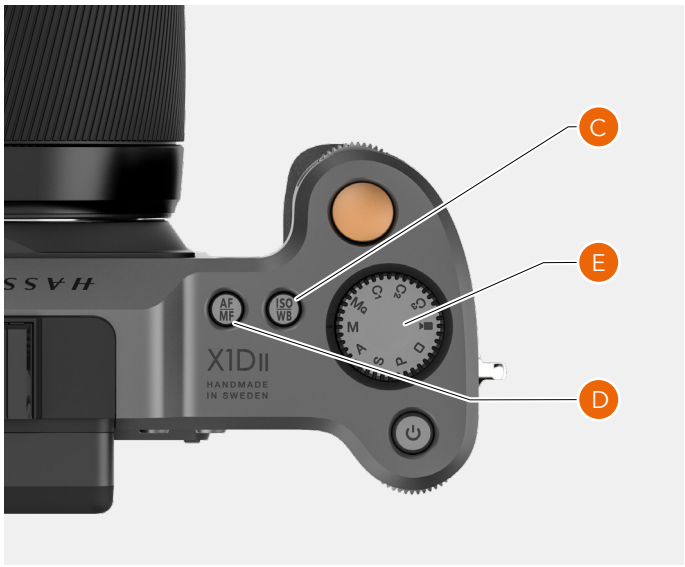
Press the AF/MF button **(D)** to toggle between AF and MF.

ISO / WB modes

1 Press the ISO/WB button **(C)** on top of the Camera Grip once to select ISO.
2 Press twice to select WB.
3 Press a third time to exit.

ISO Change ISO mode by scrolling the Rear **(B)** or Front Scroll Wheel **(A)** left or right.

WB Change WB mode by scrolling the Rear **(B)** or Front Scroll Wheel **(A)** left or right. When in WB M Manual Mode, use Rear Scroll Wheel **(B)** to select setting. Also see 53 for more details.



Mode Dial (E)

MQ	Manual Quick Mode.
M	Manual Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.
Rectangle	Automatic Mode. ISO are also automatically set. Several functions are limited or locked.
Video	Video Recording Mode.
C3	Custom Program 3.
C2	Custom Program 2.
C1	Custom Program 1.

ISO AND WHITE BALANCE

ISO and White Balance are set either on the Camera Grip, the Touch Display or, when tethered, in Phocus.

- On the Camera Grip, the ISO / WB Button **(A)** provides immediate access to ISO and White Balance settings. The front scroll wheel **(B)** and Rear Scroll Wheel **(C)** are used to make the desired changes. These appear on the Touch Display and in the Electronic Viewfinder (EVF).
- For the Touch Display, settings are changed on the Touch Display or by using the buttons next to the display.

The settings are automatically and simultaneously adjusted within the Camera and changes display on both the Touch Display and in the Electronic Viewfinder.

Note!
The changes are only displayed on the Touch Display after the settings have been saved. See more information about making manual White Balance settings in the 'Touch Display Settings' section.

ISO

1 Press ISO / WB button **(A)**.
2 Turn the Front Scroll Wheel **(B)** to select ISO setting.

White Balance WB

1 Press ISO / WB button **(A)**.
2 Turn the Front Scroll Wheel **(B)** to select WB (Auto AWB, Daylight, Shade, Cloudy, Flash, Fluorescent, Tungsten or Manual WB).
3 To set the Colour Temperature manually, turn the Front Scroll Wheel **(B)** until "M/WB" is displayed. Then the Colour Temperature value is displayed at the bottom of the screen.
4 Use the Rear Scroll Wheel **(C)** to set the Manual WB.

Note!
White Balance settings are technically not necessary for RAW 3F/3FR files. The raw format files contain all the information required for correction in Phocus and/or other software, regardless of the original colour temperature of the light source or colour temperature setting of the camera at the time of exposure.
If you intend to shoot RAW & JPEG or use Phocus for JPEG production and plan to deliver or print the JPEG files directly, then you should make a White Balance setting.

Note!
ISO and White Balance settings are made either on the Camera Grip or the Touch Display. The settings are automatically updated on both the Touch Display and the Electronic Viewfinder.

4.21 BROWSING, PREVIEW AND HISTOGRAM

BROWSE CAPTURES

Captures on the cards can be browsed on the rear display or in the EVF. Where the captures are shown, depends on which display is active when the Play / Browse Button **(C)** is pressed.

Browsing captures on the rear display
To enter Browse mode, press the Browse Button **(C)** next to the Touch Display.

In Browse mode, swipe right or left or use the Front Scroll Wheel **(A)** on the Camera Grip to Browse captures in a folder.

In Browse mode on the rear display, swipe right or left to Browse captures.

Zoom out to Folder View to select another folder to Browse as described on 95.

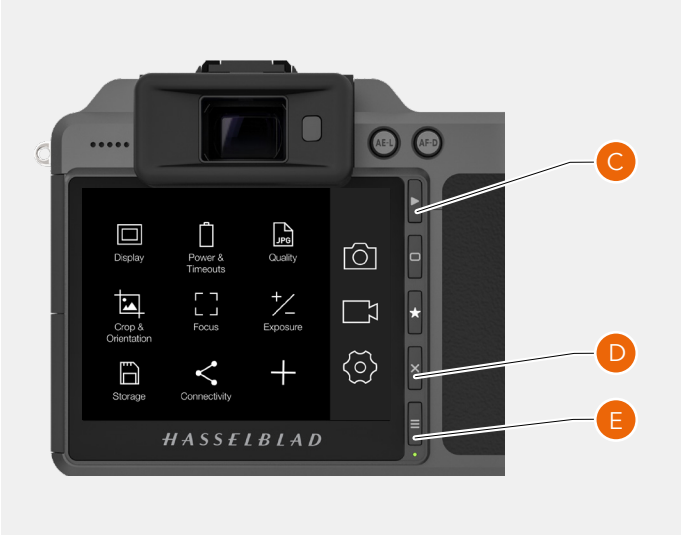
Press Shutter Release Button **(B)** to exit Browse mode or press the Menu Button **(E)**.

Access the Delete Image Dialogue by pressing the Cross Button **(D)**.

To select another overlay, use the rear scroll wheel.

You can zoom out to 9-view by pressing the AE-L button in full image view. You can zoom out further to view Folders and finally select card as described on 95 (Using buttons).

The Image Preview setting in the **General Settings > Preview** menu, includes a setting where you can choose to automatically see a preview in the EVF after each capture. See more on 124.



Browsing captures in the EVF
With the EVF active, press the Play / Browse Button **(C)**. The last capture will be shown.

To view another image, use the front scroll wheel or swipe the rear display.

To select another overlay, use the rear scroll wheel.

You can zoom in using the AF-D button. To zoom out, use the AE-L button. A long-press (1 sec), will auto-zoom in or out. Zooming in the last image will be done around the focus point used.

When zoomed-in, you can pan the images by swiping the rear display. Which area of the rear screen that is used, can be set as shown on 125.

Browsing of video files are explained on 74.

ZOOM IN AND OUT ON THE TOUCH DISPLAY

The following gestures can be used to Zoom in and out on the Touch Display:

Function	Action
Zoom in	Spread (move two fingers apart).
Zoom out	Pinch (move two fingers together).

Action	Function
Double Tap	Zoom in to 100%. Double Tap again to Zoom out to full View.

Zoomed View

Standard Preview

9 View Mode

9 View Mode displays an overview of up to 9 captures. Scroll down to display all Captures in the Folder.

Enter 9 View Mode by pressing the AE-L button, or zoom out with a two finger “pinch”.

9 View Mode

SELECT CARD TO BROWSE

You can select SD 1 Card or SD 2 Card to Browse Captures.

To select which card to review, navigate up in the folder structure until you reach the "Select Card to Browse" dialogue. The folder structure is the following:

Memory Cards
Folders
9 images
1 image

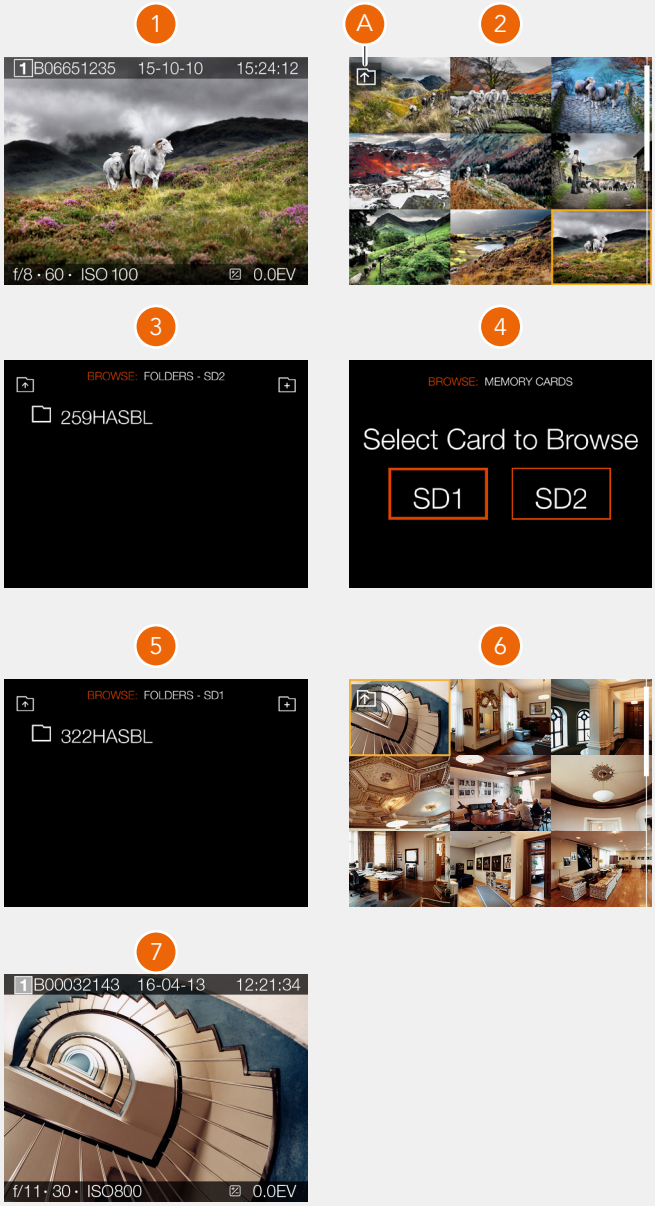
It is possible to navigate to the card selection dialogue either using touch or buttons and scroll-wheels.

By touch:

1 When viewing one image **(1)** Pinch inwards to go to the 9 images view **(2)**.
2 In the 9 images view - Press the "Folder Up" button **(A)** in the top left corner to go to folders.
3 In the folders view - Press the "Folder Up" button in the top left corner to go to Card level .
4 Select Card to Browse.
5 Select folder by clicking the folder name (322HASBL).
6 Select the image you want to view from the 9 images view.
7 The selected image is shown.

Using buttons:

8 When viewing one image **(1)** - Press the AE-L button to go to the 9 images view **(2)**.
9 Continue to press the AE-L button repeatedly to go up in folder structure.
10 Select Card to Browse using any of the scroll-wheels
11 Use the AF-D button to select card.
12 Repeatedly use scroll-wheels and AF-D button to select folder to review.



CREATE NEW FOLDER

It is possible to create a new folder on the currently active SD card. When a new folder is created, all new images will be stored in that folder. The folder name is auto-generated and cannot be changed.
It is not possible to store images in a previous folder.

By touch:

When viewing one image **(A)**, pinch inwards to go to the 9 images view **(C)**.

1 In the 9 images view - Press the "Folder Up" button **(B)** in the top left corner to go to folders.
2 In the folders view - Press the "Add folder" button **(D)** in the top right corner to create a new folder.
3 In the Create Folder dialogue **(E)**, choose **Create** to create a new folder or **Exit** to skip.

Or using buttons:

When viewing one image **(A)** - press the AE-L button to go to the 9 images view **(C)**.

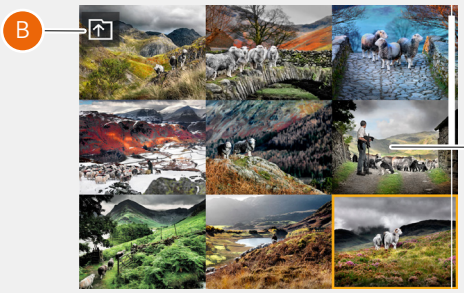
1 Press the AE-L button again to view the folder structure.
2 Select the "Add folder" icon **(D)** in the top right corner using any of the scroll-wheels
3 Use the AF-D button to show the Create Folder dialogue **(E)**.
4 In the dialogue, choose **Create** to create a new folder or **Exit** to skip.

When the new folder is created, the folder view **(F)** will show the new folder. To view images in the previous folder (259HASBL), proceed as described on the previous page. New images will automatically be stored in the new folder.

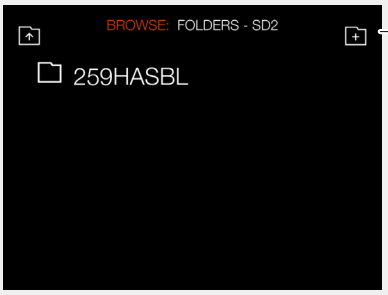
Note!
It is only possible to create a new folder on the currently active card. When browsing the other card, the "Add Folder" icon will not be available.

1-view

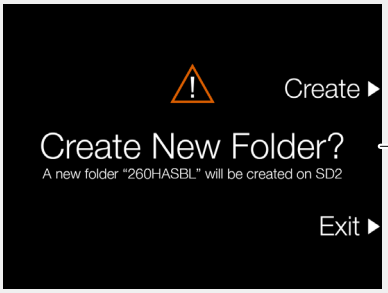
9-view



Folder view



Create folder dialogue



Folder view

STANDARD PREVIEW

The Standard Preview is displayed when you first turn on the camera and is probably the view you will use most often.

It displays a preview of your most recent capture and basic information about the settings.

1 Card (1 or 2)
2 Capture Date
3 Capture Time
4 Aperture (f/5.6)
5 Shutter Speed (125)
6 ISO Setting (100)
7 +/- Exposure Adjust Indicator and Exposure Adjust value (0.0 EV)

9 VIEW MODE

To display 9 View Mode, press the AE-L button when in Browse Mode. In this Mode you can see an overview of up to 9 captures. If you have more than 9 captures, swipe down to scroll through the captures.
Tap on one of the small images to view in full screen.

PREVIEW OVERLAYS

In addition to the Standard overlay as described on 94, the available overlays are: Histogram Mode, Capture Details Mode, Luminance Histogram Mode and Separate Histogram RGB Mode.

HOW TO CHANGE HISTOGRAM OVERLAY

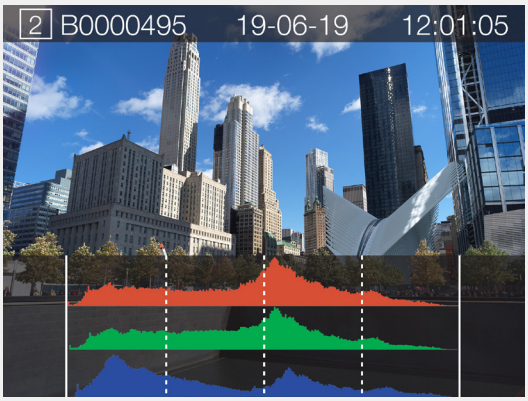
Tap the lower part of the image or use the rear scroll wheel or Rectangle Button to alter between the available Histogram representations.

CAPTURE DETAILS MODE

The Capture Details Mode displays SD Card (1), Date (19-05-19), Time (14:32:08), selected Aperture (f/11), Shutter Speed (250), ISO (100), EV Settings (+/- 0.0), Mode (A), Light Meter Mode (Center Weighted), White Balance (Daylight), Focal Length (45mm).

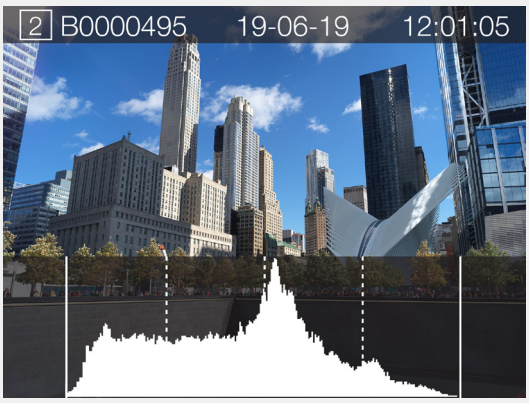
SEPARATE HISTOGRAM RGB MODE

In Separate Histogram RGB Mode, the individual RGB channels are displayed. The Red R channel first, the Green G channel in the middle and the Blue B channel below the Red and Green channels.

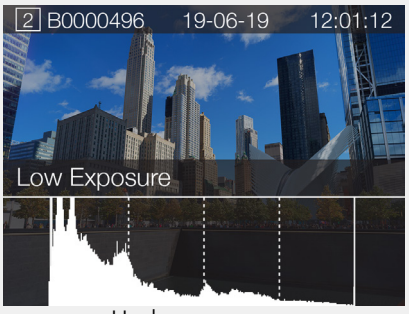


LUMINANCE HISTOGRAM MODE

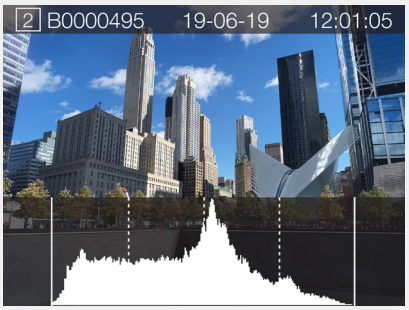
The Luminance Histogram mode displays the luminosity. The luminance is represented by a White Graph.



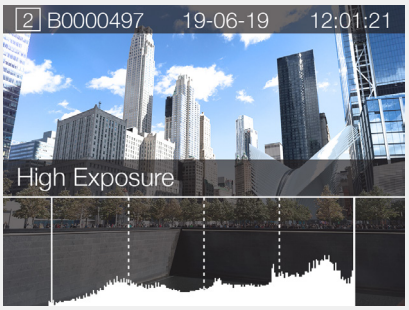
HISTOGRAM EXPOSURE MODE



Underexposure



Even exposure



Overexposure

Histogram Exposure
The Histogram provides a graph that indicates the total number of pixels at each brightness level, with brightness in range from black on the left to white on the right. It is a valuable tool for evaluating captures.

A well exposed shot usually has a full range of levels, while underexposed and overexposed Captures tend to show levels concentrated at the left or right part of the scale.

The histogram is only an indicator that should be interpreted. There are several situations in which a 'bad' histogram will match an exposure that could be perfect for the intended effect.

Study the Histogram examples and the explanations below.

Underexposure
Histogram display concentrated on the left with few pixels elsewhere indicates a likely underexposure. Many details will be lost in the shadows.

