User Guide

X1D

HASSELBLAD

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XCD
3,2/90
Ø 67mm

1.1 UPDATE X1D CAMERA FIRMWARE

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

Before you start to use your new X1D Camera, please visit www.hasselblad.com and download the latest X1D Camera firmware and update the Camera system to make sure you get the latest functionality.

See specific section in this User Guide for an in depth description on how to download the X1D Camera firmware and update your X1D Camera.

1.2 X1D FEATURES

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

HNCS Hasselblad Natural Colour Solution
HNCS saves time and enables high Colour Quality in skin tones and specific product tones that are going to be rendered automatically and accurate.

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

Digital Lens Correction
The Digital Lens Correction is 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 offers remote viewing and control when shooting tethered. Phocus mobile is free to download at Apple´s App Store for both iPhone and iPad.

XCD 30mm Lens

XCD 45mm Lens

XCD 90mm Lens

X1D CAMERA AND LENSES FEATURES

Stainless steel/aluminium camera body.
Access to 12 H system lenses.

XCD System lenses and accessories
XCD 30 Lens.
XCD 45 Lens.
XCD 90 Lens.

H System Lenses and Accessories
Adapter for H system Lenses.

Lenses
24, 28, 35, 50, 80, 100, 150, 210, 300, 120 Macro, 50-110 & 35-90 zooms.
1.7x converter & Macro converter.

Flash
Nikon Flash Product range can be used in TTL-mode.
See Flash section for details.

1.3 DELIVERY CHECK

Delivery Check

1 Unpack all items.
2 Verify that all the items listed on the attached package information are supplied.
3 Inspect all the items for damage.
4 If any items are missing or damaged, write down the product number of that item. If not, proceed to step 6.
5 Contact your Hasselblad dealer or distributor and tell them the product number of the item missing or damaged.
6 Keep the purchase details and the warranty in a safe place.

In the package

USB stick with X1D User Guide and Phocus Software.

Camera Body.
Camera Front Protective Cover.

Lens (if included in purchase).
Lens Hood.
Lens Protection lid x2.

Battery.
Battery Protection Cover.
Battery Charger.

1 SD Card included.

USB 3 Cable.

Carrying Strap.

1.4 X1D 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 mega pixels (8272 × 6200 pixels, 5.3 × 5.3 µm)
Sensor Dimensions	43.8 × 32.9mm
Image Size	Stills: RAW 3FR capture 65MB on average. TIFF 8 bit: 154MB; Video: HD (1920 x 1080p)
File Format	Stills: Hasselblad 3FR Video: H.264 Compressed (25 fps)
Shooting Mode	Single shot stills, Video
Colour Definition	16 bit; Dynamic range approx. 14 stops
ISO Speed Range	ISO Auto, 100, 200, 400, 800, 1600, 3200, 6400, 12800, 25600
Storage Options	Two SD cards or tethered to Mac or PC
Colour Management	Hasselblad Natural Colour Solution, HNCS
Storage Capacity	16GB card holds 240 images on average
Capture Rate	TBD
User Interface	Touch functionality: Yes, full support. Touch interface including swipe, scroll and pinch/spread to zoom. Camera grip with buttons and control wheels. Many camera functions and settings can be controlled from a tethered computer or iPhone/iPad over Wi-Fi.
Display	3 inch TFT type, 24 bit colour, 920K pixels.
Live View	On camera, host and iOS device with high frame rate.
Viewfinder (EVF)	2.4 Mega-pixel Electronic Viewfinder (EVF)
Histogram Feedback	Yes, on rear display
IR Filter	Mounted in front of sensor
Software	Phocus for Mac and Windows. Compatible with Adobe Camera and Adobe Photoshop Lightroom.
Platform Support	Macintosh: OS X version 10.9; PC: XP/Vista/Windows 7 (32 and 64 bit)/ 8 / 10
Host Connection Type	USB 3.0 (5 Gbit/s) Type-C connector
Additional Connections	Mini HDMI, Audio In/Out
Operating Temperature	-10 - 45 ˚C / 14 - 113 ˚F
Wi-Fi	802.11 b, g, n, a, ac (a and ac depending on region)
Dimensions	Complete camera w/ XCD 45mm lens: 148 x 97 x 125mm [W x H x D]
Weight	1170 g (Complete camera w/ XCD 45mm lens, Li-Ion battery and card)
Lenses	Hasselblad XCD lenses with built in electronically controlled shutter and aperture. Automatic or manual focusing with instant manual focus override. All HC/HCD lenses can be used with an adapter (optional). Lens shades can be mounted in reverse for transport.
Shutter	Electronically controlled lens shutter with speeds up to 1/2000. Flash sync at all speeds.
Shutter Speed Range	60 minutes to 1/2000 sec with XCD lenses. 1/800 or 1/2000 with HC/HCD lenses.
Flash Sync Speed	Flash can be used at all shutter speeds.
Flash Control	TTL centre weighted system. Compatible with Nikon™ System flashes. ISO range 100 to 6400. Flash output can be adjusted (-3 to +3EV) for fill-in purposes independent of ambient light. Sync at all shutter speeds.
Flash Compatibility	In TTL-mode the following Nikon Flash products can be used: SB-300, SB-500, SB-700, SB-900, SB-910
Focusing	Automatic and manual focusing. Instant manual focus override. Automatic focusing using contrast detection. 100% zoom possible in manual focus.
Exposure Metering	Spot, Centre Weighted and Centre Spot Metering range Spot: EV2 to 21, Centre Weighted: EV1 to 21, Centre Spot: EV1 to 21
Power Supply	Rechargeable Li-ion battery (7.2 VDC/3200 mAh)
Customization	Some of the X1D’s functions can be customized by the user to suit specific styles or situations through the built-in menu system.

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. A USB SD card reader can also be used for image transfer from the SD cards.

1.6 NEW IN THIS VERSION 1.3

New recommended memory cards.
Exposure Simulation.
Update Lens Firmware.

1.7 ABOUT THIS USER GUIDE

The X1D 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.

SEARCH TOOLS

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

FORMAT AND PRINTING THE X1D 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.

Photo Credits
Page 11, 19, 71, Ian Lawson.
Page 74, 75, Dmitry Ageev.

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2.1 SAFETY AND WARNINGS

Warning!
Do not place cables between camera and computer so that there is a risk for people to trip and fall. This can cause personal injury and/or damage to the equipment.

Warning!
If you use spare battery packs, make sure to use protective caps on the contacts. The contacts can short circuit and catch fire, if not protected. This can cause personal injury and/or damage to the equipment.

Warning!
Do not expose batteries (battery pack and batteries installed) to excessive heat such as sunshine, fire or similar. If exposed, the batteries can catch fire. This can cause personal injury, damage to the equipment and the surrounding environment.

Warning!
Be careful when working with strobe and flash units. This will prevent personal injury and/or damage to the equipment.

Warning!
Operation of this equipment in a residential area could cause radio interference.

2.2 CAUTIONS

Caution!
Be careful when you use the camera. The camera is a precision instrument. This will help prevent damage to the camera.

Caution!
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Caution!
Do not use batteries other than specified. This can cause damage to the batteries.

Caution!
Use protective covers as much as possible. The protective covers will help prevent damage to the equipment.

Caution!
Use a protective case or camera bag when you transport the equipment. This will help prevent damage to the equipment.

Caution!
Protect the equipment from oil fumes, steam, humid conditions and dust. This will help prevent damage to the equipment.

Caution!
Seal all equipment in a plastic bag or similar if you enter damp and humid condition from dry and cold condition. Wait until the equipment has acclimatized to the new temperature before you remove the equipment from bag. This will help prevent damage to the equipment.

Caution!
Avoid frequent and high temperature changes. This can cause damage to the equipment.

Caution!
Keep camera and equipment away from moisture. If your camera becomes wet, disconnect from electric power and let camera dry before further use. This will help prevent damage to the equipment.

Caution!
Store the equipment in a dry environment. This will help prevent damage to the equipment.

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

Caution!
Use the grip or strap when you lift and handle to camera. This will help prevent damage to the camera.

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

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

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

Caution!
Keep all equipment out of reach of small children. This will prevent damage to the equipment.

Caution!
When cleaning the camera, remove the batteries. This will prevent damage to the camera.

Caution!
If you leave the camera unused for a long period, remove the batteries. This will prevent damage to the equipment.

Caution!
Do not try to remove the glass IR filter from the front of the CMOS (due to dust or similar). This can cause damage to the equipment. Always contact your local Hasselblad Authorized Service Centre.

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.

2.3 DISPOSAL

This product must be put in municipal waste.
Check local regulations for disposal.

2.4 FCC

Federal Communication Commission Interference Statement:

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 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.

FCC Caution
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The highest SAR value as reported to the authorities for the X1D-50c when tested for use by the Body is 0.10 W/kg and Extremity is 0.33W/kg against a limit of 1.6W/kg.

2.5 ISED

RSS-Gen Information for the Certification of Radio Apparatus
This device complies with ISED licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1 This device may not cause interference, and
2 this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme au(x) standard(s) RSS exempt(s) de licence de ISED. Son fonctionnement est sujet aux deux conditions suivantes:

1 cet appareil ne doit pas occasionner d'interférence
2 cet appareil doit supporter toutes les interférences, y compris celles qui pourraient provoquer un mauvais fonctionnement de cet appareil.

RSS-102 RF Exposure Compliance of Radiocommunication

Apparatus
The X1D-50c has been designed to comply with safety requirements for exposure to radio waves. SAR testing has been performed in accordance with RSS-102, with the X1D-50c transmitting at its highest certified power level in all used frequency bands. The highest Body SAR value for the X1D-50c when tested was 0.10 W/kg against a limit of 1.6 W/kg. Extremity SAR was measured to 0.33 W/kg.
Please follow the instructions included in the user guide for product installation and use.

Le X1D-50c a été conçu pour se conformer aux exigences de sécurité en matière d'exposition aux ondes radio.
Des tests SAR ont été effectués conformément à la RSS-102 avec le X1D-50c transmettant à son plus haut niveau de puissance certifié dans toutes les bandes de fréquences utilisées.

La valeur SAR la plus élevée pour la X1D-50c lors des tests était de 0,10 W/Kg contre une limite de 1.6 W/kg. On a mesuré l'extrémité SAR à 0,33 W/kg.
Merci de suivre les instructions fournies dans le mode d'emploi pour l'installation et l'utilisation du produit.

2.6 CERTIFICATION INFORMATION

Depending on region certification information in addition to what is engraved on the camera bottom can be found on an e-label. From the Main Menu this label is reached by pressing General Settings > About > Certification.

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3.1 THE X1D 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 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 soft buttons to the right of the Touch Display and Scroll Wheels on the Camera.

3.2 TOUCH DISPLAY NAVIGATION

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

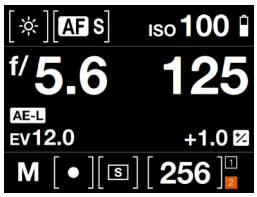
Action	Function
Swipe Right	Move back / Move image right.
Swipe Left	Move image left. Only in Browse mode.
Swipe Down	Display Control Screen.
Swipe Up	Hide Control Screen.
Tap / Press	Select action / button / setting.
Double Tap	Zoom in to 100%. Double Tap again to Zoom out to full View.

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).

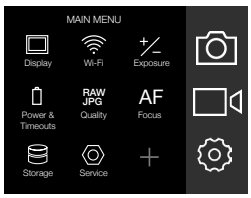
Swipe Right

Swipe Left

Swipe Down



Swipe Up



Display Control Screen from Main Menu

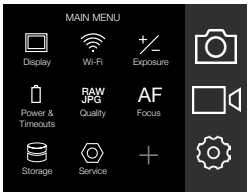
1 Swipe down over Main Menu to display the Control Screen.

2 The Control Screen displays the Camera Settings.

3 Select any of the settings to make a quick adjustment within the Control Screen Interface.

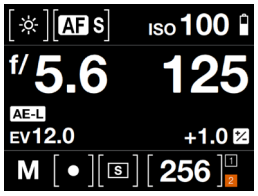
4 Swipe Up to hide the Control Screen and display the Main Menu.

1 Swipe Down



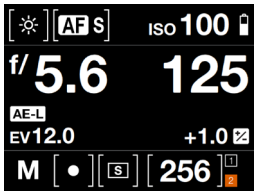
Main Menu

2



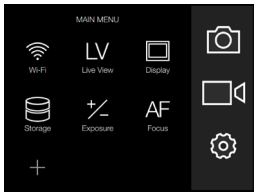
Control Screen

3 Adjust settings



Control Screen

4 Swipe up



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.

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 soft button with a “star” symbol to the right of the Touch Display, or zoom out with a two finger “pinch”.

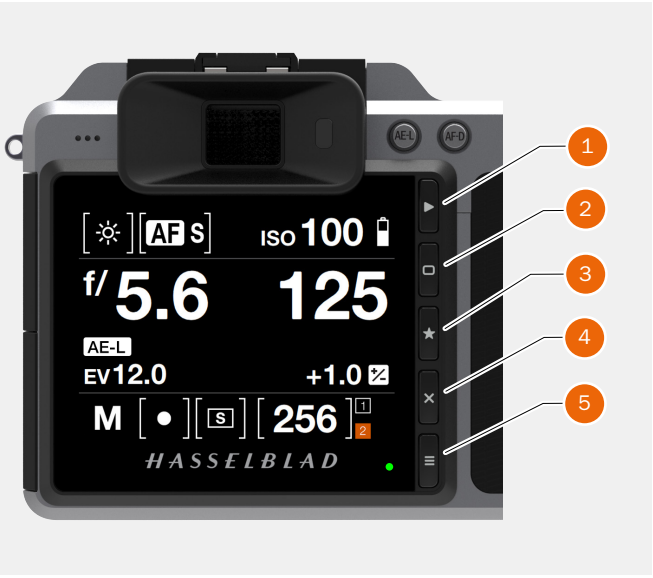
9 View Mode

3.3 NAVIGATING THE MENUS

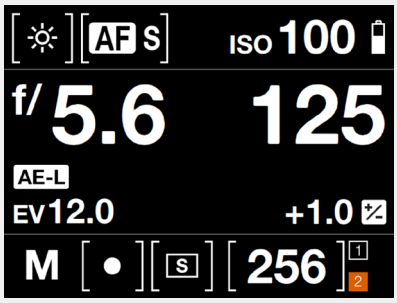
DESCRIPTION OF THE TOUCH DISPLAY MENU ITEMS

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

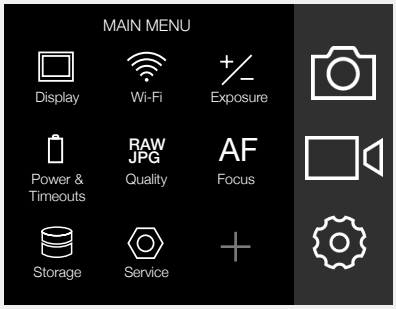
Button		Screen function
1	Browse Button	Go to image browse
2	Soft Button	Up
3	Select Button	Select
4	Soft Button	Down
5	Menu / (EXIT) Button	Back to Main Menu



Control Screen



Main Menu



1 Browse Button
Activates the display and shows the last image. The user can review images, browse and zoom. Preview images and zoom in to view close-ups of previews for focus checking. Zoom out to view several at once and finally to view and select folders and media.

2 Soft Button
Function depends on screen information. The button acts as Delete Image button in Browse Mode, while it changes the overlay in Live View Mode.

3 Select Button
The Select Button toggles between 1 view and 9 view in Browse Mode. Toggles 100% zoom-in in live View Mode.

4 Soft Button
Function depends on screen information. The button changes the overlay in Live View Mode.

5 MENU / (EXIT) Button
This button opens the Main Menu. It is also used for other tasks (for example EXIT button) as you issue commands navigating the menu system.

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

OVERVIEW OF MENUS AND SETTINGS ON TOUCH DISPLAY

The Touch Display 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 / Exit button.
2 Front Scroll Wheel.
3 Shutter Release.
4 Mode Dial.
5 Rear Scroll Wheel.

The Main Menu on the Touch Display

On the right side of the Display there are three Main Function Settings: Camera Settings, Video Settings and General Settings. To the left of them, the Favourite Settings Short Cuts are displayed. You can add or delete these Short Cuts to access your most used functions directly from the Main Menu.

The Menu Button (1) navigates back to Main Menu.

3.4 TOUCH DISPLAY MAIN MENU

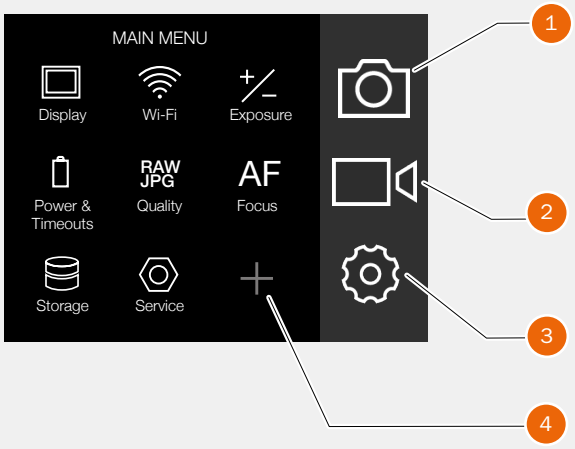
MAIN MENU

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 Short links to Functions. In this example, they are:

Display.
Wi-Fi.
Exposure (+/-).
Power & Timeouts.
Quality (RAW/JPG).
Focus (AF).
Storage.
Service.

Main Menu



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

ADD SHORT LINKS TO MAIN MENU FAVOURITES

To create and 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 by other Favourite settings. To add or remove a short link, see the instructions on the following page.