Even exposure
Histogram display spread across the full range indicates a likely good exposure. There may still be a few pixels at the extremes, indicating a few spectral highlights and saturated shadows, but this is often normal in a good exposure.

Overexposure
Histogram display concentrated on the right with few pixels elsewhere indicates a likely overexposure. Many details will be lost in the highlights.

4.22 IMAGE RATING

RATING FUNCTION

Images on the memory card, can be rated from 1 to 5 Stars. The rating is written to the meta-data of the image file. Use the following procedure.

1 Make sure that the setting “Image Rating” in the “Camera Settings - Configuration” menu is checked. See page 118.
2 Press the Play button to enter Browse Mode.
3 Select the Capture Details overlay by pressing the Display Button or by rotating the rear Scroll Wheel (A).
4 In the lower right part, the 5 stars (B) show the current rating. For an unrated image, no stars are filled.
5 To rate the image, tap the five stars (B) or press the Star Button.
6 The camera enters Rating Mode, showing five large stars. If the image has been rated before, it will show the current rating, otherwise, the five stars will be empty.
7 Tap the desired star to change rating. E.g. if you want a 4-star rating, tap the fourth star (C). The Rectangle Button increases rating and the Cross Button decreases rating. You can also use the rear Scroll Wheel to change rating.
8 To return to Browse Mode (D), press the Star Button or the Browse Button again.

Rating Mode is equivalent to standard Browse Mode, which means that you can browse to the next image by swiping the display or using the front Scroll Wheel. Double-tap the screen or press AF-D to Zoom-in.

You can always go back to a previously rated image and change rating following the same procedure as above.

Note!
For an efficient workflow while rating many images, stay in Rating mode and swipe to the next or previous image. It is also possible to use the front scroll wheel to go to the next or previous image while in Rating mode.

Note!
Images captured with earlier firmware than 1.2.0 cannot be rated.

Note!
If Image rating is deactivated in the setting “Camera Settings / Configuration / Image Rating”, the five stars in Browse Mode (A) will not be visible.

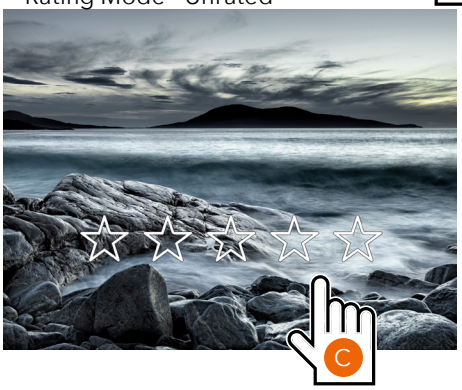
Note!
If two cards are inserted, only images on the primary card are rated.

Browse mode - Capture Details Overlay

A

B

Rating Mode - Unrated



Rating Mode - Rated 4 stars

Browse Mode - Rated 4 stars.

D

GPS

The GPS icon, when active, is displayed in the top left corner in the Viewfinder and when using the Settings Menus. When the Control Screen is active, the GPS icon is displayed near the centre of the display.

The GPS state is displayed in 3 different ways:

Steady icon
GPS has obtained the position.

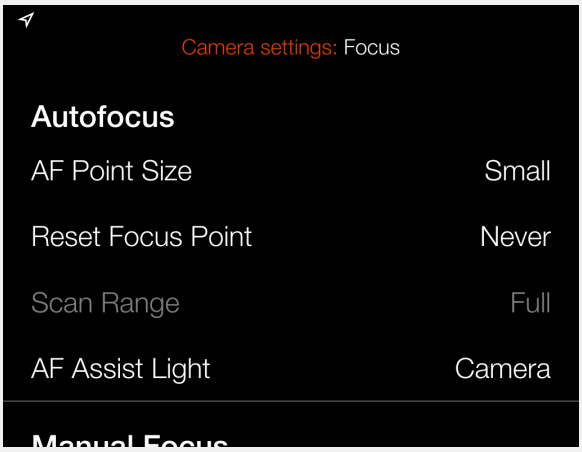
Blinking icon
GPS has not yet obtained the position.

No icon visible
GPS is not activated in the **General > GPS** Menu.

Note!
There are situations where the X1D II GPS module can receive less, or no position information. These are for example when the X1D II camera is indoors, in tunnels and even in forests with large trees.

GPS icon on Control Screen

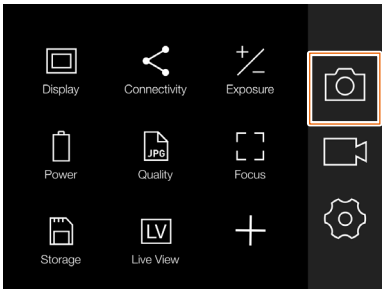
GPS icon when in Settings Menus



GPS icon in Viewfinder

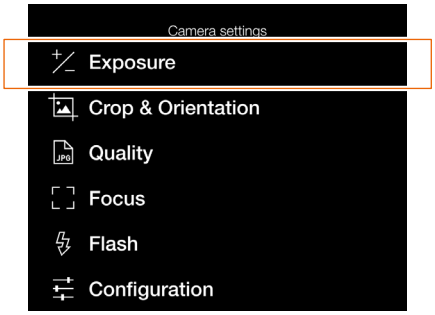
5.1 CAMERA SETTINGS MENU

Main Menu

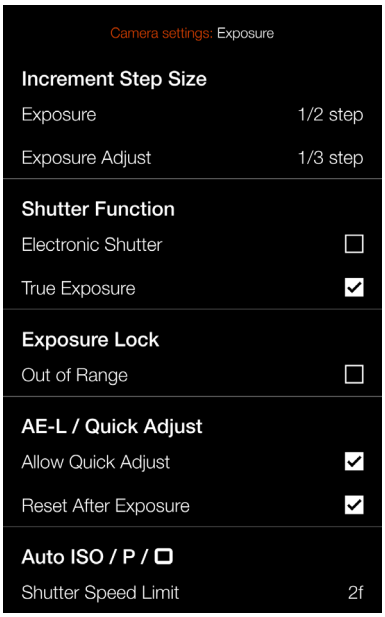


Camera icon

Camera Settings Menu



Exposure Settings Menu



MAIN MENU > CAMERA SETTINGS > EXPOSURE

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

INCREMENT STEP SIZE SETTINGS

MAIN MENU > CAMERA SETTINGS > EXPOSURE > INCREMENT STEP SIZE

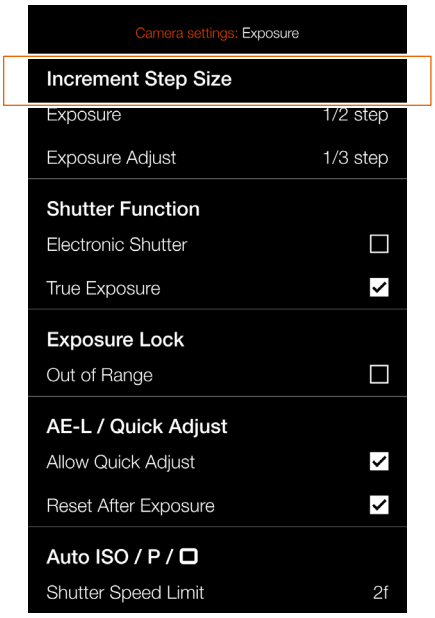
1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

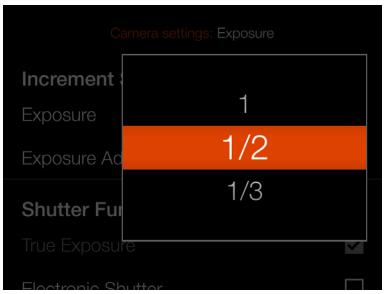
Exposure
Select between **1, 1/2 and 1/3 stop** increments.

Exposure Adjust
Select between **1, 1/2 and 1/3 stop** increments.

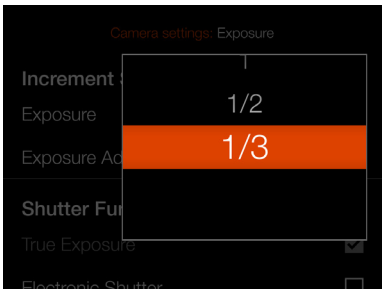
Exposure Settings Menu



Exposure increment Setting



Exposure adjust increment Setting



SHUTTER FUNCTION SETTINGS

MAIN MENU > CAMERA SETTINGS > EXPOSURE > SHUTTER FUNCTION

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.
4 Select Shutter Function.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Electronic Shutter

Select **On or Off**. If this option is checked, the camera will disable the lens shutter and use an electronic shutter in the sensor instead. When electronic shutter is active, this is indicated with an E symbol in front of the shutter speed in Live View and on Control Screen.

Please note the following limitations with Electronic Shutter:

- The camera will use the Rolling Shutter available on the sensor which has a read-out time of approximately 300 ms. This will cause distortion of the image if the camera or subject is moving during the exposure. A tripod and a stationary subject is recommended.
- ISO will be limited to 3200.
- Full image quality is not guaranteed.
- Shutter speed range is 68 minutes to 1/10000 sec.
- Flash is disabled.
- Continuous drive is disabled.
- True Exposure is disabled.

True Exposure

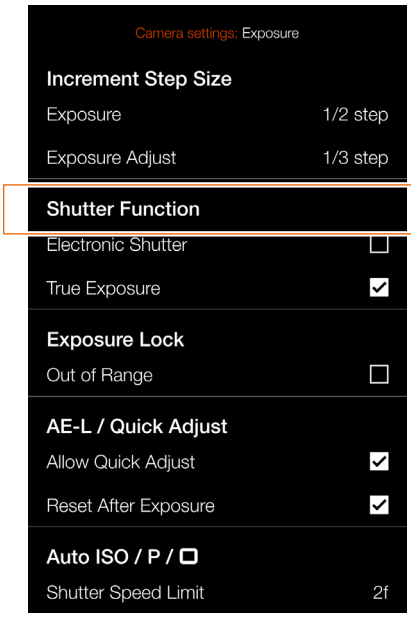
Select **On or Off**. The check box will be marked with a √ when On and the check box is empty when True Exposure is Off.

Determines whether the exposure is automatically adjusted to create a true exposure setting. On allows the adjustment. Off retains the normal setting.

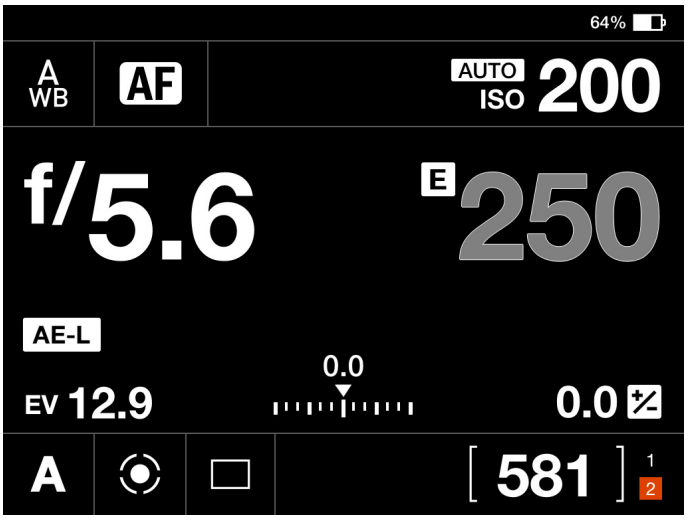
Note!
If using flash/strobe as the main light source and 1/800s or shorter shutter speed (depending on lens type), remember to turn off the True Exposure option.

Note!
The True Exposure feature is designed to keep shutter speed unaffected by aperture value. See next page.

Exposure Settings Menu



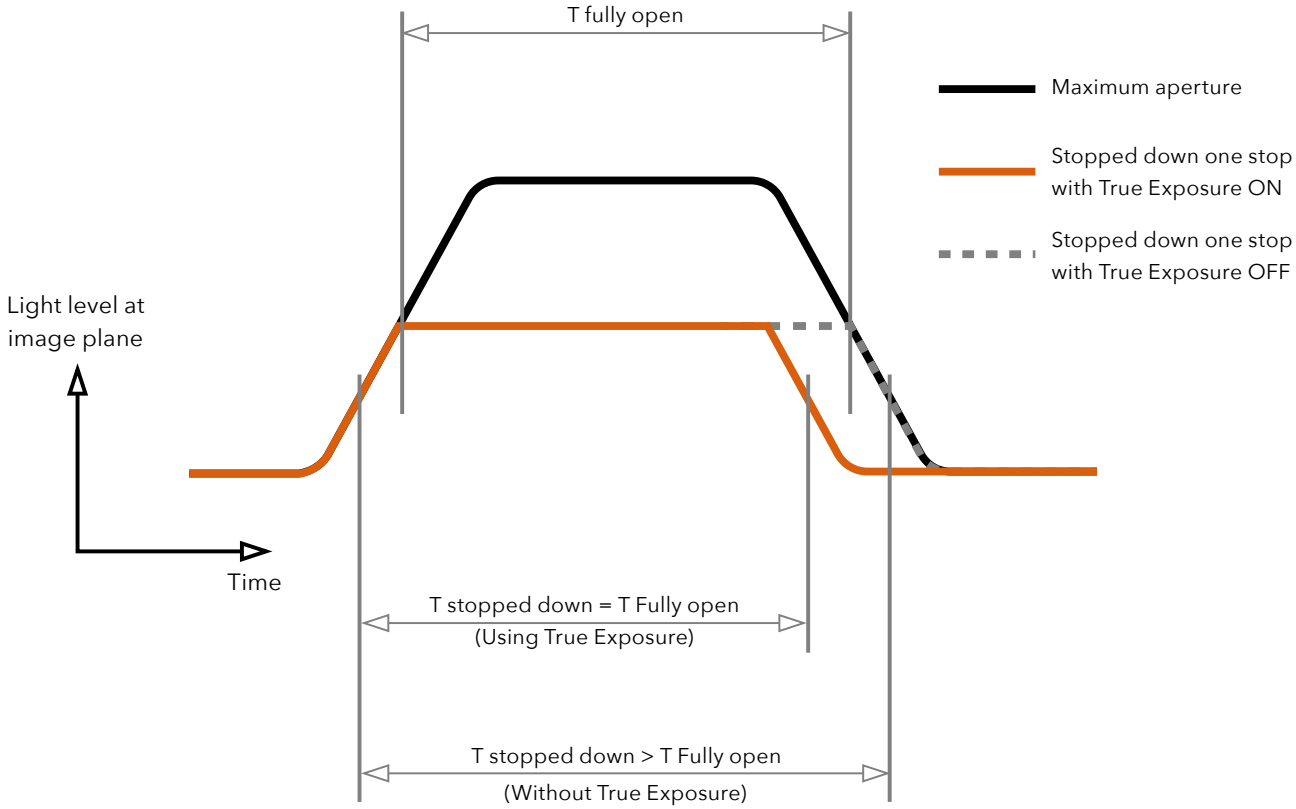
Control Screen with active Electronic Shutter



Live View with active Electronic Shutter

Note!
An active Electronic Shutter is indicated on the Control Screen and in Live View with an "E" next to the shutter speed.

TRUE EXPOSURE EXPLAINED



True Exposure is an XCD and HC/HCD lens function that allows the shutter speed to remain unaffected when stopping down. This effect is perhaps not so commonly understood as it is restricted specifically to integral lens shutters as opposed to focal plane shutters.

When a lens is stopped down, the effective shutter speed becomes longer, consequently affecting the set exposure. At slow shutter speeds the effect is minimal but at faster speeds, e.g. 1/500s, the effect becomes clearly visible. Automatic compensatory measures in speed setting adjustments are employed.
As compensation can only be put into effect where speeds can be adjusted, this prevents the possibility of adjusting the fastest speed. To counter this, compensatory adjustments are therefore made to the aperture instead to retain the set exposure. This compensation is not always required and when using flash/strobe as the main light source it is actually undesirable because compensation will result in underexposure. Therefore, when using flash/strobe as the main light source, you should set True Exposure to OFF in Main Menu > Camera Settings > Exposure > True Exposure in the Camera Display.

You can download a complete explanation of this situation from www.hasselblad.com.

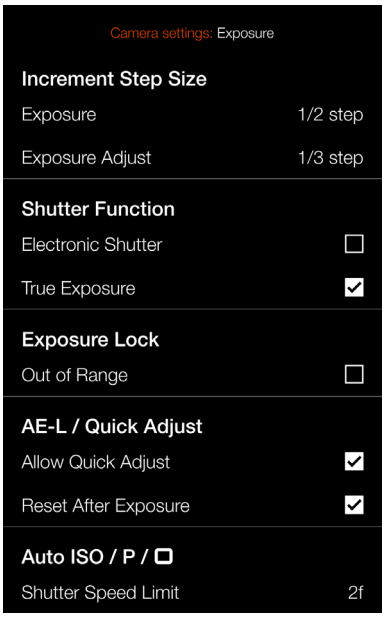
EXPOSURE LOCK

MAIN MENU > CAMERA SETTINGS > EXPOSURE > EXPOSURE LOCK

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.
4 Scroll down to Exposure Lock

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Exposure Settings Menu



Out of Range

Select **On or Off**. The check box will be marked with a √ when On and the check box will be empty when Off.

When the box is checked it is not possible to make an exposure when aperture or shutter speed are out of range.

AE-L (AE-LOCK) / QUICK ADJUST

MAIN MENU > CAMERA SETTINGS > EXPOSURE > AE-L / QUICK ADJUST

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.
4 Scroll down to AE-L / Quick Adjust.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Allow Quick Adjust

Select **On or Off**. The check box will be marked with a √ when On and the check box will be empty when Off.

When the box is checked you can use the rear Control Wheel to input a Quick Exposure Adjustment.

Reset After Exposure

Select **On or Off**. Controls if a Quick Exposure Adjustment and AE-Lock state is reset by an exposure or not.

AUTO ISO / P / FULL AUTO

MAIN MENU > CAMERA SETTINGS > EXPOSURE > AUTO ISO/P/FULL AUTO

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.
4 Scroll down to Auto ISO/P/Full Auto.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Shutter Speed Limit

The Shutter Speed limit can be set either directly or as a function of focal length. See illustrations to the right.

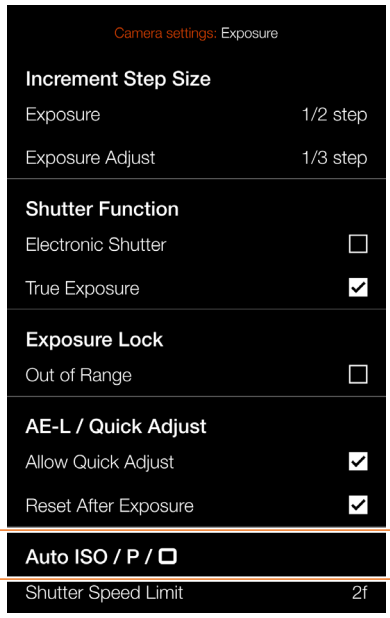
Auto ISO: Sets the slowest Shutter Speed before ISO will be increased.