The available functions to add are:

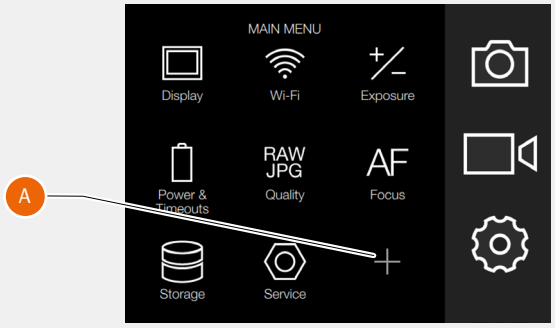
Quality RAW/JPG.
Self Timer.
Configuration.
Video Quality 1080p.
Audio.
Custom Modes.
Sound.
Date & Time.
Power & Timeouts.
Language.
Service.
About.

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

HOW TO ADD SHORT LINKS 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 Self Timer (B).
4 The Self Timer icon is displayed on the Main Menu and the action is saved in the Camera Memory.

Main Menu

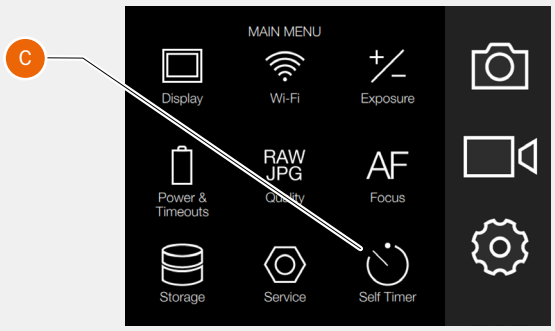


HOW TO REMOVE SHORT LINKS ON THE MAIN MENU

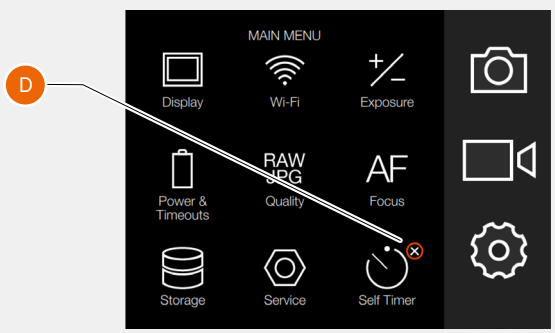
1 Press and Hold on the icon you would like to remove from the Main Menu Favourites. Self Timer (C) in this example.
2 The close symbol, X, is displayed on the upper right corner of the selected short link (D).
3 Select / Press the X in the orange circle to delete the icon and remove the function from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

Add Favourite Pop up screen

Main Menu with Self Timer added



Remove Short link



CONTROL SCREEN

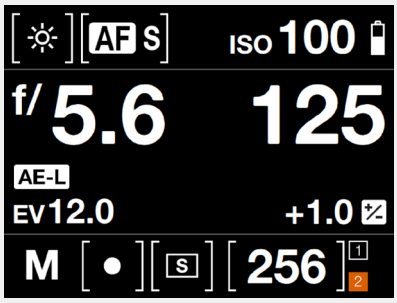
You can access the most common settings using the Control Screen. You can easily change these settings by tapping on any function and adjust directly.

Display Control Screen
Swipe down from the top of the display on the Touch Display or press the soft button to the right of the display you can always display the Control Screen.

Close the Control Screen
Swipe up from the top of the display on the Touch Display or press the soft button again the display you can always display the Control Screen.

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

Control Screen

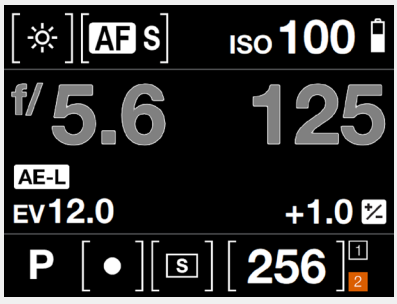


LOCKED PROGRAMS ON THE CONTROL SCREEN

P Mode
When you select P Mode the Aperture (5.6) and Shutter (125) are automatic and displayed in grey colour that indicates that you cannot change these settings.

Control Screen

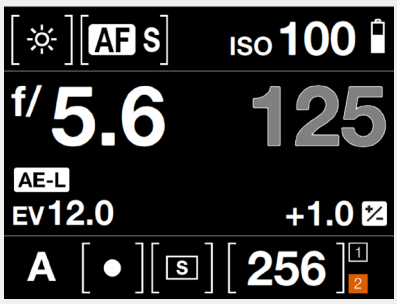
P Mode



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

Control Screen

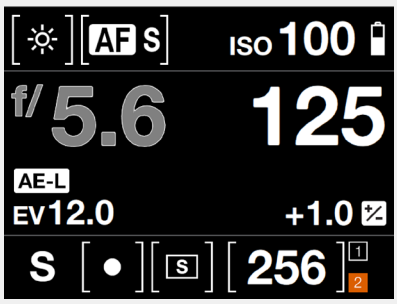
A Mode



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

Control Screen

S Mode



SETTINGS ON THE CONTROL SCREEN

White Balance
- Auto White Balance AWB.
- Cloudy.
- Shade.
- Daylight.
- Tungsten.
- Flourescent.
- Flash.
- Manual WB.

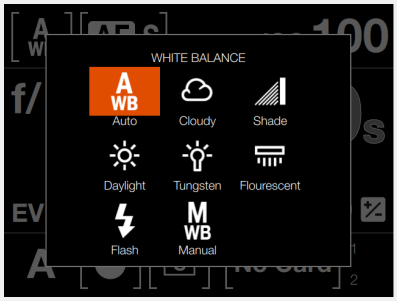
AF Focus
- MF Manual Focus.
- AF-S Auto Focus Single.

ISO
- Select ISO value.

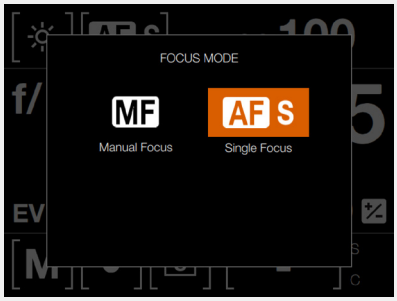
Aperture
- Select Aperture value.

This Chapter continues on the next page.

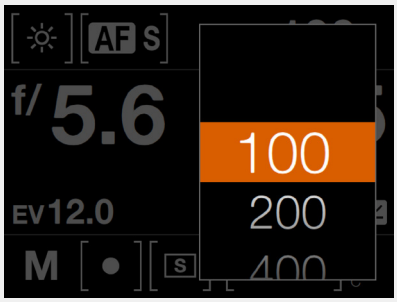
White Balance



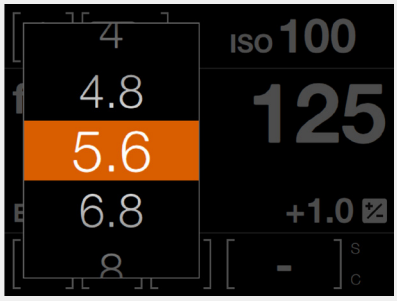
AF Focus



ISO



Aperture



Settings on the Control Screen

Shutter

- Select Shutter value.

Exposure Adjust

- Adjust Flash Exposure by sliding right (+) or left (-).
- Adjust Exposure by sliding right (+) or left (-).

Exposure Mode

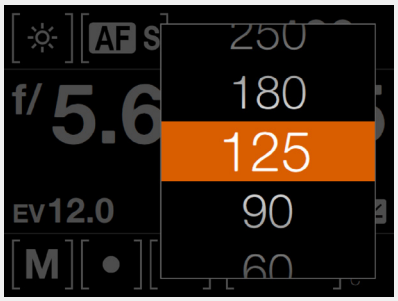
M	Manual Mode.
Mq	Manual Quick Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.
C1	Custom Program 1.
C2	Custom Program 2.
C3	Custom Program 3.
Video	Video Mode.
Rectangle	Automatic Mode (ISO are also automatically set).

Metering Mode

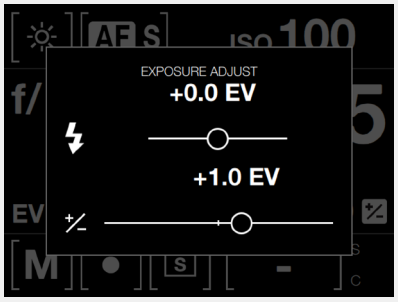
- Centre Weighted.
- Spot Weighted.
- Centre Spot Weighted.

This Chapter continues on the next page.

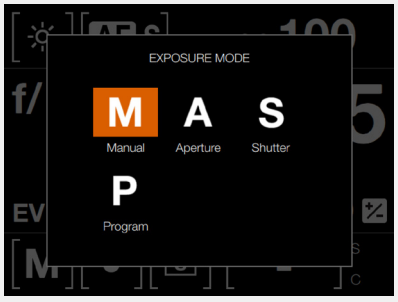
Shutter



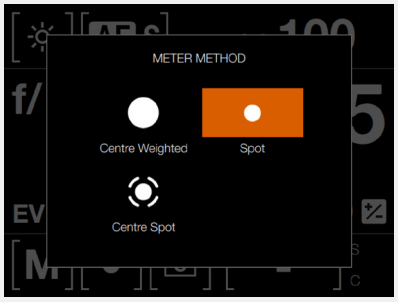
Exposure Adjust



Exposure Mode



Metering Mode



Settings on the Control Screen

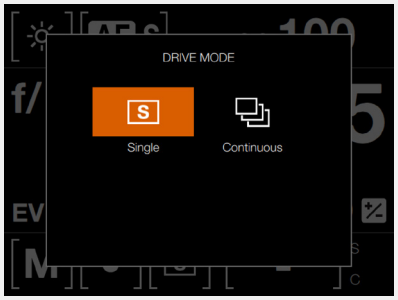
Drive Mode
- Single Drive Mode.
- Continuous Drive Mode.

Remaining Captures
- Displays the number of remaining Captures.

Memory Card
- 1 for SD 1 or 2 for SD 2 Card.

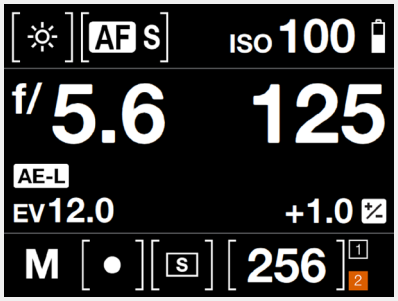
Drive Mode

Single Drive Mode selected.



Remaining Captures

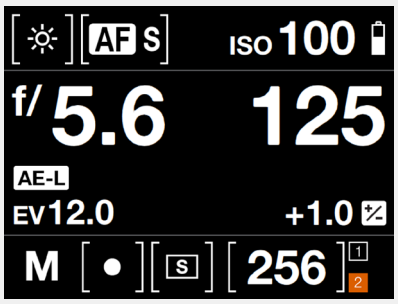
256



Memory Card

1 - SD 1 Card.

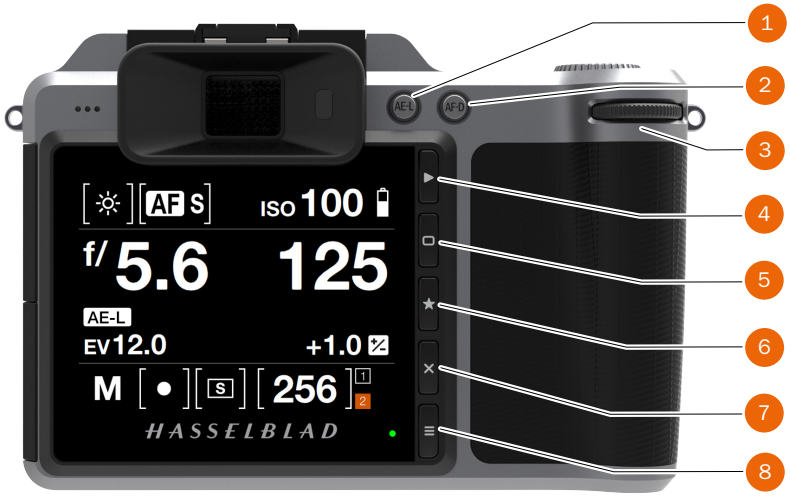
2 - SD 2 Card.



3.5 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



1 AE Lock Button
2 AF Drive Button
3 Rear Scroll Wheel
4 Browse Button
5 Soft Button
6 Select Button
7 Delete Image / Soft Button
8 Menu Button

1 Electronic Viewfinder EVF
2 Speaker
3 Strap Lug
4 Eye Sensor
5 Touch Display
6 Status LED

1 Flash Hot Shoe
2 Dioptre Adjustment Dial
3 Electronic Viewfinder EVF
4 Touch Display
5 Shutter Release Button
6 Mode Dial
7 On / Off Button
8 Strap Lug

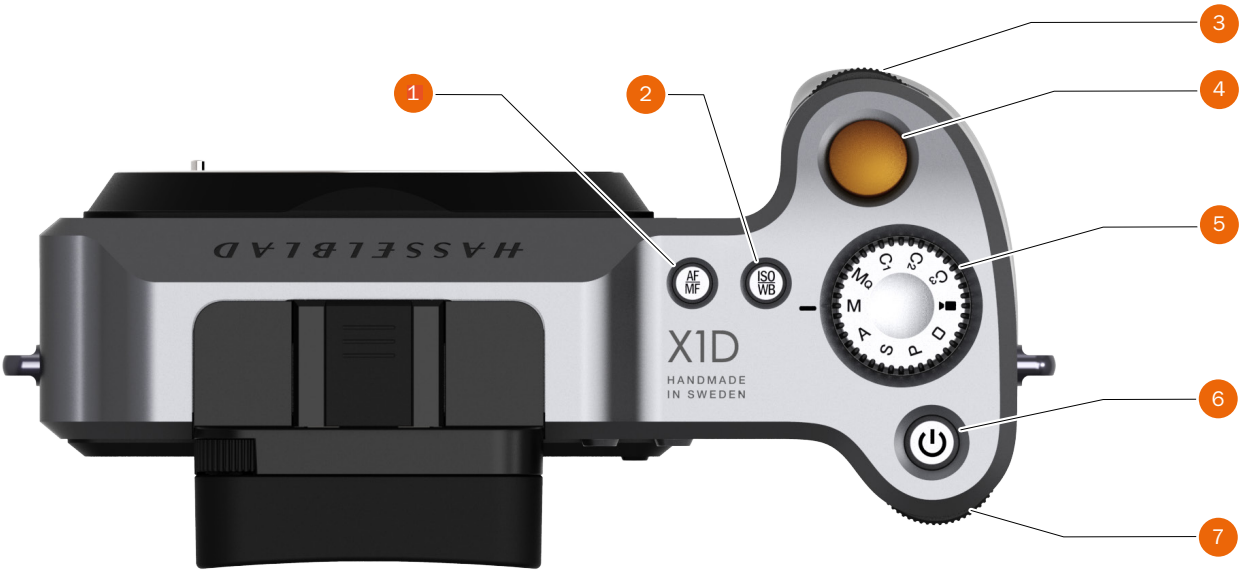
1 Microphone Right
2 Microphone Left
3 Strap Lug
4 Image Plane Mark
5 SD Cards Slot Lid
6 Connectors Slot Lid
7 Lens Release Button

ADJUST DIOPTRE

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

1 **Tripod Thread 1/4”**
2 **Battery Release Lever**
3 **Battery**

3.6 GRIP BUTTONS AND CONTROLS



1 AF/MF button
The AF/MF button toggles between Autofocus and Manual Focus.

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.

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 start up logo will appear and then the main screen. After a few seconds (customizable) 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.

3.7 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 square symbol in the centre of the Viewfinder changes colour depending on the Autofocus process.

White - Normal mode. Autofocus is not 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.

3.8 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

Mq	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 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)

3.9 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) or you can access the Control Screen on the Touch Display to select program M, A, S and P.

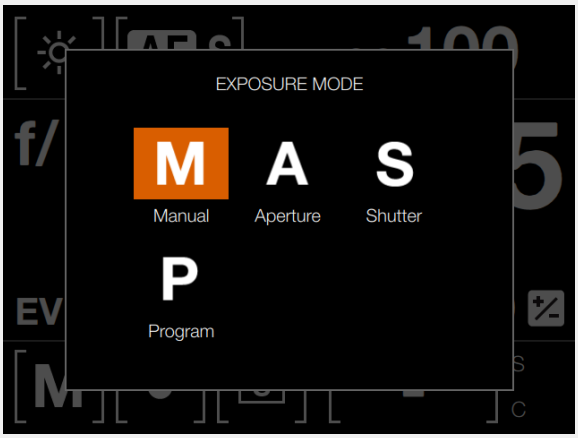
Programs

Mq	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 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. Within this mode there are four choices.

Exposure Modes



MANUAL EXPOSURE MODE

To change the Exposure mode Swipe Down to display the Control Screen.

Manual mode provides total user control of the shutter and aperture settings. In this mode the shutter speed and aperture settings 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's.

A '+ 0.7' above the scale in the display, 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 grip and viewfinder displays 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 and shutter speeds 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). For example, a setting between f/8 and f/11 will appear as f/9,5 if half-stop is chosen.

Exposure Modes

MANUAL QUICK EXPOSURE MODE

Mq mode is a Manual mode for quick photography. This mode works best when the X1D 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 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.

Note!
The White Balance mode “Auto”, AWB, requires Live View to be active for at least 1 second before it is used. To use AWB in Mq mode (without Live View option), start Live View for 1 second in (for example) M-mode before changing to Mq mode.

AUTOMATIC EXPOSURE MODE

To change the Exposure mode Swipe Down to display the Control Screen.

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.