P: If the calculated Shutter Speed is slower than the set value, the Aperture value will be changed instead of Shutter Speed.

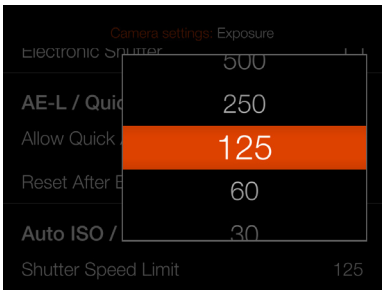
Full Auto: If the calculated Shutter Speed is slower than the set value, the Aperture value will be changed instead of Shutter Speed.

Note!
The Shutter Speed Limit can still be exceeded in some cases. For instance if using A Mode and the Maximum ISO Limit is already reached and there is not enough light, the Shutter Speed Limit will be exceed as a last resort to get a proper exposure.

Exposure Settings Menu

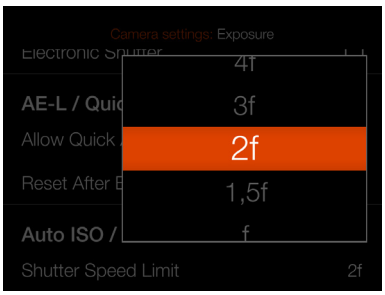


Direct Shutter Speed Limit Setting



Shutter Speed Limit is set to: 1/125 s.

Shutter Speed Limit Setting as a function of focal length.



With this setting and a 45mm lens, the Shutter Speed Limit will be: 1/(2 x 45) = 1/90 s.

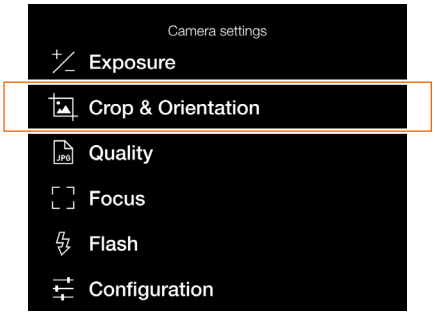
CROP & ORIENTATION

MAIN MENU > CAMERA SETTINGS > CROP & ORIENTATION

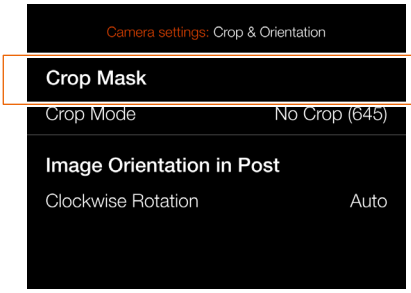
1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Crop & Orientation Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Crop & Orientation Menu



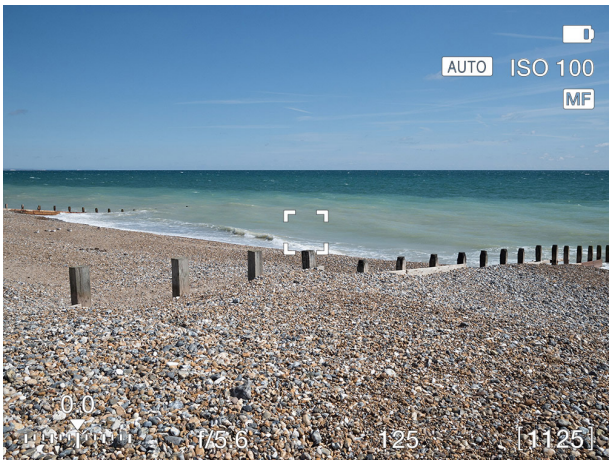
Crop Mask

Adds a crop mask to Live View and the RAW file. When imported to Phocus, the crop mask can be modified or removed.

Crop Mode Settings:

No Crop (645)
1:1 (6x6)
7:6 (6x7)
5:4 (4x5)
11:8.5 (Letter)
297:210 (A4)
3:2 (6x9)
3:2 Crop (24x36). See Notes below.
16:9 (Screen)
2:1 (6x12)
65:24 (XPan)

Live View with **No Crop**



Notes:

- JPG files are not cropped.
- Crop Modes are disabled in USB tethered mode.
- Crop Modes are not supported in Phocus Mobile 2.
- A good method is to program a button to "Crop Mode Next" or "Crop Mode Previous". This allows quick selection of crop format. A long press on this button will return to "No Crop". See page 126.
- If a button is programmed to "Crop Mode Next" or "Crop Mode Previous", 3:2 Crop (24x36) is only available when using electronic shutter and other lenses than XCD or HC/HCD. Useful when using 3rd party lenses designed for 24x36 mm format.

Live View with **65x24 (XPan)**

Continued on the next page.

IMAGE ORIENTATION

MAIN MENU > CAMERA SETTINGS > CROP & ORIENTATION

1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Crop & Orientation Menu.

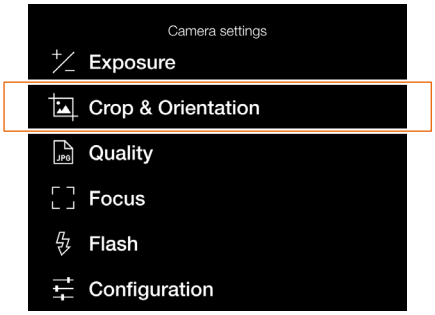
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Image Orientation in Post

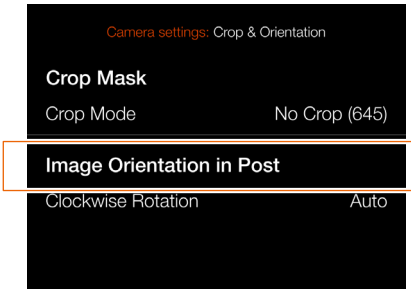
Sets the viewing orientation of captures when they appear in Phocus. To avoid unintentional orientation changes when the camera is pointing straight up or down, the orientation setting can be locked.

Clockwise Rotation Settings:
Select between:
Auto.
Lock at 0 degrees.
Lock at 90 degrees.
Lock at 180 degrees.
Lock at 270 degrees.

Camera Settings Menu



Crop & Orientation Menu



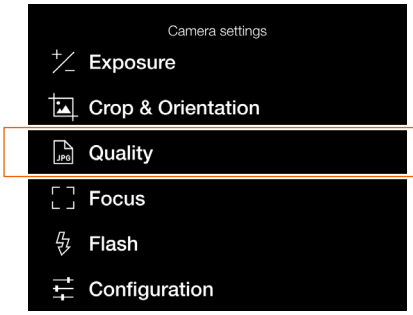
5.2 IMAGE QUALITY SETTINGS

MAIN MENU > CAMERA SETTINGS > QUALITY

1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Quality Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Quality Menu

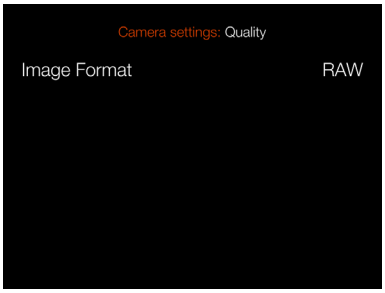
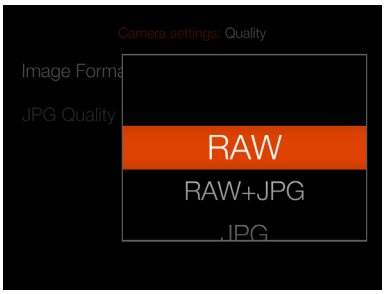


Image Format Settings

Select between:
RAW.
RAW + JPG.
JPG.

Image Format Settings Menu



Note!
JPG file size depends on subject and ISO value. Subjects with many details or a high ISO setting will give larger files.

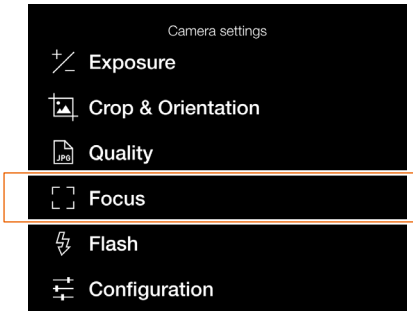
5.3 CAMERA AUTOFOCUS SETTINGS

MAIN MENU > CAMERA SETTINGS > FOCUS

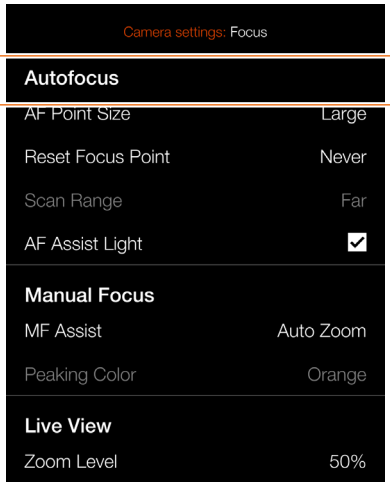
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Focus Settings Menu

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Focus Menu



Autofocus

AF Point Size Settings
Select the size of the area used for AF measurements. You can choose between:

Large (35 points)
Medium (63 points)
Small (117 points)

Also see page 89 on how to resize.

Reset Focus Point Settings
Select any of these two settings:

After Exposure
Never.

Autofocus Point can be reset to centre position after every exposure. If you need the Autofocus Point to remain in the specific position, select Never.
See section Move Autofocus Point on page 119 for more in-depth information.

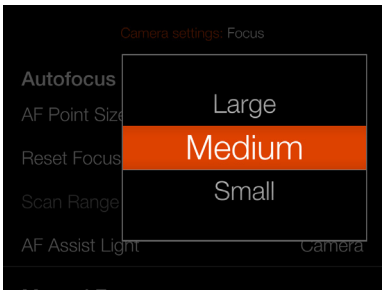
Scan Range Settings
For lenses that support this function (e.g. the XCD 120 Macro or the XCD 135) is used you can choose between:

Near
Far
Full

These settings will limit the focusing scan range to scan in AF mode. If Near or Far is selected, AF speed will be faster.

Continued on the next page.

AF Point Size Setting



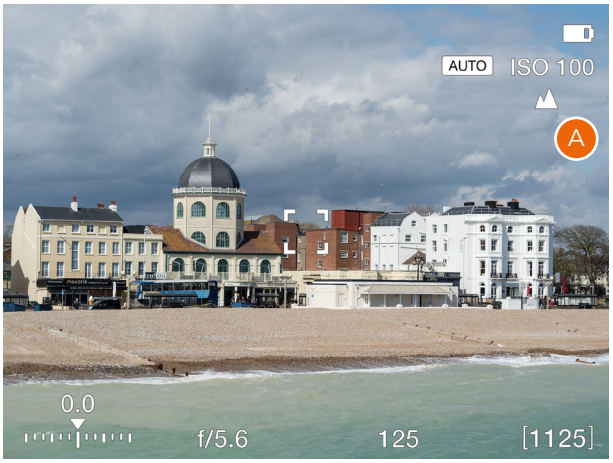
Reset Focus Point Setting

Scan Range Setting

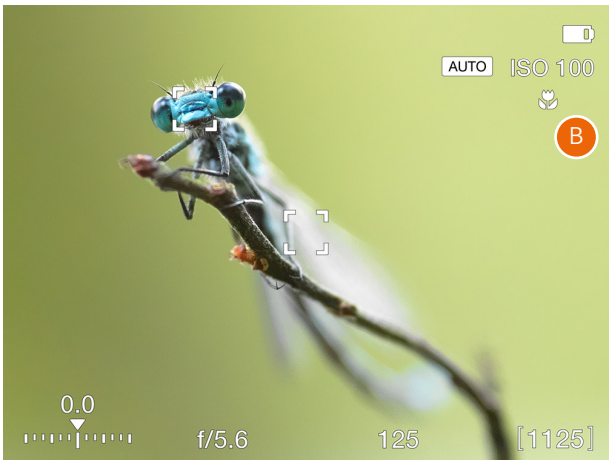
Note!
You can program a Custom Button to cycle through the Scan Range options.

A Far-icon **(A)** is shown when Scan Range Far is selected. If Near is selected, the Near-icon **(B)** is shown.

Live View when Far setting is selected

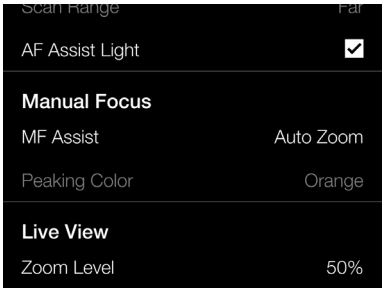


Live View when Near setting is selected



AF Assist Light Setting
A built-in LED that assists AF in low light situations.

AF Assist Light Setting

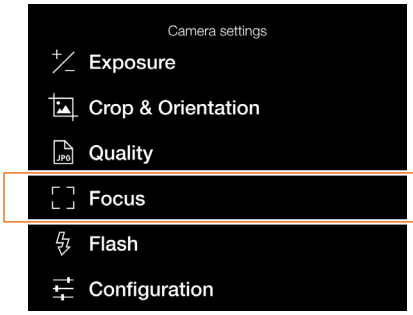


MAIN MENU > CAMERA SETTINGS > FOCUS

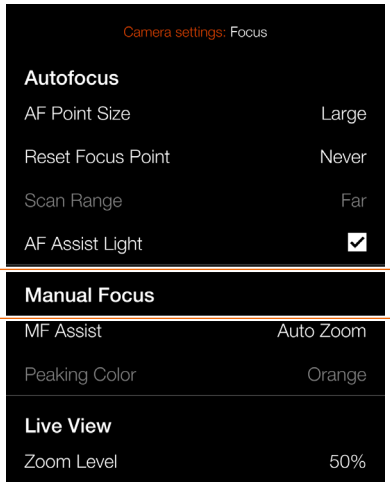
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Focus Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Focus Menu



Manual Focus

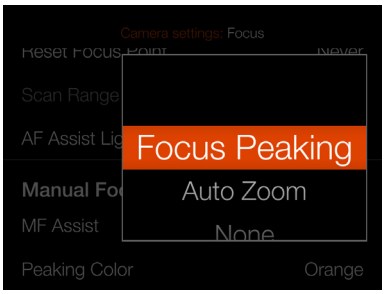
MF Assist Settings
Select the Manual Focus Assist Mode. Choose between:

Focus Peaking
See page 87.

Auto Zoom
The Live View image will zoom in to 50 or 100% when the focusing ring is turned. See page 86.

None
Manual Focus assist is turned off.

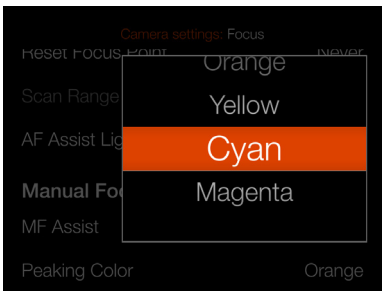
MF Assist Setting



Peaking Color Settings
Select the Focus Peaking Color to be used. You can choose between:

Orange
Yellow
Cyan
Magenta

Focus Peaking Color Setting



Live View

Zoom Level
Select **50%** or **100%.**
Controls the zoom level when you double-tap the screen, press the Star Button in Live View mode or use the Auto Zoom function in manual focus.

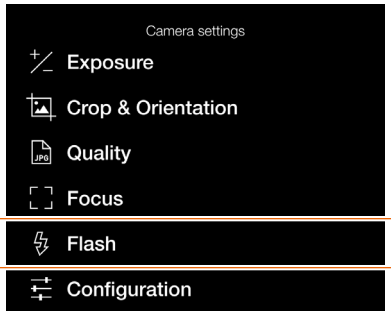
5.4 CAMERA FLASH SETTINGS

MAIN MENU > CAMERA SETTINGS > FLASH

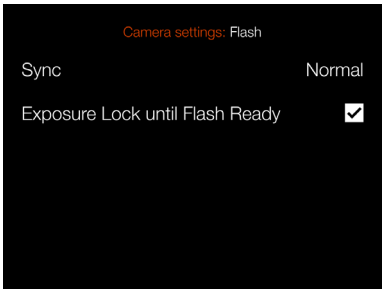
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Flash Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Flash Menu

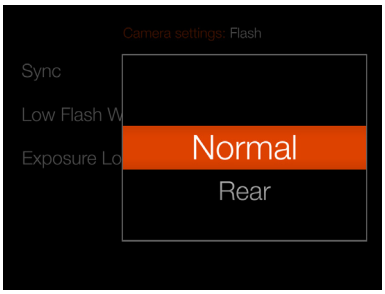


Sync Settings
Controls if the flash shall be triggered in the beginning or at the end of the exposure. Select between:

Normal (beginning of the exposure)
Rear (end of the exposure)

Exposure Lock until Flash Ready Settings
Controls if a capture shall be blocked if the flash is not ready.

Sync Setting



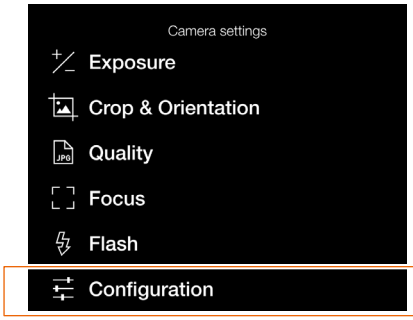
5.5 CAMERA CONFIGURATION SETTINGS

MAIN MENU > CAMERA SETTINGS > Configuration

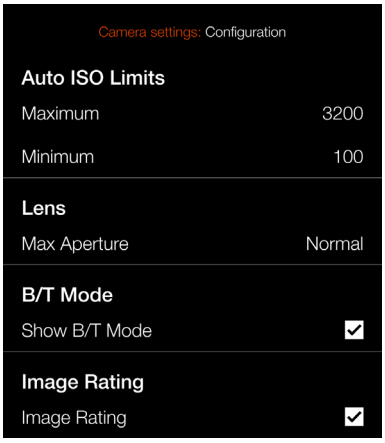
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Configuration Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Camera Settings Menu



Configuration Menu



Auto ISO Limits

Maximum Settings
Sets the maximum allowed ISO for the Auto ISO function.

Minimum Settings
Sets the minimum allowed ISO for the Auto ISO function.

Lens

Max Aperture Setting
Select if the lens shall use a fully open and round aperture at maximum setting. A round aperture will create a smoother look for the out-of-focus areas. For some lenses, e.g. the XCD 90, this can cause a very slight overexposure.

Normal
Standard setting. Will minimize the risk for internal reflections.

Full
Selects a fully open round aperture. Only for XCD Lenses.

Max aperture setting menu

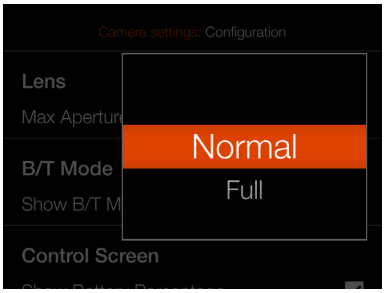


Image detail with **Normal** setting

Image detail with **Full** setting

Normal

Full

Continued on the next page.

B/T Mode

Show B/T Mode setting

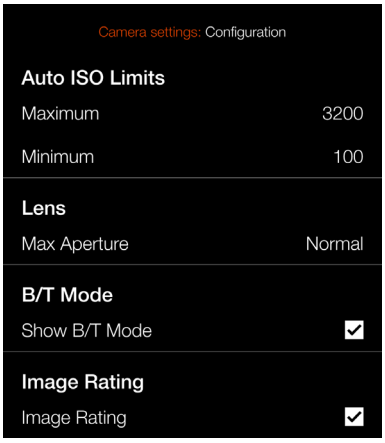
B and T mode is available in the list of shutter speeds if the box is checked.

Image Rating

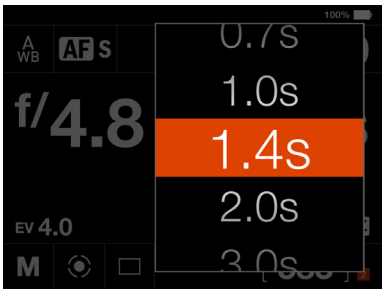
Image Rating setting

Image rating is available in Browse mode if the box is checked. See page 100.

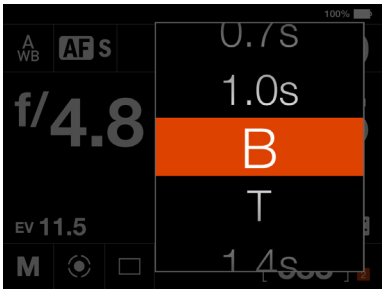
Configuration Menu



Time Setting B&T not available

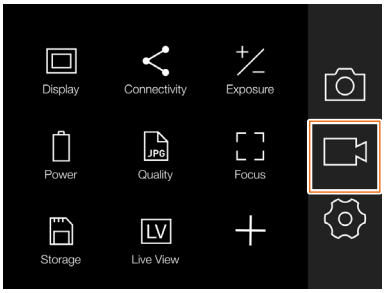


Time Setting B&T available



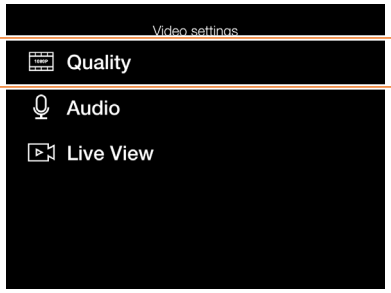
5.6 VIDEO SETTINGS MENU

Main Menu

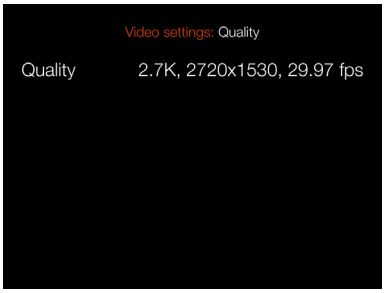


Video icon

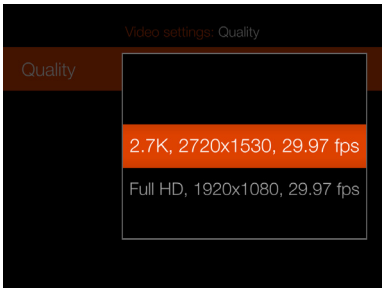
Video Settings Menu



Video Quality Settings



Resolution Setting



MAIN MENU > VIDEO SETTINGS

1 Press the Video icon on the Touch Display.
2 The Video Settings Menu appears.
3 Select a Video Setting.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

QUALITY

Resolution
Select from:
2.7k (2720 x 1530 pixels)
Full HD (1920 x 1080 pixels)

Frame rate is 29.97 fps.

AUDIO

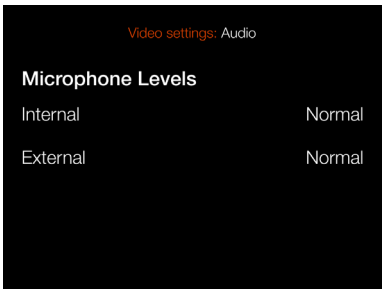
Internal. Selects recording level for the internal microphones.

Select between:
Normal, -6 dB, -12 dB, -18 dB or Mute.

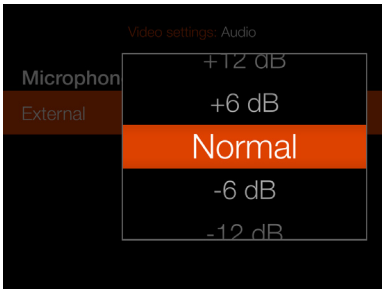
External. Selects recording level for the external microphone.

Select between:
+12 dB, +6 dB, Normal, -6 dB, -12 dB, -18 dB or Mute.

Audio Settings



Audio level settings



LIVE VIEW

Overlay
Selects the overlay for video live view screen. Select from:

None
Live view without grid or focus peaking.

Grid
Displays a 1/3 grid on the video live view screen.

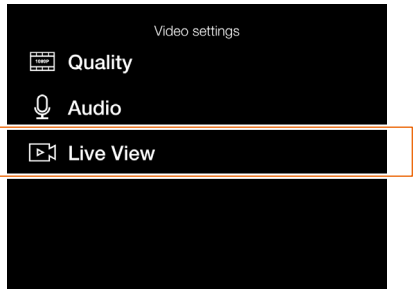
Focus Peaking
Use to highlight areas in focus with a false color. See page 86 for details.

Grid+Focus Peaking
Shows grid and focus peaking at the same time.

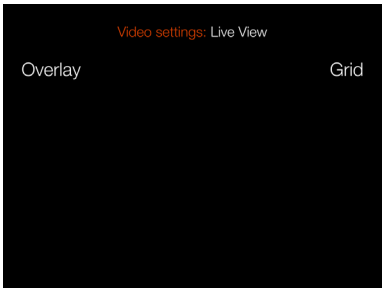
Note!
You can cycle through the overlays by pressing the rectangle button ▭ while in video live view.

Note!
Video recording is not possible in tethered mode.

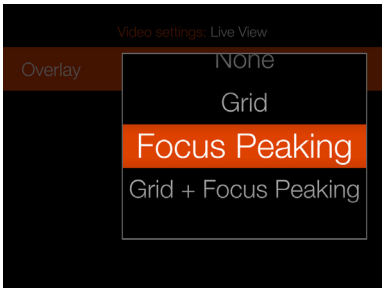
Video Settings Menu



Live View Settings



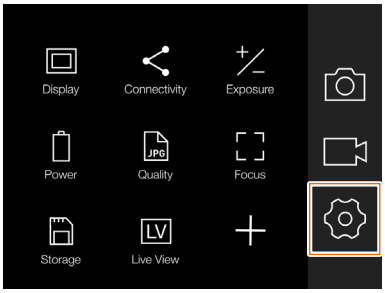
Overlay Setting



Video Live View screen with grid

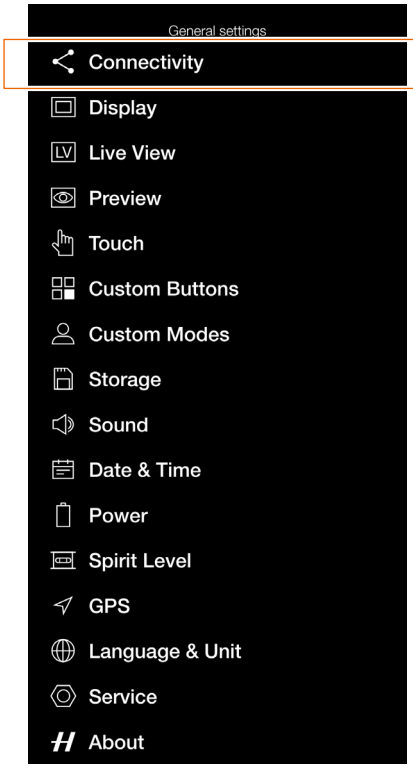
5.7 GENERAL SETTINGS MENU

Main Menu

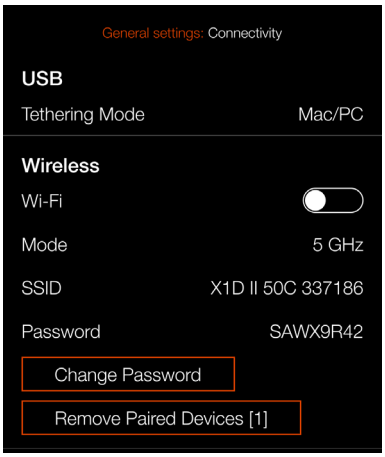


General Settings icon

General Settings Menu



Connectivity Settings Menu



MAIN MENU > GENERAL SETTINGS

1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

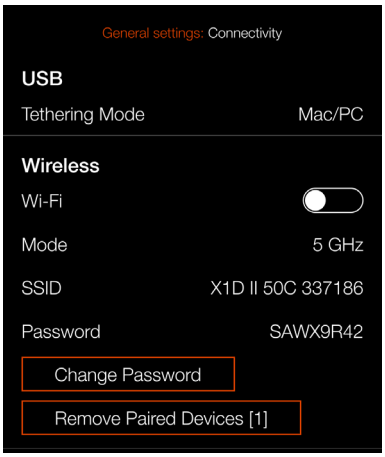
CONNECTIVITY SETTINGS

MAIN MENU > GENERAL SETTINGS > CONNECTIVITY

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Connectivity Settings Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Connectivity Settings Menu



USB Settings

Tethering Mode

Select Mac/PC or iOS.

If the camera is connected via USB to an iOS device, select **iOS**. For connection to a computer select **Mac/PC**.

Wireless Settings

Wi-Fi

Select **On** or **Off**.

Mode

Select between **2.4** and **5 GHz**.

Note!

Some regions do not allow Wi-Fi/5 GHz Wi-Fi.

SSID

The identity of the camera on the Wireless network.

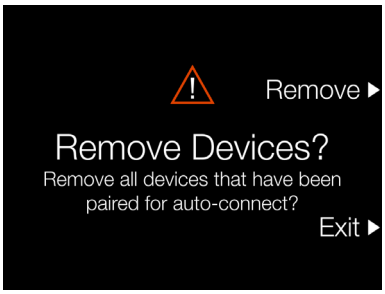
Password

Use this password to connect via Wi-Fi to the camera from the Phocus Mobile 2 App.

Change Password

Press this button to generate a new password.

Remove Paired Devices dialogue



Remove Paired Devices

Removes all devices that have been paired over Bluetooth for auto-connection with the Phocus Mobile 2 App. The number within brackets represents the current number of paired devices. If the button is greyed out, no devices have been paired. Press Remove (Rectangle button, ▭) to confirm or Exit (Cross button, ✕) to return without removing any device.

Note!

The display timeout will temporary be increased to 60 seconds when enabling Wi-Fi. If user touches the screen or press any key during this 60 second timeout the display timeout will be restored to normal value.

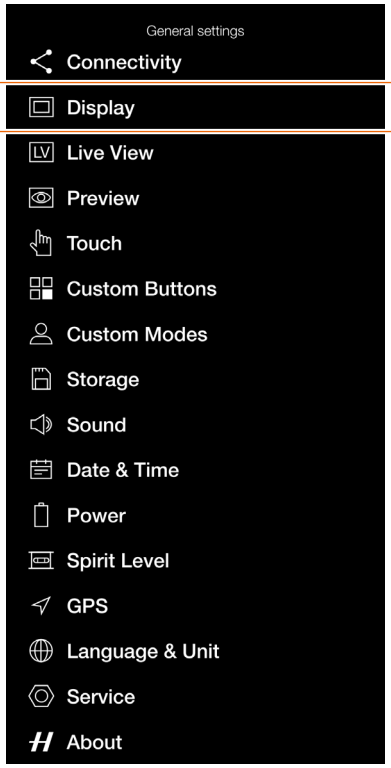
DISPLAY

MAIN MENU > GENERAL SETTINGS > DISPLAY

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Display Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



Display Settings Menu

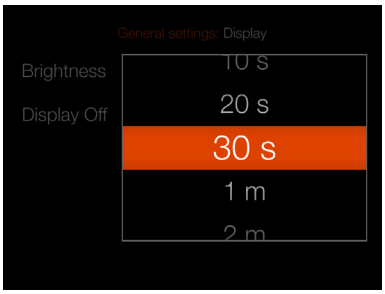
Brightness

Controls the overall brightness of the rear display. Slide the white dot to the left to make the screen darker and to the right to make it brighter.

Display Off

Select how long the rear display shall be active.
Chose between:
5sec, 10sec, 20sec, 30sec, 1min, 2min, 3min.

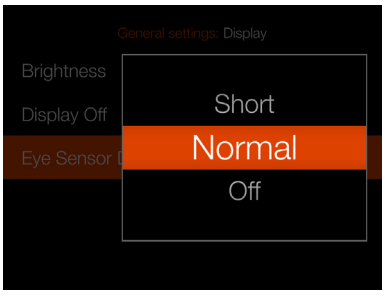
Display Off Setting



Eye Sensor Distance

Select the sensitivity of the eye sensor for the EVF.
Chose between:
Short, Normal and Off.

Eye sensor distance setting



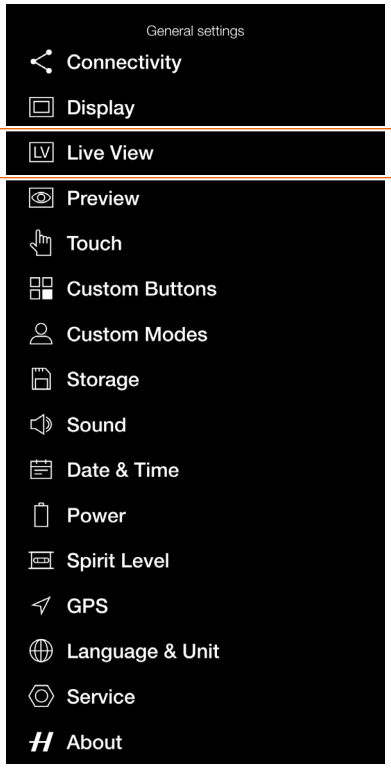
LIVE VIEW

MAIN MENU > GENERAL SETTINGS > LIVE VIEW

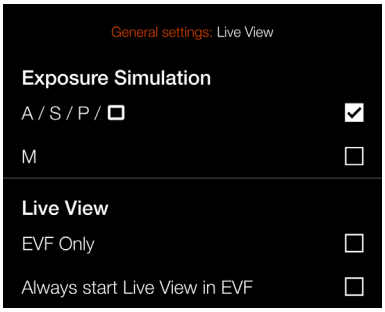
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Live View Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



Live View Settings Menu



Exposure Simulation

A/S/P/Full Auto
If this box is checked, the display will simulate what the final image will look like. When unchecked, the brightness will not be affected by exposure adjustments.

M
Check this box to use exposure simulation in Manual Mode.

EVF Only
When this box is checked, Live View is disabled on the rear display.

Always start Live View in EVF
When this box is checked, Live View will always start when you put your eye to the EVF. When unchecked, you will see the same screen that was previously shown on the rear display.

Note!
When you use the camera with a flash, the Exposure Simulation will not display a correct result. For example, if you have set the Aperture and Shutter to be adapted to flashlight indoors, normally the Exposure Simulation displays an image that is too dark in the Live View mode. It is advised to turn off Exposure Simulation before you start to take photos with a flash.

Note!
When Autofocus is active and analysing the subject, the Exposure Simulation is deactivated to let the Autofocus system operate in optimal conditions. When the Autofocus process is ready, the Exposure Simulation is automatically activated again.

Note!
If Exposure Simulation is active and the exposure settings are set to very high overexposure or very low underexposure for the actual light conditions, the Live View displays a very light or very dark image. In extreme cases, it results in a completely overexposed white image or a completely underexposed black image. In these cases you can use the balance scale, down to the left in Live View mode, while adjusting the exposure settings, to maintain desired exposure.

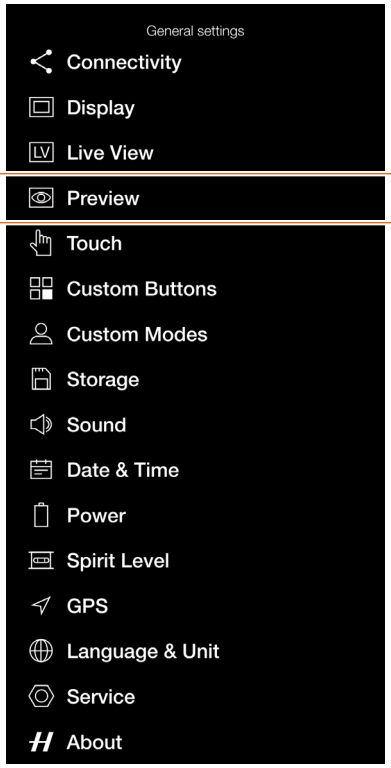
PREVIEW

MAIN MENU > GENERAL SETTINGS > PREVIEW

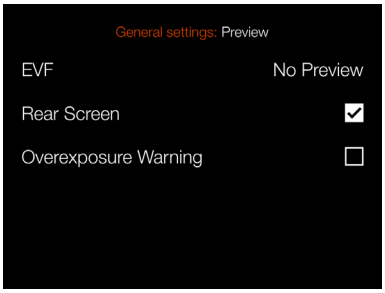
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Preview Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



Preview Settings Menu



EVF

Choose between:
No Preview, 0,5sec, 1sec, 2sec, 4sec, 8sec or Hold.
This controls how long you will see a preview of the last capture. Select **No Preview** to disable this function. **Hold** will keep the preview active until the display goes off or you press a button.

Rear Screen

Check this box to show a preview on the rear screen after each exposure.

Overexposure Warning

When this box is checked, areas close to overexposure in the pre-view image will alternate between black and white.

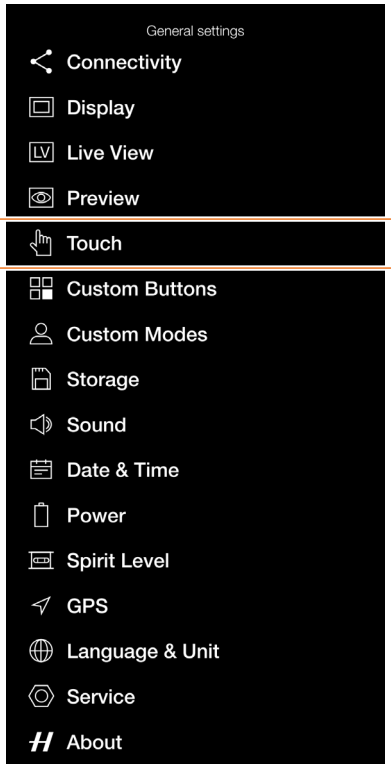
TOUCH

MAIN MENU > GENERAL SETTINGS > TOUCH

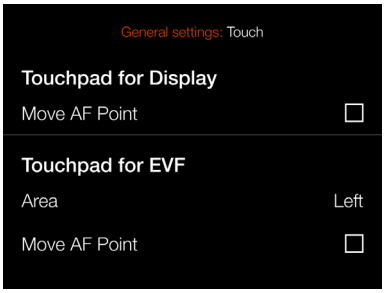
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Touch Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



Touch Settings Menu



Touchpad for Display

Move AF Point
When checked, the AF point can be moved on the rear display by tapping on the new location. It can also be resized by pinch or spread gestures.