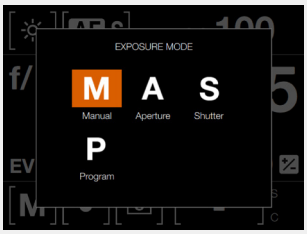
Shutter priority S
The shutter speed is manually chosen by turning the Front Scroll Wheel, and the aperture is automatically chosen by the camera.

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.

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. The compensation appears as a +/- symbol on the Control Screen and Viewfinder Display.

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

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



CUSTOM MODES

The Custom Modes C3, C2 and C1 are three Modes that can be saved with your favourite settings.

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 program.
Set desired ISO, AF/MF or WB.
3 Press the Menu Button to the right of the Touch Display to display the Main Menu.
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 step 1 to 10 to create and use your 3 different Custom Modes, C1, C2 and C3.

AE-L BUTTON

The AE-L button (1) has two main functions that can be incorporated in various working methods involving exposure locking. It also has an extra function for the flash measure capability (see AE-L section under Flash). The AE-L button can:

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 L (=locked) symbol appears between the shutter speed and 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, 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.

FIXED EXPOSURE COMPENSATION SETTING

1 Select the Exposure Adjust setting on the Control Screen.
2 Turn the Front Scroll Wheel (B) to change the Flash compensation and the Rear Scroll Wheel (C) on the grip to increase or decrease the amount of Exposure Compensation in 1/3 EV steps.
3 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,
4 Press AE-L Button (A) to reset any compensation back to zero.
5 The settings are saved.
6 A ‘±’ symbol is then displayed between the aperture and shutter speed setting as confirmation of the setting.

EXPOSURE COMPENSATION / QUICK ADJUST

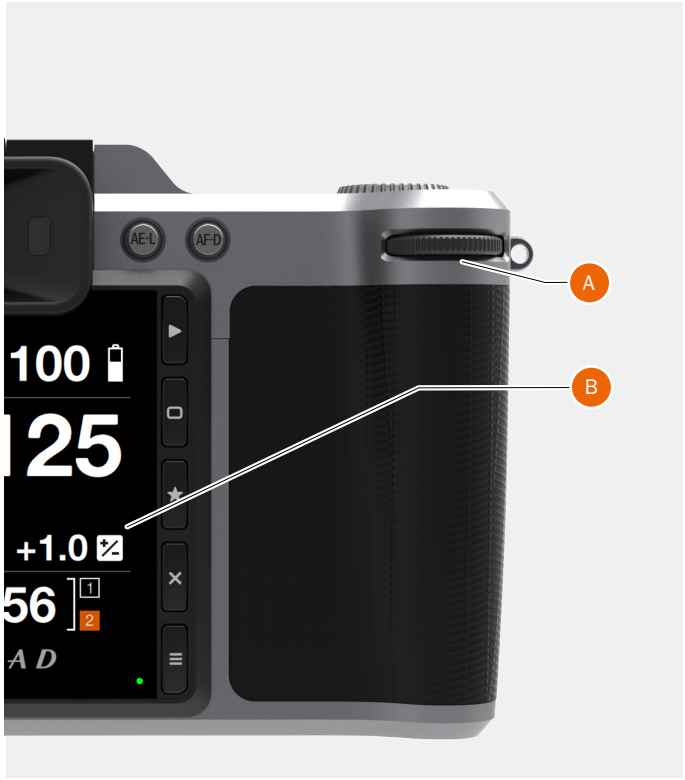
The exposure compensation function, for both manual and automatic modes can be set from -5 to +5 EV, in 1/3, 1/2 or 1 EV increments and is visible above the scale in the viewfinder and as a ± symbol on the Touch Display Control Screen.

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

1 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.

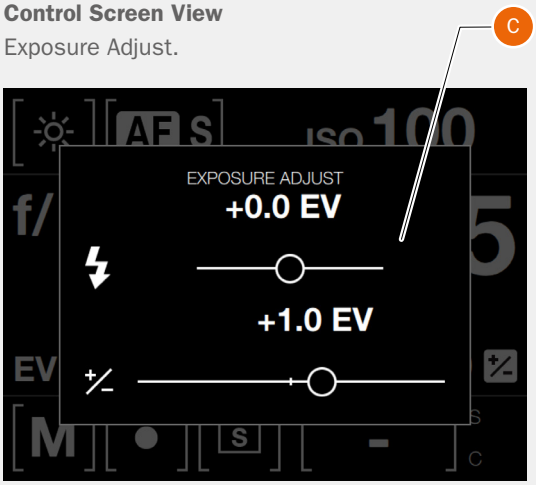
Default settings provide 1/3 EV compensation and an immediate clearing of the setting after capture.



Adjust the Exposure on the Control Screen

1 Swipe Down on the Touch Display to access the Control Screen.
2 Select Exposure Adjust (B).
3 Adjust sliders to the left or right to change values (C).
4 Close the Exposure Adjust pop up by clicking outside of it.
5 Swipe Up to exit Control Screen and return to Main Menu.

Control Screen View
Exposure Adjust.



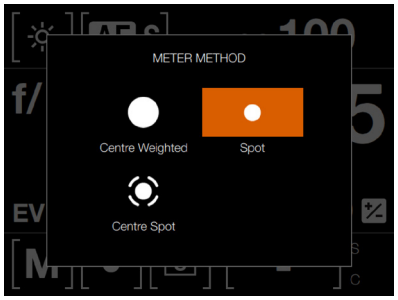
3.10 LIGHT METER EXPOSURE MODE

The Light Meter Mode can be changed on the Control Screen.
Use the Rear Wheel to select Mode.

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

Centre Weighted.
Centre Spot.
Spot Metering.

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.
◉	**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.
•	**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.

3.11 VIDEO RECORDING

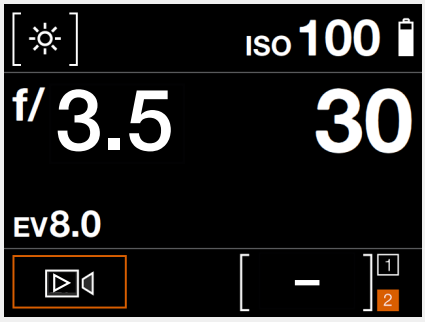
To Record Video

First select Video Settings in the Video Settings Menu.

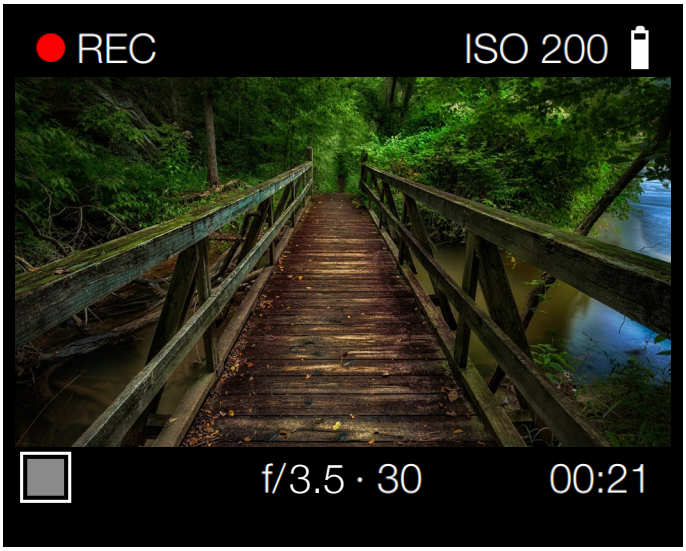
1 Select Video mode on the Mode Dial (B).
2 The Video Control Screen is displayed on the Touch Display.
3 Start the Live View Video by pressing the Live View Video icon.
4 The Video is displayed on the Touch Display.
5 Start Recording by pressing the Shutter Release Button (A) or by pressing the red recording icon on the Touch Display. The recording icon is grey during recoding.
6 Stop the Recording by pressing the Shutter Release Button (A) or by pressing the grey stop icon on the Touch Display.

Note!
For best Video result, use a stable tripod with the X1D Camera when recording Video.

Video Control Screen



Video Display when capturing video



3.12 CONNECTOR PORTS

1 SD Card Port 1
Port for the SD Card no 1.

2 SD Card Port 2
Port for the SD Card no 2.

3 HDMI
Connector for Mini HDMI plug.

4 Audio in
Connector for Audio In Microphone 3.5 mm stereo plug.

5 USB 3 Tethering plug
Connector for USB 3 plug.

6 Audio Out
Connector for external 3.5 mm Stereo Audio Out Plug.

3.13 MEMORY CARDS

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

When using a SD card, the X1D is completely self contained. No additional wires or connectors need to be attached.