Touchpad for EVF

Area
Select which area of the rear display is used for Touchpad selection of AF point. Choose between:

Left half of screen (**1**)
Right half of screen (**2**)
Top left (**3**)
Top right (**4**)
Bottom left (**5**)
Bottom right (**6**)

Move AF Point
When checked, the AF point can be moved by sliding a finger over the area selected in the setting **Area** above while viewing through the EVF.

CUSTOM BUTTONS

MAIN MENU > GENERAL SETTINGS > CUSTOM BUTTONS

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Custom Buttons Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

The Custom Button function allows three of the buttons to be re-programmed to a different function for faster access to frequently used functions.

AF/MF
Settings for the AF/MF button.

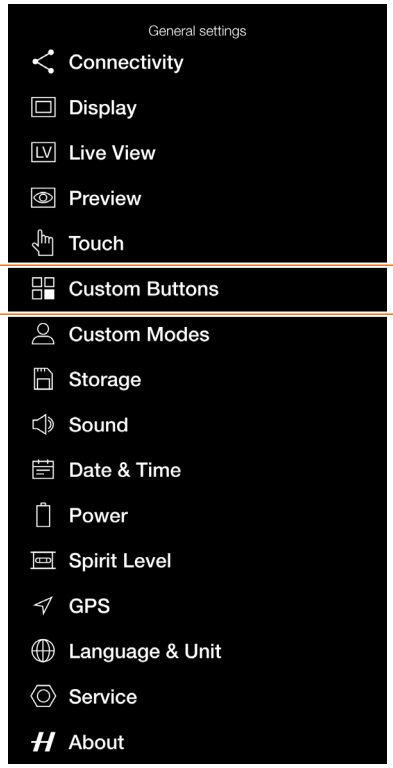
ISO/WB
Settings for the ISO/WB button.

Stop Down
Settings for the Stop Down button.

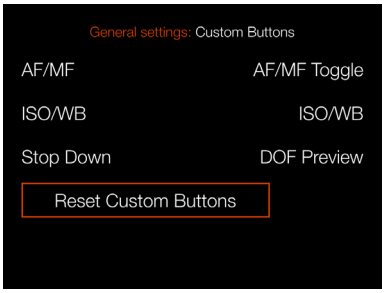
Scroll through the list and select the required function by tapping.

Reset Custom Buttons
Restore button function to factory default. Pressing this button will bring up a confirm dialogue. Press the Rectangle button to restore the settings to default or the Cross button to exit without changing the settings.

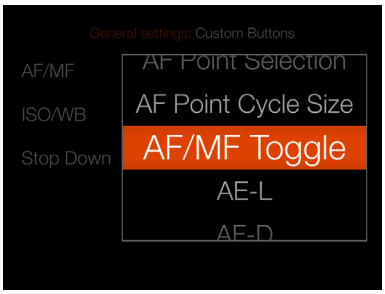
General Settings Menu



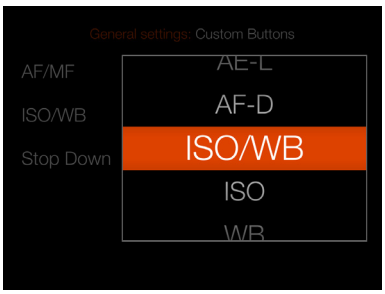
Custom Buttons Settings Menu



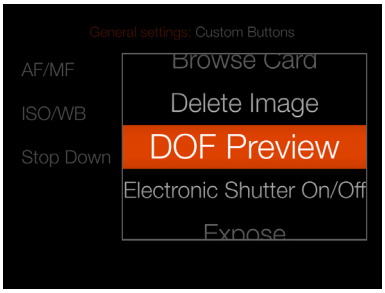
AF/MF button settings



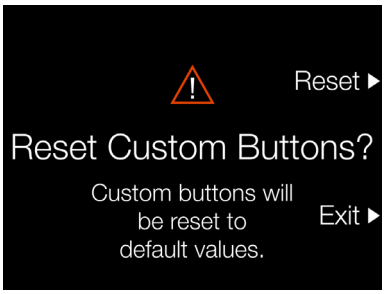
ISO/WB button settings



Stop Down button settings



Reset Custom Buttons Confirm



CUSTOM MODES

MAIN MENU > GENERAL SETTINGS > CUSTOM MODES

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Custom Modes Menu.

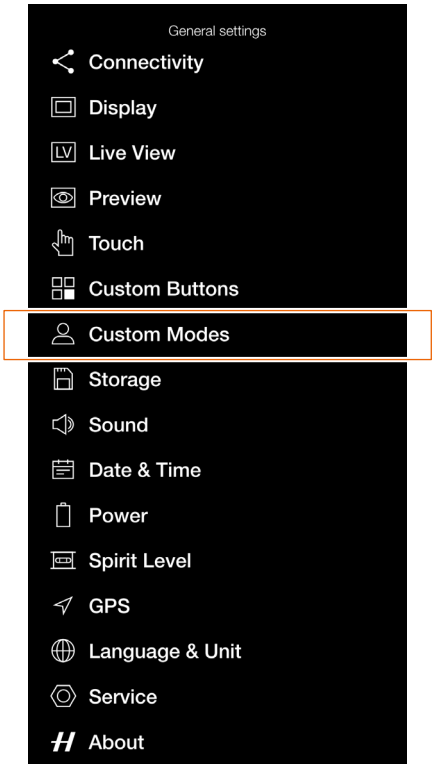
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

The Custom Modes function is used to store all camera settings in three different memories. It allows you to pre-program the camera for different modes of operation. This can greatly speed up usage in varying condition but can also reduce the risk of making mistakes.

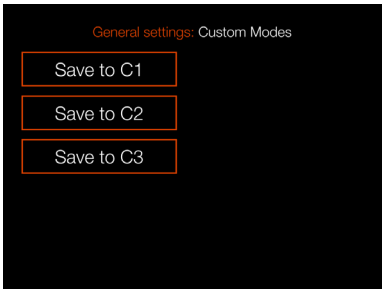
The three memory locations **C1**, **C2** and **C2** corresponds to the same settings on the Mode Dial. If you have settings stored in **C1**, you can quickly recall these setting by turning the Mode Dial to position **C1**.

To save the current settings of the camera in one of the memories, tap the corresponding button. Any previous setting in this memory will be overwritten and you can chose to **Save** or **Exit** in the Confirm Dialogue.

General Settings Menu



Custom Modes Settings Menu



Custom Modes Confirm dialogue

STORAGE

MAIN MENU > GENERAL SETTINGS > STORAGE

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Storage Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Storage Menu Settings

Format Card
Format SD 1 or **Format SD 2**.

Image Destination
- Primary slot:
SD 1 or **SD 2**.

Secondary Slot Usage
Overflow or **Backup (Images)**

If Overflow is selected, the camera will automatically switch to the secondary card when the primary card is full.

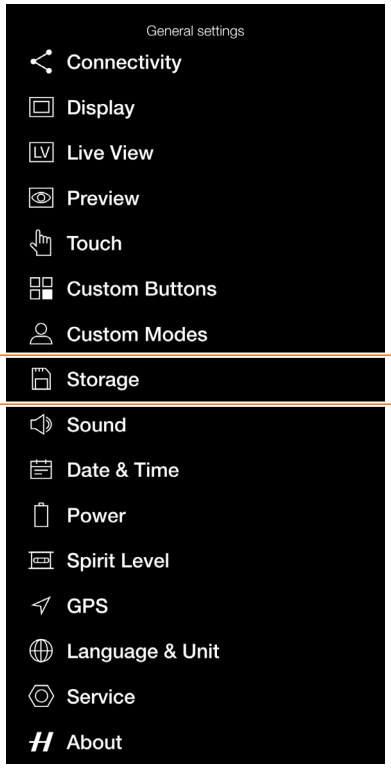
If Backup is selected, the camera will save the image to both cards (RAW and RAW + JPG). Video files will not be backed up.

HOW TO FORMAT A MEMORY CARD

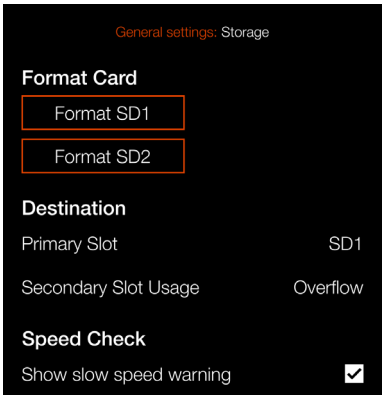
1 Select Card to Format, SD 1 or SD 2, on the Storage Menu.
2 A new Format Card Dialogue appears.
3 To confirm, select Format by pressing the Rectangle Button.
4 Exit without formatting by pressing the Cross Button.

Note!
If Backup is selected and no second card is inserted, the camera will be blocked for exposures. If trying to expose, an information message will be shown. The Control Screen will show the Backup Missing icon instead of remaining frames.

General Settings Menu



Storage Settings Menu



Format SD1 dialogue

Information Message

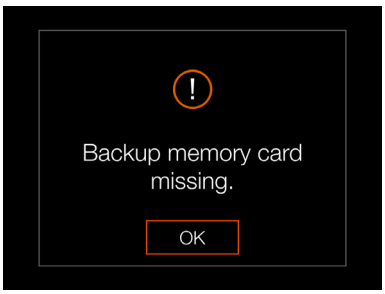
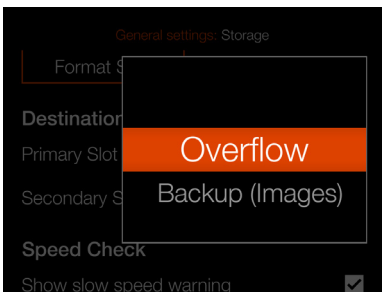


Image Destination dialogue

Control Screen, Backup missing

Secondary Slot usage dialogue



SOUND

MAIN MENU > GENERAL SETTINGS > SOUND

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Sound Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

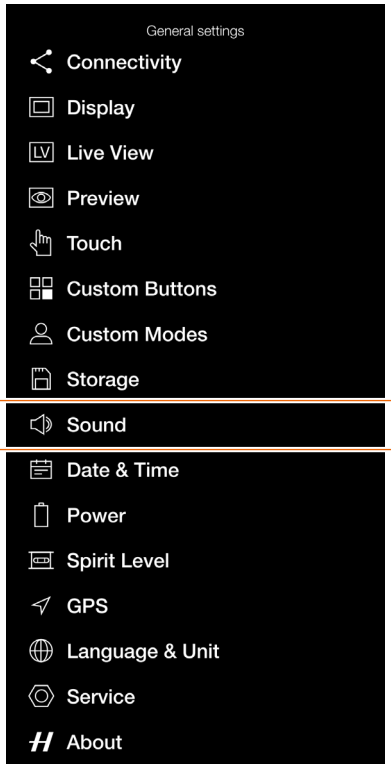
Volume

Choose between:
Off, Low, Medium, High

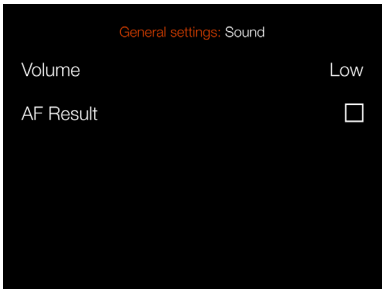
AF Result

When this box is checked, a sound will indicate a finished AF setting. If AF is successful or not, the camera will play different sounds.

General Settings Menu



Sound Settings Menu



Volume Settings Menu

DATE & TIME

MAIN MENU > GENERAL SETTINGS > DATE & TIME

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Date & Time Menu.

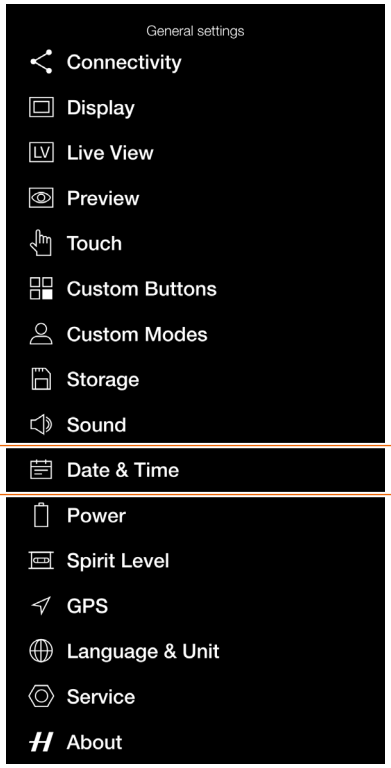
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Date and Time Menu Settings

Date
Set Date by changing year, month and day using the pop up menus.

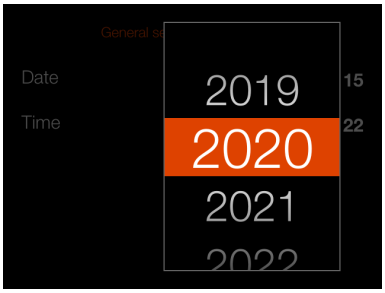
Time
Set Time by changing hour and minute using the pop up menus.

General Settings Menu

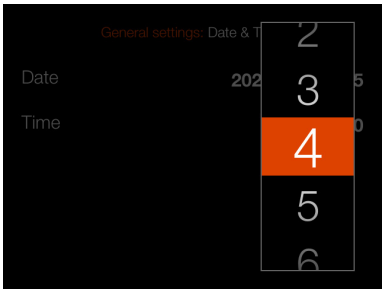


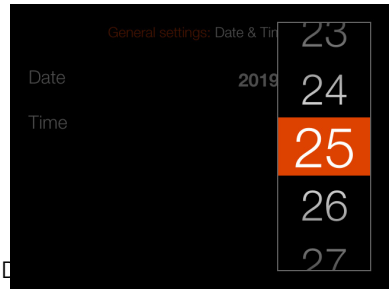
Date & Time Settings Menu

Year Setting

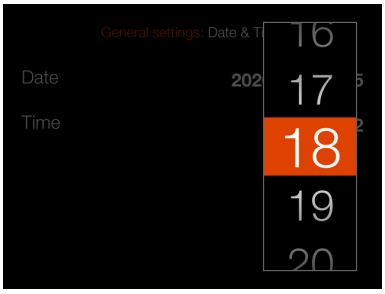


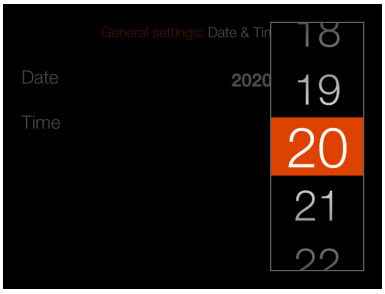
Month Setting





Hour Setting





POWER

MAIN MENU > GENERAL SETTINGS > POWER

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Power Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Power Settings

Power Off
Sets the time before the camera automatically turns off.
Choose between:
5 min, 10 min, 30 min, Never.

Power Off when Tethered
Sets the time before the camera automatically turns off when connected to a computer.
Choose between:
5 min, 10 min, 30 min, Never.

Power from Computer USB
When checked, the camera will take power from the USB device. This is indicated by a symbol **(A)** next to the battery on the Control Screen and on the Live View screen.

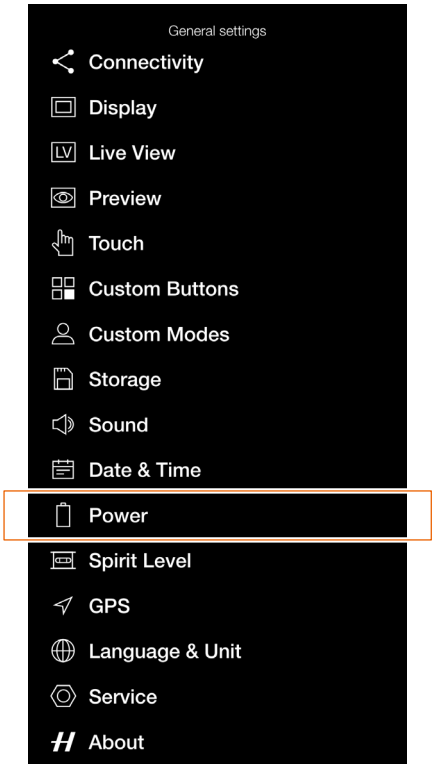
Control Screen

Show battery Percentage setting
When the box is checked, an approximate value of the battery charge level in percent is shown next to the battery icon on the control screen.

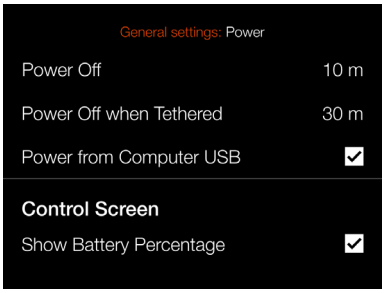
Note!
The camera will only be partially powered from USB. A charged camera battery is still required.

Note!
Only power from a USB Host device is supported.

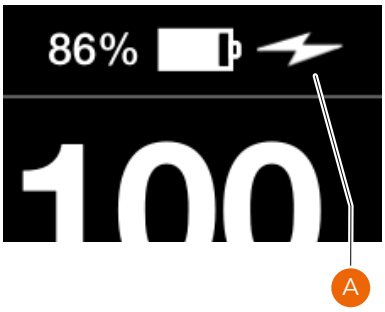
General Settings Menu



Power Settings Menu



Indication of active USB power.



Battery percent value not shown

Battery percent value shown

SPIRIT LEVEL

MAIN MENU > GENERAL SETTINGS > SPIRIT LEVEL

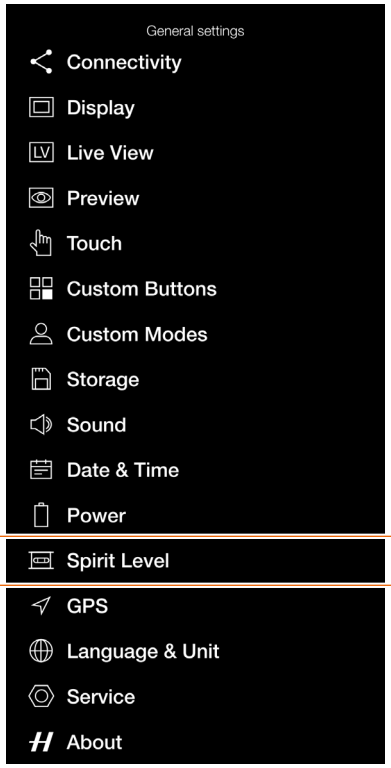
The camera is equipped with an accelerometer. The accelerometer is used to measure the tilt of the camera relative to the horizontal axis (**A**) and vertical axis (**B**).

How to align Camera with Spirit Level

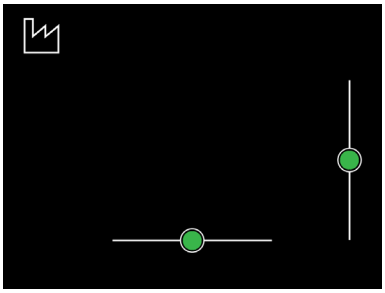
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Spirit Level icon.
4 Adjust the tilt of the camera left/ right and up/down until the white filled circle is in the centre and turns green.

Note!
In Live View, press the Rectangle Button until the Spirit Level Overlay is shown.

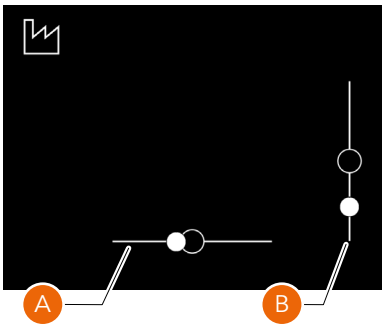
General Settings Menu



Spirit Level when camera is aligned



Spirit Level when camera is tilted a little to the right and more down.



Camera tilted to the left.

Camera aligned horizontally and vertically.

Camera tilted to the right.

Camera tilted up.

Camera aligned vertically.

Camera tilted down.

CALIBRATE SPIRIT LEVEL

MAIN MENU > GENERAL SETTINGS > SPIRIT LEVEL

The Spirit Level can be set to Factory or User mode. In User mode, the Spirit Level can be calibrated by the user. This could be used to return to a specific camera position. In Factory mode, the calibration from the Factory is used.

Factory mode.

User mode.

How to calibrate Spirit Level

1 Press the General Settings icon on the Main Menu display.
2 The General Settings Menu appears.
3 Press the General Settings Spirit Level icon.
4 Press the icon in the top left corner **(A)**.
5 The Spirit Level dialogue appears.
6 Align the camera carefully both horizontally and vertically.
7 Press Calibrate **(B)**.
8 The two white circles are now moved to their centre position. When in their centre position, they turn green.

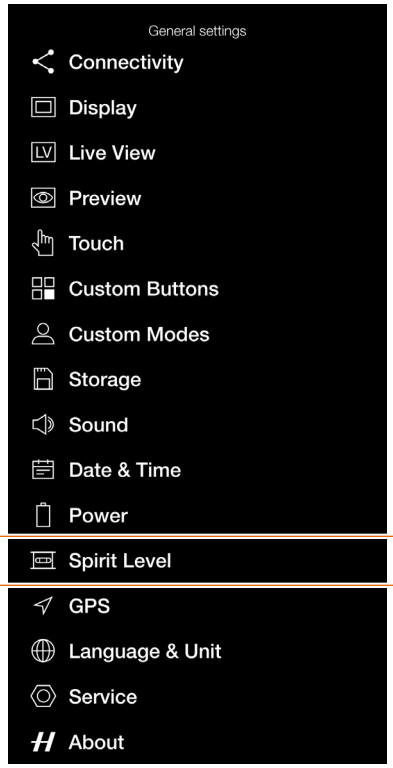
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

How to reset Spirit Level to Factory calibration

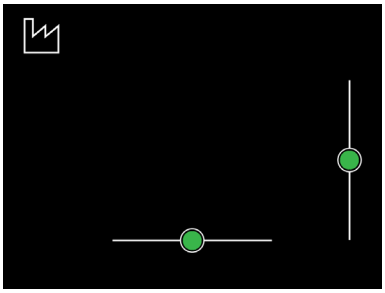
1 Press the General Settings icon on the Main Menu display.
2 The General Settings Menu appears.
3 Press the General Settings Spirit Level icon.
4 Press the icon in the top left corner **(A)**.
5 The Spirit Level dialogue appears.
6 Press the Factory settings icon **(C)**.
7 The Factory settings icon **(D)** is now displayed and the Spirit Level is reset to Factory calibration settings.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

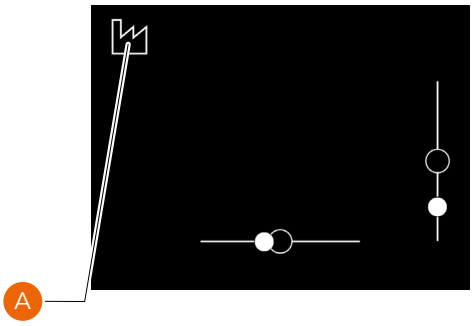
General Settings Menu

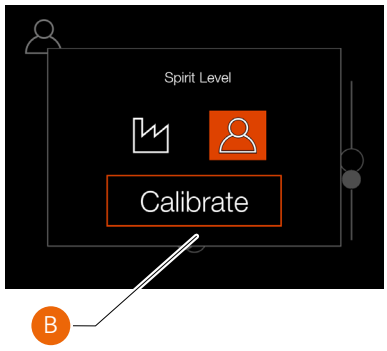


Spirit Level when camera is aligned

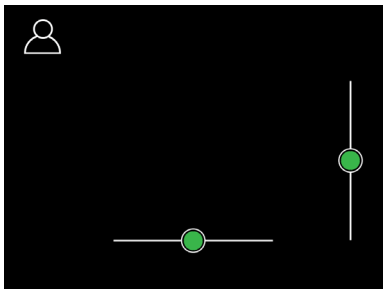


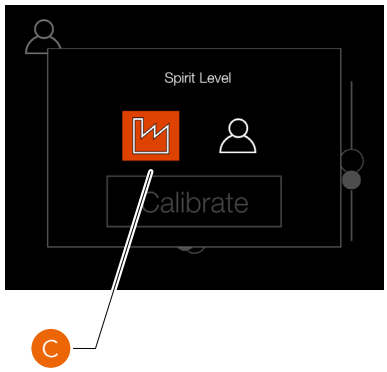
Spirit Level when camera is tilted a little to the right and more down.

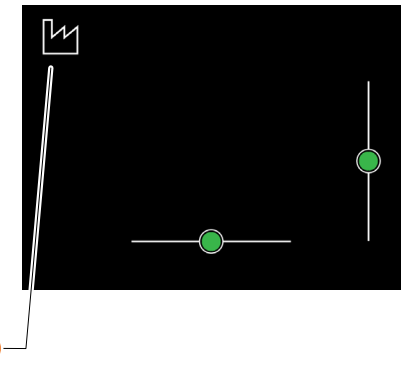




Spirit Level when calibrated by user.







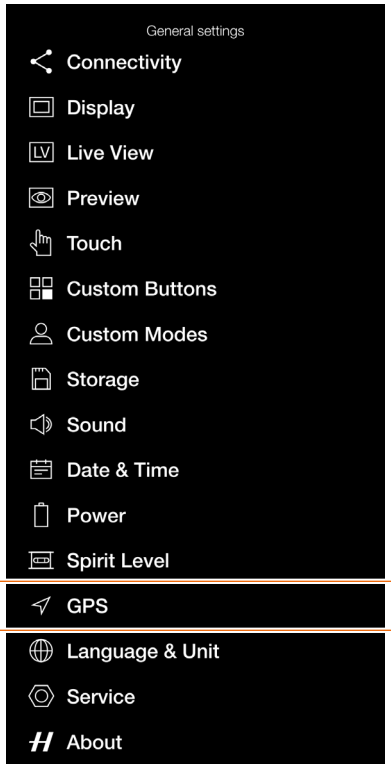
GPS

MAIN MENU > GENERAL SETTINGS > GPS

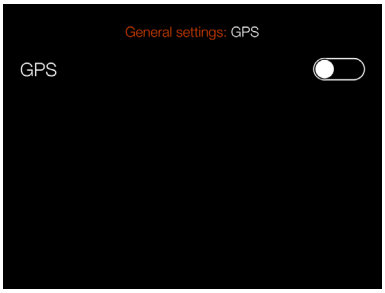
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the GPS Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



GPS Menu



GPS Settings

Select **On** or **Off**.
When set to On, GPS data is included in the Meta Data tags of the image.

LANGUAGE & UNIT

MAIN MENU > GENERAL SETTINGS > LANGUAGE & UNIT

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Language & Unit Menu.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

How to change Language

1 Press MENU button on the Touch Display.
2 Navigate to General Settings.
3 Navigate to Language.
4 Select Language.
5 Close the pop up Menu by a click outside the pop up.

Available Languages:

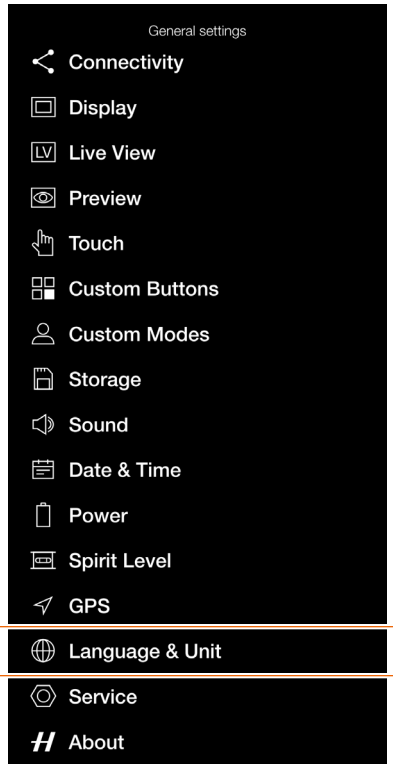
English
Spanish
French
German
Italian
Swedish
Russian
Japanese
Simplified Chinese
Traditional Chinese
Korean

Note!
If the Camera has been set to a language you do not understand, see page 157 for a solution.

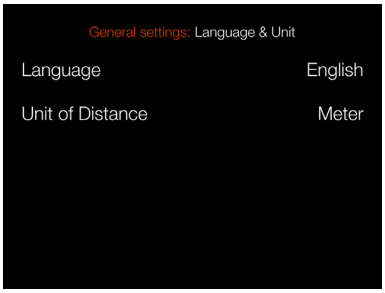
Unit of Distance

Select **Meter** or **Foot** for the distance scale overlay.

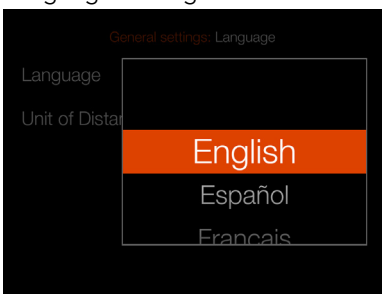
General Settings Menu



Language Menu



Language Setting



Unit of Distance Setting

SERVICE

MAIN MENU > GENERAL SETTINGS > SERVICE

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Service icon.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Service Menu Settings

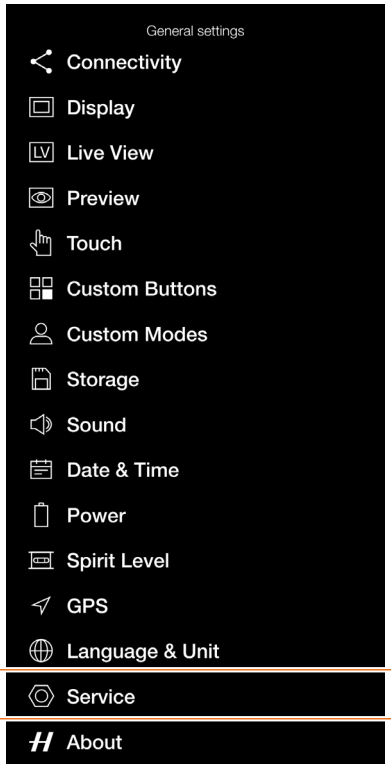
Firmware Update
Locate firmware file on the SD Card.

Log Data
Press Save to Log Data for Service.

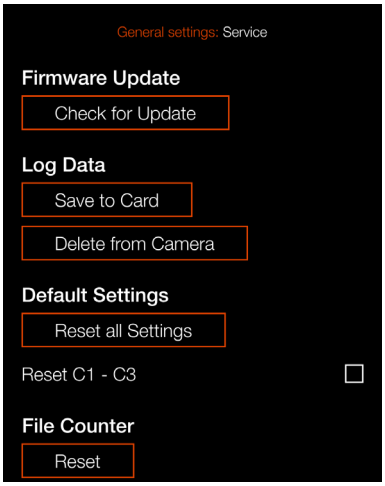
Default Settings
Reset all Settings.

File Counter
Reset

General Settings Menu



Service Menu



FIRMWARE UPDATE

MAIN MENU > GENERAL SETTINGS > SERVICE > CHECK FOR UPDATE

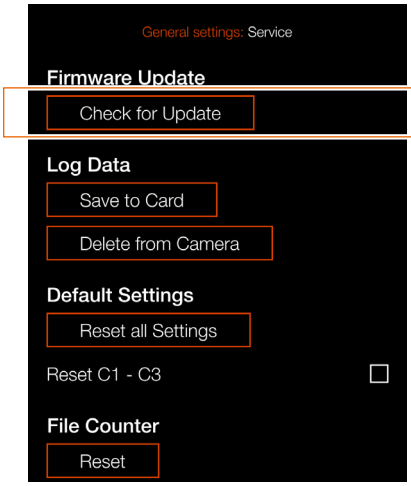
1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Service Menu.
4 Press the Check for Update button.
5 The camera will now check the inserted card/cards for update files.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

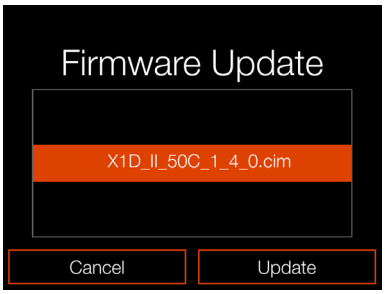
Update X1D II Firmware Procedure

1 Download the latest X1D II Firmware from www.hasselblad.com.
2 Save the Firmware file to an SD Card.
3 Insert the SD Card in the Camera.
4 Select Settings from the Main Menu.
5 Select Service / Firmware Update / Check for Update.
6 Make sure the Firmware File Name and Number corresponds to the latest Firmware File you have downloaded.
7 Select Update.
8 Select Update in the Update Dialogue to start the Firmware Update.
9 During the update the text "Update in progress" is displayed on the Camera Display.
10 Do not turn off the Camera during the Update Progress.
11 The Update will take several minutes.
12 When the Update is finished this text will be displayed: "Update Finished. Please remove and reinsert battery!".
13 Remove and reinsert the battery.
14 Start the Camera.
15 The new Firmware is now installed!

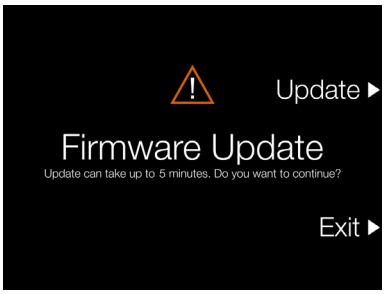
Service Menu



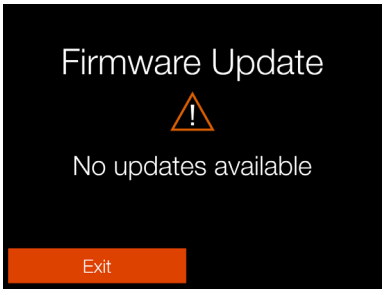
Check for Update dialogue



Update Confirm dialogue



No Firmware Update files are available on the SD Card



LENS FIRMWARE UPDATE

MAIN MENU > GENERAL SETTINGS > SERVICE > CHECK FOR UPDATE

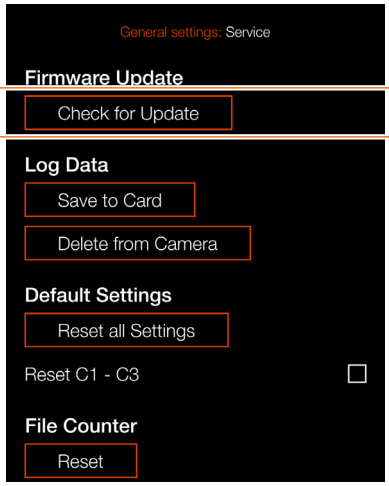
1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Service Menu.
4 Press the Check for Update button.
5 The camera will now check the inserted card/cards for update files.

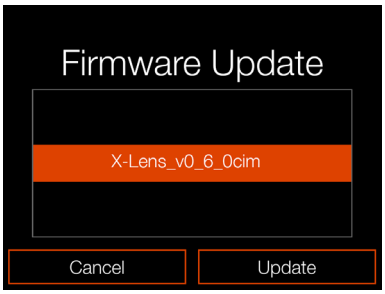
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Lens Firmware Update Procedure

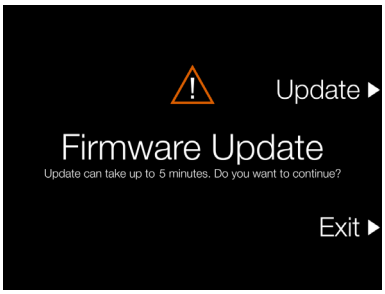
1 Attach the lens to the Camera.
2 Download the latest XCD Lens Firmware from www.hasselblad.com.
3 Save the Firmware file to an SD Card.
4 Insert the SD Card in the Camera.
5 Select Settings from the Main Menu.
6 Select Service / Firmware Update / Check for Update.
7 Make sure the Firmware File Name and Number corresponds to the latest Firmware File you have downloaded.
8 Select Update.
9 Select Update in the Update Dialogue to start the Lens Firmware Update.
10 During the update the text "Update in progress" is displayed on the Camera Display.
11 Do not turn off the Camera during the Update Progress.
12 The Update will take several minutes.
13 When the Update is finished this text will be displayed: "Update is completed!".
14 The new Lens Firmware is now installed!

Service Menu

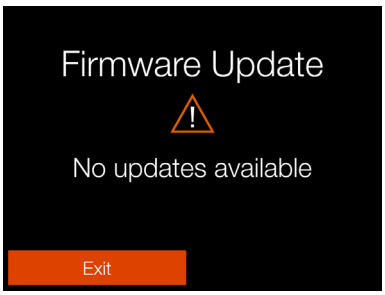




Update Confirm dialogue



No Firmware Update files are available on the SD Card



LOG DATA

MAIN MENU > GENERAL SETTINGS > SERVICE > CHECK FOR UPDATE

1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Service Menu.
4 Press the **Check for Update** button.
5 The camera will now check the inserted card/cards for update files.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

Log Data Settings

Save To card
Saves the content of the Log Data memory in the camera to the SD Card.

Delete from Camera
Erases the content of the Log Data memory in the camera.