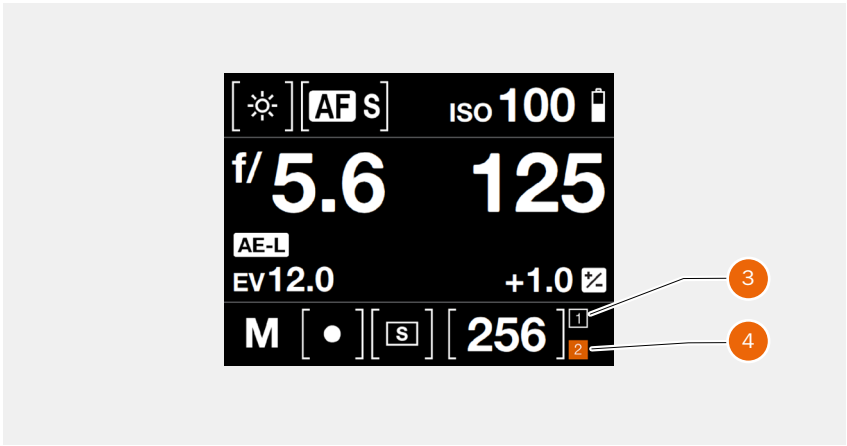
The recommended minimum write speed is 60 MB/sec (400x) or better.

The X1D is shipped with a 16 GB SDHC SD card. This card is capable of holding approximately 75 – 150 captures (according to model).

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

SD Memory Card Status Display

1 Black = Not inserted, not active (3).
2 Orange = Inserted, Active (4).
1 or 2 [0] = Full.
1 or 2 ! = Card Error.
Lock Symbol = Card Write Protected.



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 counter 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 back and pushing it in place towards the front of the camera (C) to lock it into position.

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. The card will also need to be reformatted.

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 back 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

The camera is only able to read and write to storage media that have been formatted correctly. New cards sometimes have no formatting, or you might want to convert a card that is currently using a format that the camera cannot read. In either case, you must reformat both SD cards within the X1D Camera to be able to use the SD Cards.

FORMAT MEMORY CARDS VIA TOUCH DISPLAY

MAIN MENU > GENERAL SETTINGS > STORAGE > FORMAT

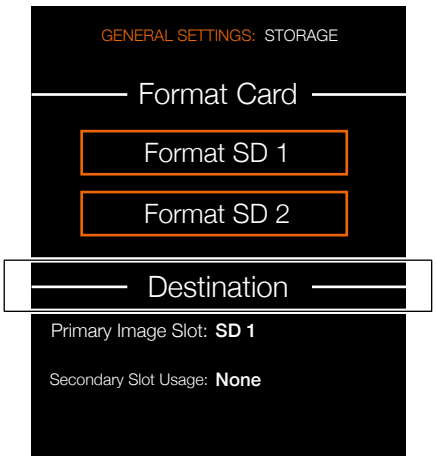
Use the Rear Scroll Wheel or navigate via the Touch Display and the dedicated five buttons to the right of the Touch Display.

1 Press MENU.
2 Navigate to Storage.
3 Navigate to Format.
4 Navigate to Format SD card.
5 Confirm by pressing OK (Display button).

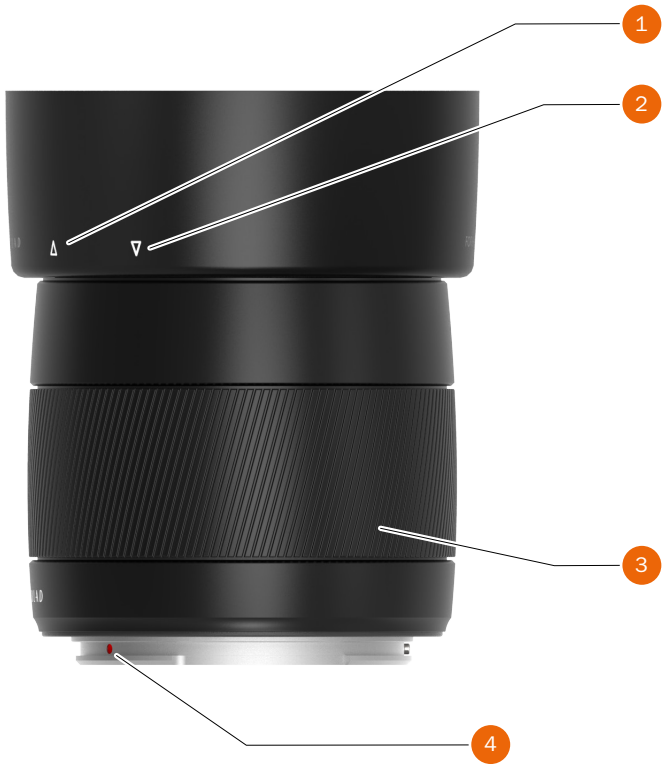
Note!
The X1D Camera is capable of writing 78 MB/s to SD cards.

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

Storage Menu



3.14 XCD LENSES



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

HASSELBLAD XCD 3,5/30MM LENS

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

The lens boasts extremely high performance and a compact build, providing a 71° horizontal angle of view. A unique feature is that the lens will keep its amazing performance even when shooting at close distance.

HASSELBLAD XCD 3,5/45MM LENS

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

As part of the X System lens range, it´s lightweight and compact size perfectly complements the compact X1D body.

HASSELBLAD XCD 3,2/90MM LENS

The XCD 30mm lens is the ideal portrait lens for the X1D. Its moderate telephoto focal length provides a 71mm equivalent field of view, making it the perfect portrait lens.

Coupled with it´s wide aperture, the focal length allows you to isolate small elements in the field of view with a beautiful smooth bokeh.

You can download technical data sheets from the Hasselblad website, www.hasselblad.com.

3.15 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 lid (D) on the camera body directly.
6 Attach a lens protection lid on the detached lens to prevent damage.
7 Store the lens with both lens protection lids on and the lens hood inverted over the lens instead of in front of the lens.

ATTACH THE LENS

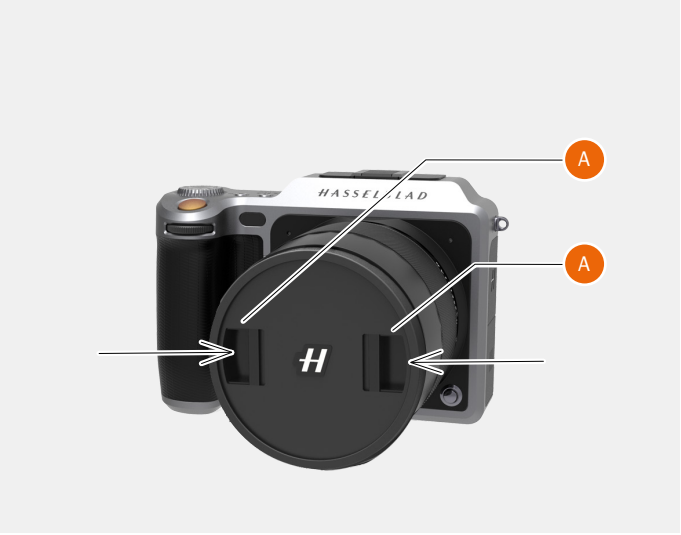
Caution!
Be careful when you attach/detach the components to/from the camera. This will help prevent damage to the data bus connections.

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 protection cover lid (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.

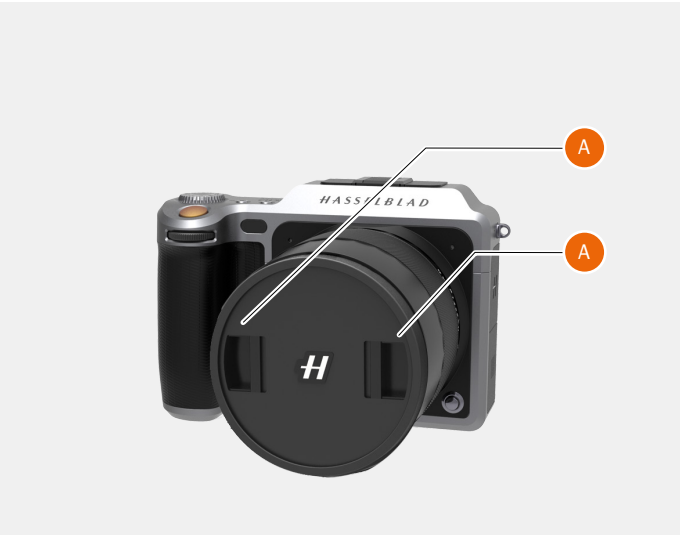
REMOVE THE LENS CAP

1 Insert thumb and index finger into the recesses (A).
2 Pinch the recesses (A) 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 (A) 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 (A).

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.

FILTERS

The filters have a threaded fitting of 67 mm for both the XCD 45 mm and the XCD 90 mm lens, and are rotated clockwise into place. The XCD 30 mm Lens uses a 77 mm filter.

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.

Hasselblad XCD 30 Lens, 77 mm filter

Hasselblad XCD 45 Lens, 67 mm filter

Hasselblad XCD 90 Lens, 67 mm filter

3.16 DISPLAY INFORMATION

Viewfinder information

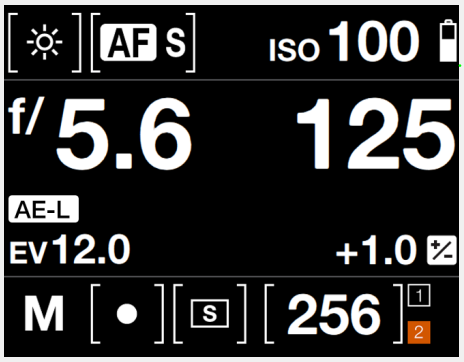
ISO (100)
Battery Status
Exposure compensation EV
Aperture setting (f/11)
Shutter speed (1/1000)
Remaining Capture counter (621)

PHOCUS / PHOCUS MOBILE INFORMATION

Metering method
Aperture setting
Shutter speed
Exposure method
ISO
White Balance
Flash indication
Focus
Drive
EV

Touch Display information Control Screen

Exposure (Daylight)
ISO (100)
Aperture (f/5.6)
Shutter (1/125)
EV (12.0)
Exposure Compensation (+1.0)
Exposure Mode, Aperture priority (A)
Focus Setting (Centre Spot)
Focus Method (Single)
Capture Counter
Storage medium (SD1)



3.17 TOUCH DISPLAY AND CONTROLS

When shooting, the X1D Touch Display with Live View displays the information most often required for a quick settings check. The Front and Rear Scroll Wheels and Camera Buttons together with the Touch Display are used to navigate the Main Menu and change settings.

The Touch Display can show all saved captures on SD card 1 and 2. You can Browse and Zoom in the Captures for detailed inspection.

When shooting, you can control the amount of information visible together with the current preview by choosing various modes.

Buttons and Scroll Wheels
In Browse mode, the Scroll Wheels and AE-L buttons are used for navigation.

Activate Browse mode by a single Press on the top button to the right of the Touch Display.

Here you see the Main Menu on the Touch Display. Swipe Down to display the Control Screen.

Control Screen with Settings and Information
The Control Screen is interactive. Swipe down to display the Control Screen. Select any of the settings to change the value. Aperture setting, shutter speed, focus setting, drive, EV, battery status, exposure method, capture counter, ISO and white balance can simultaneously be displayed and changed in the Control Screen on the Touch Display. Swipe Up to close the Control Screen and see the Main Menu.

3.18 ELECTRONIC VIEWFINDER DISPLAY EVF

TYPICAL VIEWFINDER DISPLAY

Touch Display

Electronic Viewfinder Display EVF visual user interface

VIEWFINDER DISPLAY SETTINGS

AF indicator

The square AF indicator in the middle of the Electronic Viewfinder displays if the Autofocus is set properly or not. Start the Autofocus function by a soft half-press on the Shutter Release Button or by pressing the AF Drive button (AF-D).

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.

ISO indicator

Displays the selected ISO setting (ISO 100).

Battery indicator

Displays the Battery level.

Exposure compensation setting

Displays the EV compensation setting (0.0).

Aperture setting

Displays the selected Aperture Setting (f/11).

Shutter Speed setting

Displays the selected Shutter Speed setting (1/1000 sec).

Frames Counter

Displays remaining Frames (621 left).

White AF indicator. Normal mode.

Green AF indicator. AF set correct.

Red AF indicator. AF analysis failed to focus.

CAMERA LIVE VIEW

The Camera features Live View on the Touch Display by default.

In Camera mode
Press once on the soft button marked with a star to the right of the Touch Display to Zoom in to 100%. This gives you a detailed view of the focus in the focus area. Rotate the Focus Ring on the Lens to adjust Focus.

Press the star button again to exit Zoom.

Press once on the soft button marked X to the right of the Touch Display to remove the grid overlay (the four white Composition Grid lines).

Press again on the soft button marked X to the right of the Touch Display to remove the Exposure, Capture, ISO and battery information. The AF, Auto Focus aid will still be visible.

Press a third time to display both Composition Grid and Exposure, Capture, ISO and Battery Information as overlay on the Live View.

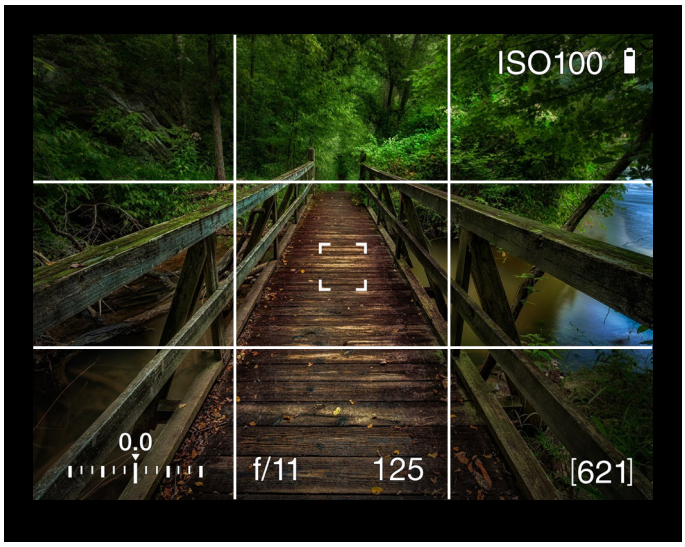
In Video Mode
Press once on the soft button marked with a star to the right of the Touch Display to Zoom in to 100%. This gives you a detailed view of the focus in the focus area. Rotate the Focus Ring on the Lens to adjust Focus.

Press the star button again to exit Zoom.

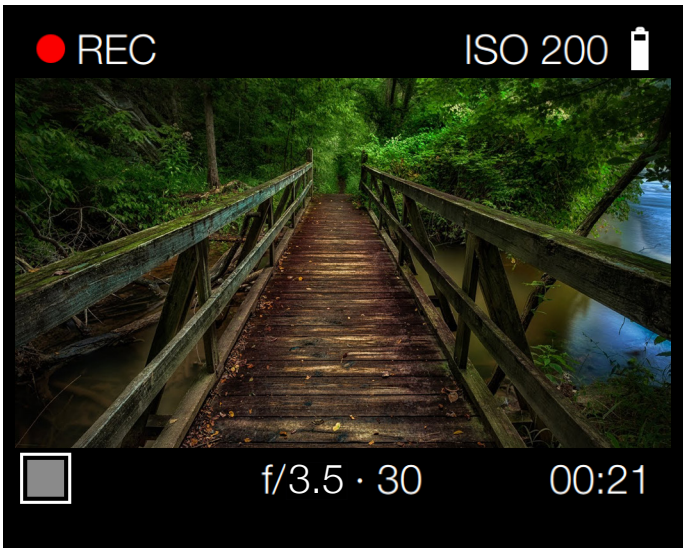
Exposure information, ISO, Battery and Time will be displayed during Video Recording.

This Chapter Continuous on the next page.

Touch Display, Live View example with grid overlay



Touch Display, Video Display when capturing video



LIVE VIEW

This feature is useful for accurate focusing, composition and depth of field preview.

1 The Camera displays Live View when you half-press Shutter Release Button.
2 Press button B to step to next overlay.
3 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

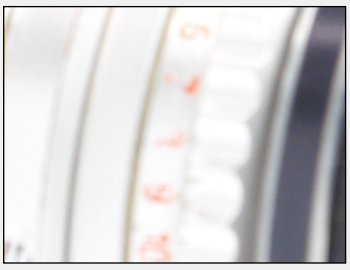
Overlay
Select Overlay Displayed during Live View. Scroll between options with button (B).
- Exposure information.
- Grid + Exposure information.
- None.
- Spirit Level. See chapter Spirit Level for details.

ZOOMING IN LIVE VIEW

1 Double click on Touch Display, or press the soft button marked with a star (C) to the right of the Touch Display, to Zoom in to Actual Pixel Size (100%) to that specific area.
2 Double click again to Zoom out to Display the entire Capture.
3 You can move the image to view different areas by swiping.

Entire Capture before zoom in

100% view before Focusing



FOCUS IN LIVE VIEW

1 Double click on Touch Display, or press the soft button marked with a star to the right of the Touch Display, to Zoom in to selected Focus Area.
2 Adjust Focal Point manually on the Lens.
3 Double click or press on the start marked soft button again to Zoom out to Display the entire Capture.

100% view after Focusing

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

LIVE VIEW WITH HDMI EXTERNAL SCREEN

Connect an external Video Screen to the HDMI connector socket (1). On the Main Menu select LV Live View.

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

3.19 FOCUS

FOCUS ASSIST

The X1D camera features automatic focus assist. A white rectangle marked green in the middle of the view provides confirmation of a precision focus setting and are a useful aid when making a setting with Auto 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.

1 Press once on the soft button marked with a star to the right of the Touch Display to Zoom in to 100%. This gives you a detailed view of the focus in the focus area.
2 Rotate the Focus Ring on the Lens to adjust Focus.
3 Press the star button again to exit Zoom.