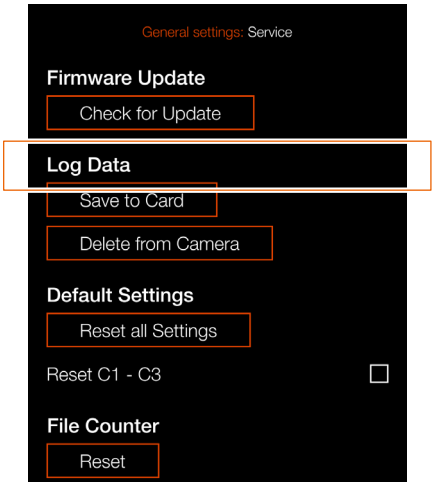
How to save Log Data:

1 Press MENU.
2 Navigate to General Settings.
3 Navigate to Service.
4 Navigate to Log Data.
5 Press the **Save to Card** button.
6 Save Log Data saves a log file on the SD 1 card or SD 2 card.
7 Press MENU button to exit.

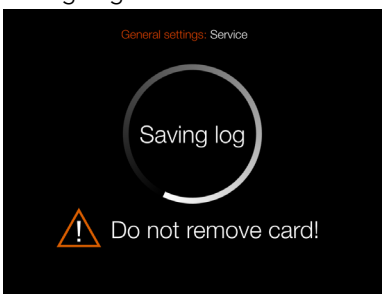
How to delete Log Data:

1 Press MENU.
2 Navigate to General Settings.
3 Navigate to Service.
4 Navigate to Log Data.
5 Press the **Delete from Camera** button.
6 In the confirm dialogue, press Delete (Rectangle Button).
7 Press MENU button to exit.

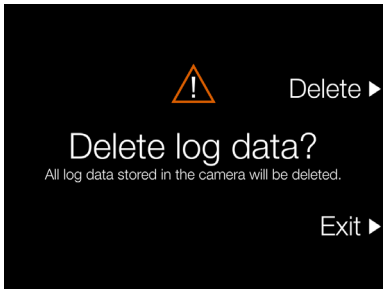
Service Menu



Saving Log Data



Delete Log Data confirm dialogue



DEFAULT SETTINGS

MAIN MENU > GENERAL SETTINGS > SERVICE > DEFAULT SETTINGS

1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Service Menu.
4 Press the **Check for Update** button.
5 The camera will now check the inserted card/cards for update files.

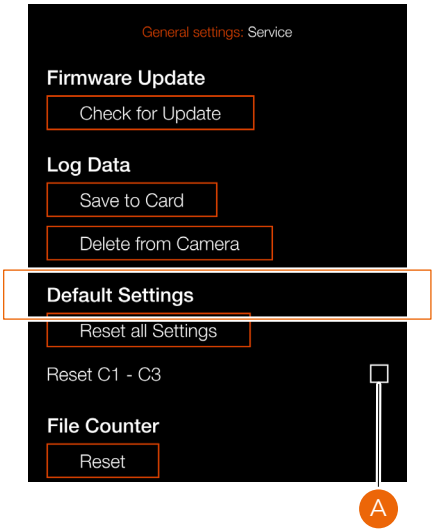
Swipe right or press the Menu / EXIT button to get back to the Main Menu.

How to reset all Settings to the Default Setting:

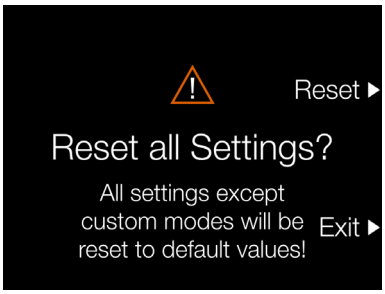
1 Press MENU.
2 Navigate to General Settings.
3 Navigate to Service.
4 Press "Reset All Settings".
5 A "Reset All Settings" confirmation dialogue appears.
6 If you also want Custom Modes C1, C2 and C3 to be reset, check the box **(A)** before pressing "Reset Settings".
7 Select Reset to Reset all Settings.
8 After confirmation, all settings will be reset to default values.

Note!
Select Exit to exit without resetting.

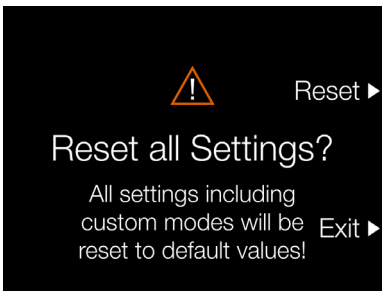
Service Menu



Reset All Settings Dialogue. C1 - C3 are not selected to be reset.



Reset All Settings Dialogue. C1 - C3 are selected to be reset.



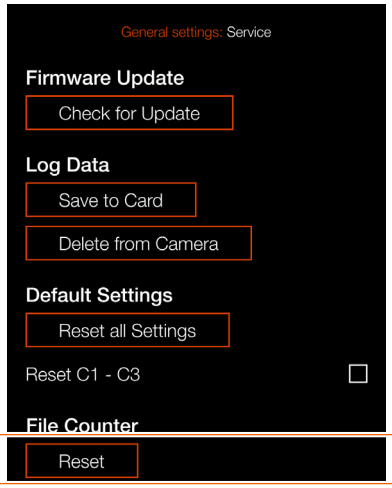
RESET FILE COUNTER

MAIN MENU > GENERAL SETTINGS > SERVICE > FILE COUNTER

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Service Menu.
4 Select **Reset** under File Counter.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

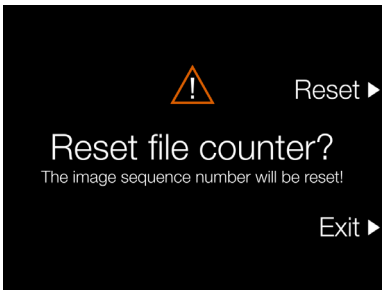
Service Menu



How to Reset the File Counter:

1 Press MENU.
2 Navigate to General Settings.
3 Navigate to Service.
4 Under File Counter, select Reset. A dialogue will appear asking for confirmation.
5 Press OK.
6 After confirmation, the File Counter will be reset and the next captured image (or video recording) will be numbered B00000001.
7 If the current folder on the memory card is not empty when a Reset is performed, a new folder will be created on the memory card. This is done to avoid the possibility of two captured images being labelled with the same name and file number.

Confirm dialogue



File Counter Reset Dialogue

Note!
A new folder is created if there are images present on any inserted active SD memory Card.

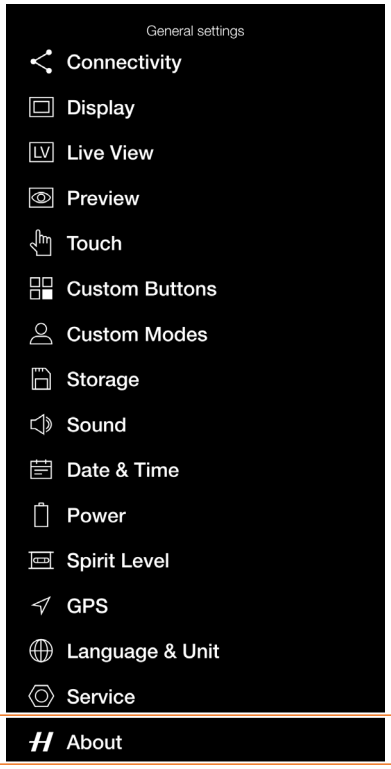
ABOUT

MAIN MENU > GENERAL SETTINGS > ABOUT

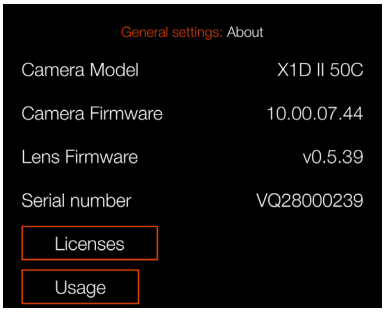
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings About icon.

Swipe right or press the Menu / EXIT button to get back to the Main Menu.

General Settings Menu



About Menu



About Menu Settings

Camera Model
Camera model name.

Camera Firmware
The About box will tell you which firmware version is present so you can see if you have the latest firmware (can be downloaded from the Hasselblad website).

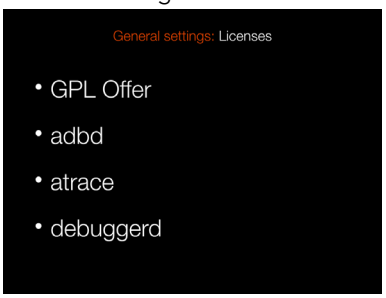
Lens Firmware
The Lens Firmware (v0.5.39) is displayed in the About menu.

Serial Number
The Camera serial number.

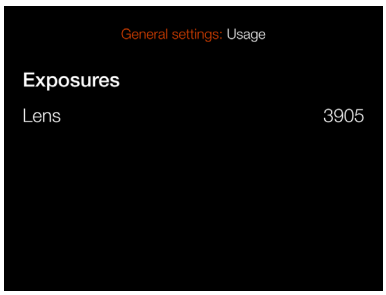
Licenses
Displays the available Licenses. Tap each line for more information.

Usage
Displays the total number of the currently mounted lens exposures. 3905 in this example on the right.

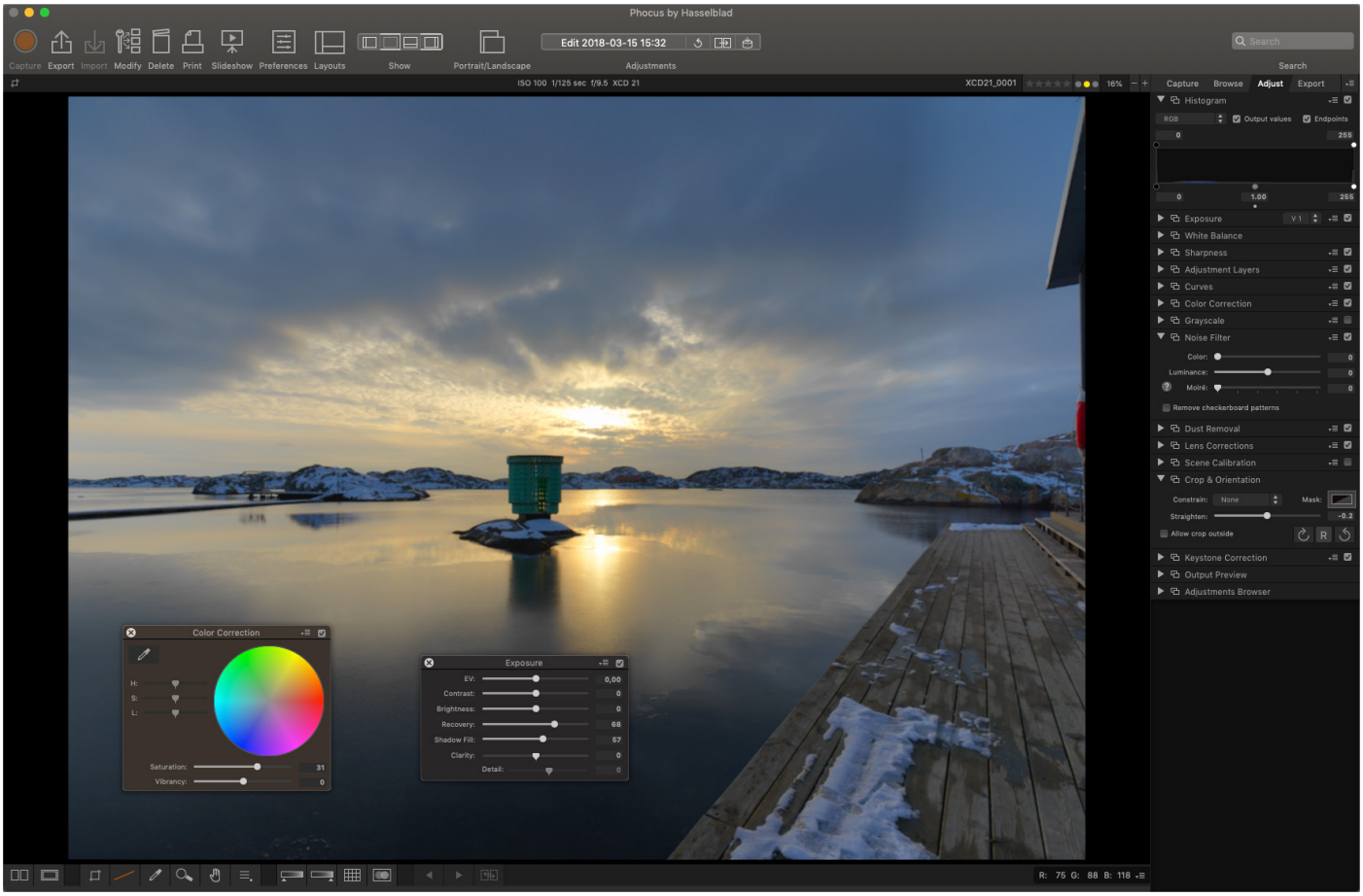
Licenses dialogue



Usage dialogue



6.1 PHOCUS OVERVIEW



Phocus

Phocus is a Capture Processing and File Management application aimed primarily at Hasselblad RAW 3F file handling. Phocus is available for both Mac and Windows.

Professional Image Quality

Phocus combines Hasselblad Natural Colour Solution (HNCS) with Digital Auto Correction (DAC) to provide high digital image quality in the images you create. With Phocus, the moiré effect that can occur on even extremely high resolution images is effectively removed automatically and directly on the raw data, leaving the image quality intact and saves time in post production work. Tethered shooting is efficient with Phocus Remote camera controls providing a number of remote functions. For example remote focusing, live view, aperture and exposure time controls.

FEATURES IN PHOCUS

Professional Image Quality

- Hasselblad Natural Colour Solution (HNCS).
- Lens corrections for X, H and V system lenses (DAC). The X1D II Camera fully supports X and H Lens systems. V and XPan System lenses can be used with electronic shutter.

Specialized Tools

- Advanced Tethered Camera Controls.
- Phocus Mobile 2*. See next page.
- Scene calibration & reproduction tools.
- Leading edge Moiré removal.
- Highlight recovery, shadow fill, clarity and dust spot removal tools.
- Selective Adjustments.
- Easy-to-use interface.
- Extensive customization options for individual work-flow scenarios.
- Import/Export of image adjustments, keywords, workflow settings.
- High quality printing.
- Slide show.
- RAW file support from more than 150 DSLR cameras**.
- A tethered camera can be used as a card reader for importing images into Phocus.

Any File from Anywhere

Phocus allows you to import image files and work in the same intuitive processing environment, no matter where your files are coming from. You can browse, handle, adjust, and process all kinds of RAW and non-RAW formats.

Phocus supports RAW files from more than 150 cameras**. The most common file formats can be processed for example TIFF, JPEG, DNG, and PNG. (Not all adjustments are available for 3rd party files).

Ultimate Image Quality

Phocus combines Hasselblad Natural Colour Solution (HNCS) with Digital Auto Correction (DAC) to provide high digital image quality in the images you create. With Phocus, the moiré effect that can occur on even extremely high resolution images is effectively removed automatically and directly on the raw data, leaving the image quality intact and saves time in post production work. Tethered shooting is efficient with Phocus Remote camera controls providing a number of remote functions. For example remote focusing, live view, aperture and exposure time controls.

* Phocus Mobile 2 is available for free download in the Apple App Store.
** Based on macOS RAW processing.

Note!

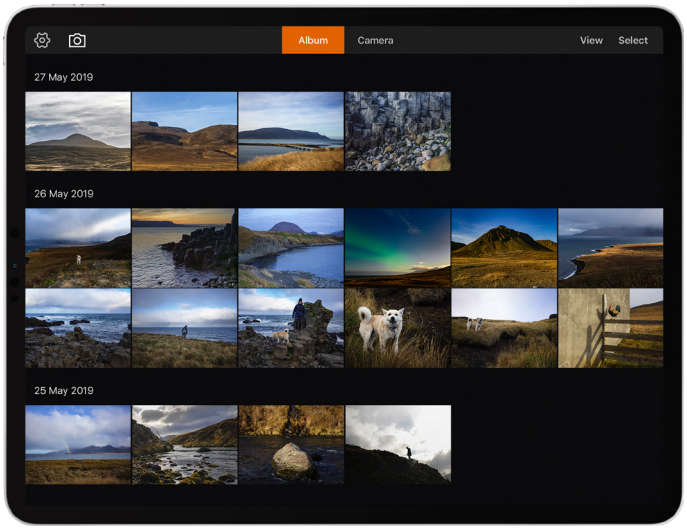
Phocus is a license free software with unlimited installations and there is no registration needed.

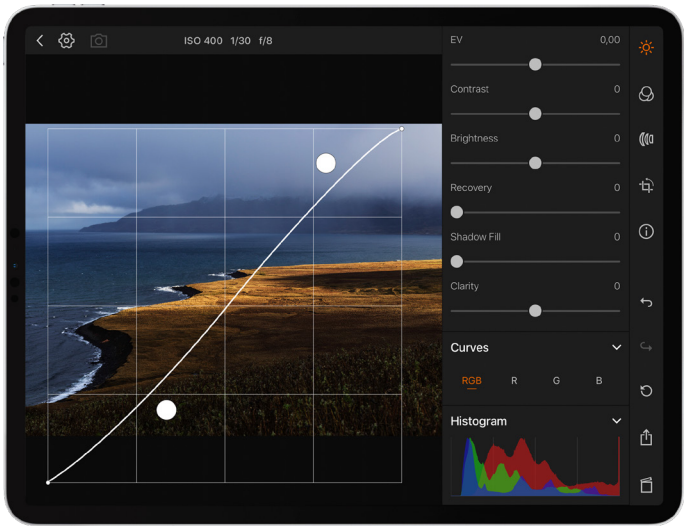
6.2 PHOCUS MOBILE 2

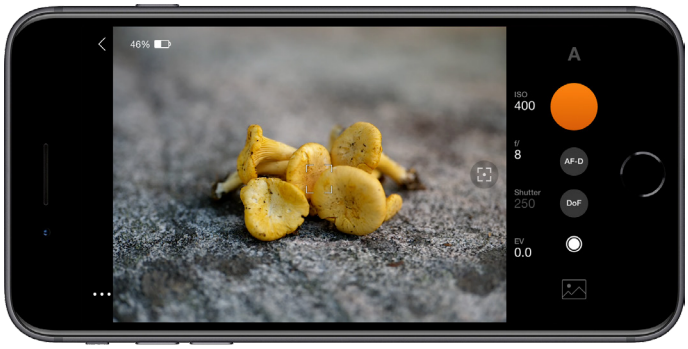
Phocus Mobile 2 is the successor to the original Phocus Mobile iOS application adding a number of new features. Most importantly it adds support for both USB and Wi-Fi connectivity, will let you capture images directly to the iOS device and provides full quality image editing and export. It will support both iPhone and iPad but for the image editing functionality an iPad Pro or one of the most recent iPad Air models with more than 2GB RAM is required. It will support the X1D II 50C and future camera models - the original Phocus Mobile will still be needed for the older cameras.

For further details please refer to the full User Guide for Phocus and hasselblad.com/phocusmobile2.

Note!
The X1D II 50C is not compatible with the previous version of Phocus Mobile.







6.3 CONNECT TO A COMPUTER

1 Connect a USB 3 cable to the USB port on the computer.
2 Open the hinged cover on the camera.
3 Connect the USB 3 cable to the USB port on the camera.

When initiating a shot from Phocus, the Computer sends a signal to the X1D II Camera, which triggers the shutter (and strobe/flash, if any). The Camera then sends the capture over the USB connection to the Computer, where it is displayed on the Computer Screen and saved as a 16-bit 3F file in the currently selected folder on the Computer hard disk.

Note!
When connected to a computer, the following applies:

- The destination medium and location are controlled from Phocus.
- All exposure settings, including ISO, aperture and exposure time, are controlled from Phocus if you choose to expose from Phocus. In addition extra tools such as Live Video, remote focus control are available. See Phocus user manual for full description.

Note!
Make sure the Tethering Mode is set to Mac/PC when connecting to a computer. See more on page 121.

6.4 PHOCUS AND HASSELBLAD CAPTURE FILES

The X1D II can capture files and store them as Hasselblad RAW format files or Hasselblad RAW + JPEG formats simultaneously.

Hasselblad RAW files are initially stored in the 3FR format which is a proprietary Hasselblad format for the temporary storage of captures. A 3FR file contains the complete digitized raw image exactly as it was captured by the camera. 3FR information requires further computing power (typically by way of Phocus) to obtain complete development. If developed in Phocus, 3FR files become Hasselblad 3F files – denoted by each file now bearing the suffix ".fff". If developed by other RAW processors, the 3FR files are not converted to 3F but can be exported directly to TIFF and PSD according to requirements.
When working tethered to Phocus or Phocus Mobile 2, 3FR files are automatically processed and stored in the background on a computer appearing as 3F files on the hard disk ready for selective adjustment and export. 3FR files stored on a SD card can be processed using:

- Hasselblad Phocus
- Adobe Camera Raw
- Adobe Lightroom

Capture files can be stored as 3FR files (from a SD card) for later processing in Phocus or other software, or they can be stored as 3F files (as a result of tethered shooting or 3FR files processed and converted in Phocus). In all cases if you keep the original 3FR/3F files, you will also retain the possibility of reprocessing them in the future in later versions of Phocus or other software to take advantage of eventual improvements and developments.

Mixed formats
Phocus can also process most other capture formats, generic and proprietary. This means you can include other formats in your normal Phocus workflow if you choose. Or if you prefer, you can include Hasselblad files in Adobe / Apple workflow as stated above.

Note!
For best possible image result, use Hasselblad Phocus Software. Other Digital Image Software can give you a similar result, but not exactly the same as Hasselblad Phocus Software.

For a complete list of accessories, see
https://www.hasselblad.com/x-system-accessories/

XH LENS ADAPTER

CP.QT.00000290.01
The XH Lens Adapter can be used to mount an HC or HCD Lens onto the X1D II Camera.
The XH Lens Adapter widens your X1D II lens choices to include all 12 H-system HC/HCD lenses, and accessories including a macro converter and 3 extension tubes.
The HC/HCD lens range includes a 24 mm wide-angle lens, a 300 mm telephoto lens and a 100 mm f 2.2 lens, delivering small depth-of-field range and a beautiful, smooth Bokeh.

Note!
Currently the X1D II Camera supports the XH Lens Adapter with Auto Focus for all HC/HCD Lenses, except the HC 120 Macro. Converters and extension tubes can also be used with AF.

Note!
Only HC/HCD lenses with firmware 18.0.0 or later can be updated for AF functionality. Lenses with older firmware have older hardware and cannot be updated with this firmware. They can only be used in Manual Focus Mode.

XH CONVERTER 0,8

CP.HB.00000627.01
The XH Converter 0,8 is an accessory for using HC/HCD lenses on X System cameras. It reduces the focal length of the attached lens by a factor of 0,8x as well as increases the maximum and minimum aperture with 2/3 stops.

- Hasselblad X System cameras, X1D with firmware 1.25.0 or later, or X1D II 50C/907X/CFV II with firmware 1.4.0 or later.
- All Hasselblad HC and HCD lenses, except HC120 and HC120-II with firmware older than 18.0.0.
- Lenses with firmware 18.0.0 to 19.0.3 must be upgraded to 19.1.0 or later. Lenses with firmware older than 18.0.0 will have manual focus only.
- HCD lenses were originally designed for a smaller format than HC lenses. Therefore some reduction of performance in extreme corners can occur.

Note!
Only HC/HCD lenses with firmware 18.0.0 or later can be updated for AF functionality. Lenses with older firmware have older hardware and cannot be updated with this firmware. They can only be used in Manual Focus Mode.

XV LENS ADAPTER

CP.HB.00000241.01
The XV lens Adapter is used to attach Hasselblad V System lenses to the X1D II. Compatible with all V System lenses (C, CF, CFi, CFE, CB, F and FE)

Note!
This requires the electronic shutter function of the X1D II to be activated. See more on page 105.

Note!
You can use Focus Peaking or 100% zoom in to assist manual focusing.

Note!
Lens corrections for V System lenses are available with Phocus version 3.4 or later. Note that they have to be manually selected.

TRIPOD MOUNT RING 75MM

CP.HB.00000217.01
The tripod mount ring is designed to fit the XH/XV lens adapters and the X Converter 1.7, giving additional support when using long or heavy HC/HCD or V System lenses on X System camera bodies. The tripod mount ring can be fitted to 1/4" and 3/8" tripod threads or the Hasselblad Quick Coupling Plate H.

XPAN LENS ADAPTER

CP.HB.00000036.01
The XPan Lens Adapter is used to attach lenses that was made for the XPan Camera. Available XPan lenses were 5,6/30mm, 4/45mm and 4/90mm.

Note!
XPan Lenses had no built-in shutter. Consequently, they can only be used when the electronic shutter of the camera is activated. See more on page 105.

Note!
You can use Focus Peaking or 100% zoom in to assist manual focusing.

RELEASE CORD X

CP.HB.00000242.01
The Hasselblad Release Cord X allows for remote shutter control, helping to eliminate shake or vibration. A durable cloth-wrapped 90cm (36 in.) cable connects to the microphone input of the X1D II and the simple single button operation allows photographers to keep vibration to a minimum. Its durable metal construction combined with its slim, ergonomic design fits comfortably in the hand. Release Cord X comes with a small leather carry pouch.

BATTERY CHARGING HUB

CP.HB.00000397.01 (EMEA)
CP.HB.00000395.01 (United Kingdom)
CP.HB.00000392.01 (North America/Japan)
CP.HB.00000396.01 (China)
CP.HB.00000393.01 (South Korea)
CP.HB.00000394.01 (Australia/New Zealand)

Streamlining the battery charging process, the Hasselblad Battery Charging Hub contains dual slots that support the simultaneous charging of two batteries. An integrated USB Type-C connector supports mains power via an included power supply or from common external USB battery banks (sold separately). Front-facing LEDs indicate status and capacity when charging, or users can use the Battery Charging Hub to check battery levels simply by inserting a battery and pressing a single button.

7.1 OPTIONAL HC LENS ACCESSORIES

H 13, 26 AND 52 EXTENSION TUBES

CP.QT.00000228.01 Extension Tube H 13 mm
CP.QT.00000223.01 Extension Tube H 26 mm
CP.QT.00000233.01 Extension Tube H 52 mm
The Extension tubes attach between the XH Lens Adapter and the HC Lens to reduce the close focusing distance for close up photography. They are available in three sizes: 13 mm, 26 mm and 52 mm. As the X1D II has a TTL light metering system, exposure compensation is automatic.

CONVERTER H 1.7X

CP.QT.00000239.01
The Converter H 1.7x is mounted between the XH Lens Adapter and the HC Lens. Then Converter H 1.7x increases the focal length of a lens by a factor of 1.7x. It features the same outstanding optical and mechanical quality as the elements in the Hasselblad H-lens series.

TILT/SHIFT ADAPTER HTS 1.5X

CP.QT.00000232.01
The HTS 1.5x is designed to work with HCD24, HCD28, HC35, HC50, HC80 and HC100 Lenses. It has a converter factor of 1.5 times and allows for +/- 10 degrees of Tilt and +/- 18 mm Shift. AF with the X1D II works even if the adapter is set for Tilt and/or Shift. Meta Data for Tilt and Shift amount is not added to the image file when using the X1D II, and automatic lens corrections will not be applied in Phocus. This is a feature unique to the H5D and H6D Cameras.

7.2 OPTIONAL ACCESSORIES

PRO SHADE V/H 60 – 95

CP.QT.HB000021.01
An adjustable bellows lens shade that provides highly efficient protection against stray light. The compact, flat folding design saves space in the equipment case. It also features a filter holder for glass, gelatin, or plastic filters.

PRO SHADE ADAPTERS

CP.QT.HB000024.01 Proshade Adapter 67mm
CP.HB.00000073.01 Proshade Adapter 77mm
CP.QT.HB000025.01 Proshade Adapter 95mm
67 mm, 77 mm and 95 mm adapters with bayonet mount for HC lenses. Features lock to provide positive and secure attachment.

UV SKY FILTERS

CP.HB.00000024.01 Filter UV-Sky 67 mm
CP.HB.00000086.01 Filter UV-Sky 77 mm
CP.HB.00000087.01 Slim Filter UV-Sky 95 mm
Absorbs UV radiation and reduces blue haze without affecting colours. Also protects the front lens surface. Particularly recommended when the camera is used in harsh conditions. Available in three sizes to suit various lenses: 67mm, 77mm and 95mm.

POLA FILTERS

CP.HB.00000089.01 Polarizing Filter 67 mm
CP.HB.00000090.01 Polarizing Filter 77 mm
CP.HB.00000091.01 Polarizing Filter 95 mm
Reduces non-specular reflections and glare. Increases colour saturation in general. Can intensify a blue sky. Available in three sizes.

X CAMERA SHOULDER STRAP

CP.QT.00000207.01
Wide camera strap with anti slip backing.

X CAMERA BLACK LEATHER SHOULDER STRAP

CP.QT.00000418.01
Wide Leather Strap.

TRIPOD QUICK COUPLING H

CP.HB.00000070.01
Mounted on a tripod, this accessory facilitates rapid attachment and removal of the camera. The camera is firmly held in an exact and repeatable position. Works with the The tripod mount ring 75 mm.

Two integrated spirit levels make horizontal positioning of the camera easy. The Tripod quick-coupling H fits 1/4" and 3/8" tripod threads and has a safety catch. Fits all H System cameras and virtually all V System Cameras. X System cameras can be mounted by using the Quick-Coupling Plate (CP. QT.00000212.01).

8 APPENDIX

8.1 CHANGE FROM FOREIGN LANGUAGE

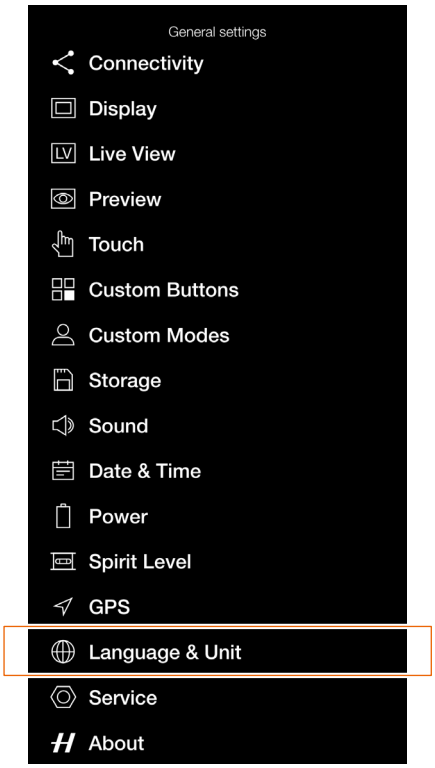
MAIN MENU > GENERAL SETTINGS > LANGUAGE & UNIT

1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Navigate to the menu item with a Globe icon (number 3 on the list from the bottom, Language).
4 Scroll down to select your Language.

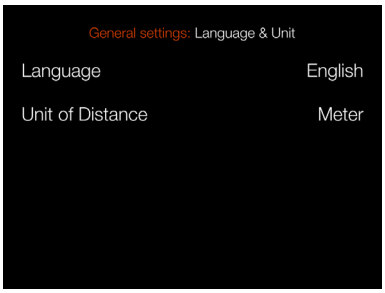
Swipe right or press Menu / EXIT button to get back to Main Menu.

Also see page 135.

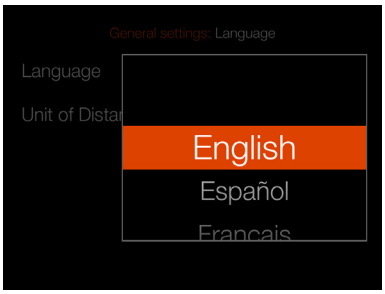
General Settings Menu



Language Menu



Language Setting



8.2 ERROR MESSAGES

If any error message is displayed

1 Remove the components from the camera.
2 Attach the components to the camera again.

If the error message is still displayed

1 Remove the battery.
2 Remove any connected USB cable.
3 Wait 10 seconds.
4 Attach the battery again.
The Camera processor is now reset.

If the error message is still displayed

1 Write down the error message.
2 Contact your closest authorized Hasselblad dealer.

8.3 EV VALUE

The EV value (Exposure Value) represents a combination of Aperture and Shutter Speed where all combinations giving the same exposure will have the same EV value.
As an example:
f/5,6 - 1/125s and f/4 - 1/250s has the same EV value = 12.
If you press AE-L in manual exposure mode and rotate either or both thumb wheels, aperture and shutter speed will change, but the EV value will remain the same.

A change of the EV value by one is the same as changing aperture or shutter speed by one stop.
Examples:
f/5,6 - 1/125s : EV12
f/8 - 1/125s : EV 13
f/5,6 - 1/250s : EV 13

It is important to understand that although two images that were made using the same EV value but with different combinations of aperture and shutter speed will have the same exposure but will not be identical due to different depth-of-field and movement stopping time.

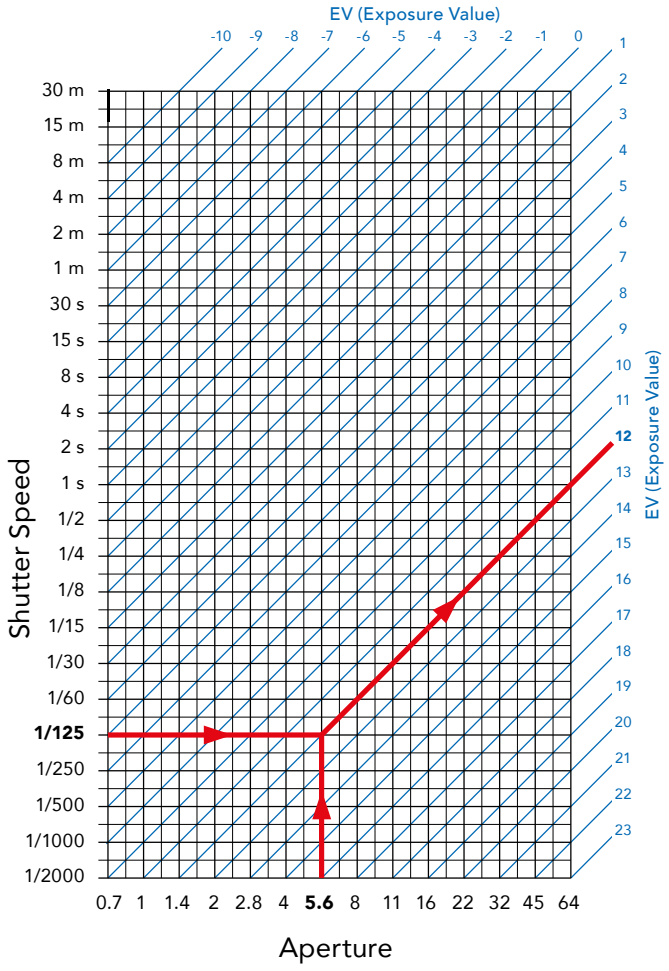
As the EV value is related to the lighting conditions, it can in many cases be an easy way to quickly set the correct exposure. As a start you can use the following guidelines.

Scene	EV Value @ISO100
Light sand or snow with clear shadows	16
Outdoor scene in direct sunlight	15
Outdoor scene, Cloudy no shadows	13
Outdoor scene in shadows, clear sunlight	12
Sunset	12
Night scenes in city lights	7-8
Indoor, home	5-7

The table shows EV values for ISO 100. If you use another ISO setting the EV value should be modified as follows:

ISO200: EV +1
ISO400: EV +2
ISO800: EV +3
Etc.

More information here: https://en.wikipedia.org/wiki/Exposure_value



8.4 CLEAN THE SENSOR FILTER

Caution!
Be careful when you attach/remove the components to/from the camera. This will help prevent damage to the data bus connections.

Caution!
When you remove the lens, keep foreign objects away from the camera opening. The camera opening is very sensitive. This will help prevent damage to the equipment.

Remove the Lens and clean the Sensor

1 Remove USB 3 cable if connected.
2 Press and hold the Lens Release button.
3 Rotate the Lens counter clockwise.
4 Remove the lens.
5 Carefully clean the outside surface of IR filter by using clean compressed air.

Caution!
If you use canned compressed air to clean the glass of IR filter, read the instructions very carefully before use. This will help prevent damage to the filter.

If compressed air did not remove all the problems and you still see dust spots in the images, you may have dust either on the inside of the IR filter or on the CMOS itself, please contact your Hasselblad dealer.

Caution!
Do not try to remove the glass IR filter from the front of the sensor (due to dust or similar). This will cause damage to the equipment.

8.5 CLEAN THE LENS GLASS SURFACE

REMOVE DUST

Caution!
Do not touch the glass surface with your fingers. This can cause damage to the equipment.

If there is dust on the lens glass, do as follows:

1 Remove the dust with an air blower.
2 If that does not solve the problem, try to remove dust with a very soft lens brush.

REMOVE SMEAR

Caution!
Do not touch the glass surface with your fingers. This can cause damage to the equipment.

If there is smear on the lens glass, do as follows:

1 If you are not sure how to remove the smear, contact your local Hasselblad Authorized Service Centre.
2 Clean the lens glass with a high quality lens cleaning solution on a tissue.

8.6 INFORMATION ABOUT THE HASSELBLAD X1D USER GUIDE

The information in this User Guide is intended for informational use only. The information and the 3D Product Images and Photos, are subject to change without notice, and should not be construed as a commitment by Victor Hasselblad AB.

UPDATES

Updates to this User Guide will be issued regularly. Please check www.hasselblad.com for the latest version.

3D PRODUCT IMAGES

The X1D II Product Images in this User Guide were not taken with a Hasselblad X1D II. They are produced in 3D as visualization. They are used for illustrative purposes only and are not intended to represent the image quality produced by a Hasselblad X1D II.

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