For users who prefer manual focus control but would like the benefits of autofocus, one method is to set the AF-D button to AF (Single) drive. The main subject can then be centred and the AF-D pressed, to ensure correct focus. The camera 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.

Note!
The Camera will only display a green or red AF Focus Assist indication when in AF mode. In Manual Focus mode the Camera will not display any Focus Assist feedback.

Note!
Lens corrections can be applied when captures are imported into Phocus. Guided by the information in the meta data included with each individual capture, the DAC (digital lens correction) tool uses lens-model specific calculations to adjust for chromatic aberration, distortion and vignetting. Not only model specifications but also capture parameters are taken into consideration for analysis. This extremely capable refinement of captures should not be overlooked when processing files! See Phocus User Manual for details.

Note!
The autofocus function is not possible with certain combinations of lenses and accessories. However, a warning is displayed which disappears after confirmation.

White AF indicator.

Green AF indicator. AF set correct.

Red AF indicator. AF analysis failed to focus.

MANUAL FOCUS

There is both a Manual focus mode setting and a manual override capability.

In Manual focus mode, focusing is carried out by rotating the focus ring on the lens. The focus setting remains until changed as with a conventional non-autofocus lens. This means that pressing the shutter release button will not activate a focus setting change as it does in autofocus. To change back to autofocus, press the AF / MF button (B).

MANUAL OVERRIDE IN AUTOFOCUS MODE

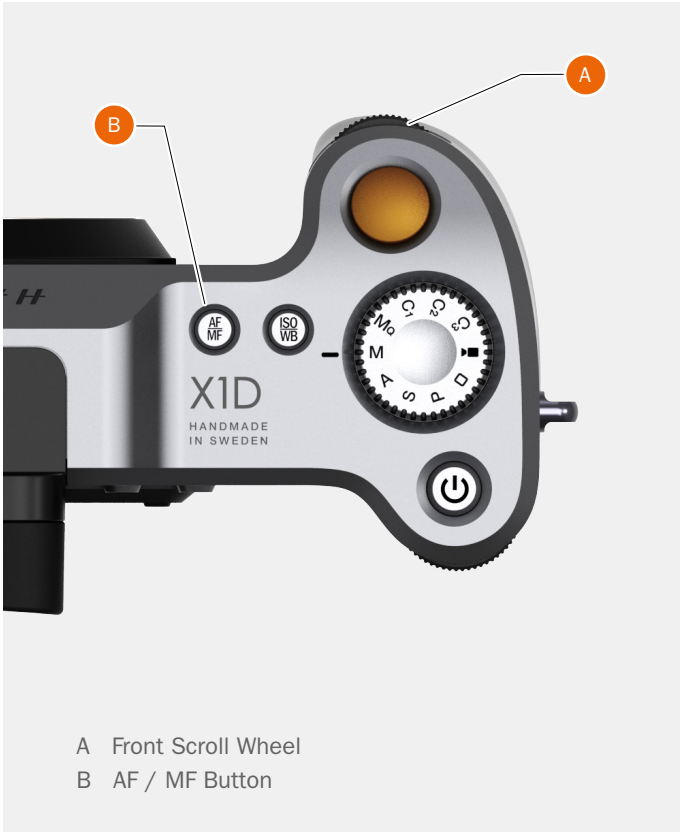
Manual override is always possible in automatic focus mode without any need to make a new setting. Just rotate the focusing ring in the conventional manner. As the lens barrel does not rotate in autofocus mode, you can hold the focusing ring for instant manual adjustments. However, to retain the new manual focus adjustments, you must maintain the pressure on the shutter release button. You can instantly return to the automatic focusing mode by releasing the pressure on the shutter release button first and then pressing the release button halfway again. The instant manual override function produces a convenient way of working. You can take advantage of autofocus while retaining an instantly adjustable manual focus check if preferred for pin-point accuracy without making any changes in the settings.

With manual override in autofocus mode you can manually alter a focus setting that has been made, by rotating the lens barrel and without having to change modes. As long as the shutter release button is kept at the half-press position, the new focus setting is maintained.

To reactivate the autofocus function, release the shutter release button and press again.

AUTO / MANUAL FOCUS SETTING

1 Press AF Button (B).
2 Turn the Front Scroll Wheel (A) to select Manual or AF S Single Shot.
3 Press AF Button (B) or Shutter Release to Save.



A Front Scroll Wheel
B AF / MF Button

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.

Alternatively, an attached flash unit that has a similar facility (a Nikon SB 600, for example) can also be used. This feature can be altered in settings.

AF Assist light

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

White AF indicator.

Green AF indicator. AF set correct.

SINGLE SHOT FOCUS

At Single Shot setting (AF S), 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. However, this delay is normally only a fraction of a second in good lighting conditions with a clear focusing pattern.

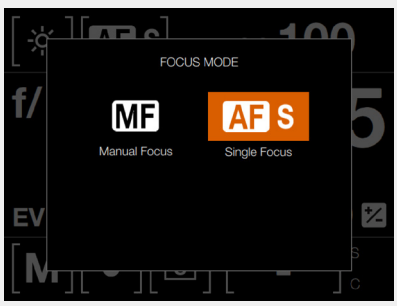
Note!
In this mode the lens will focus at one distance and will remain focused at that distance while pressure remains on the Shutter Release button (A).

In this way, you can focus on a nearby 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.

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 override in autofocus mode for a useful way of working with manual and autofocus settings combined.

AF Focus

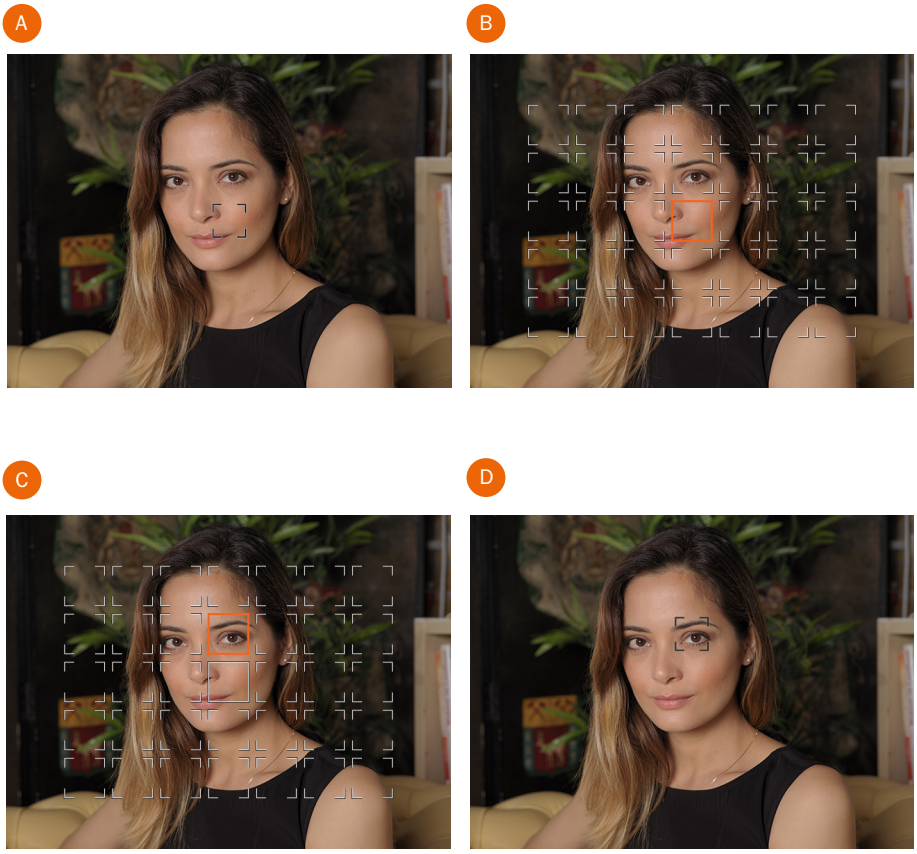


3.20 MOVE AUTOFOCUS POINT

The Autofocus point (A) can be moved, and selected manually, to any one of the 35 AF points (B). The AF point is a rectangle that measures 4 x 4 mm.

How to 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 The single AF point is displayed in the centre position (A).
3 Press and hold the AF/MF button (E) for 1 second.
4 All 35 focus points are now displayed as an overlay (B).
5 Select one of the 35 AF points by tapping on the Touch Display or Rotate the Rear Scroll Wheel (L) one step left to move the AF point one step up (C).
6 Save and exit by a half-press on the Shutter Release button (F). The AF point is now in the new selected location (D).



How to use the Scroll Wheels to move the AF point

AF point	Rear Scroll Wheel (L)
Move up	Rotate left
Move down	Rotate right

AF point	Front Scroll Wheel (G)
Move left	Rotate left
Move right	Rotate right

How to select AF point, save and exit

Press any of these 3 buttons:
-Half-press Shutter Release button (F).
-AF-D button (I).
-Star button (J).
-The AE-L button exits without saving.

Note!
To reset the AF point back to the centre position, press the soft button (K) marked with an x.

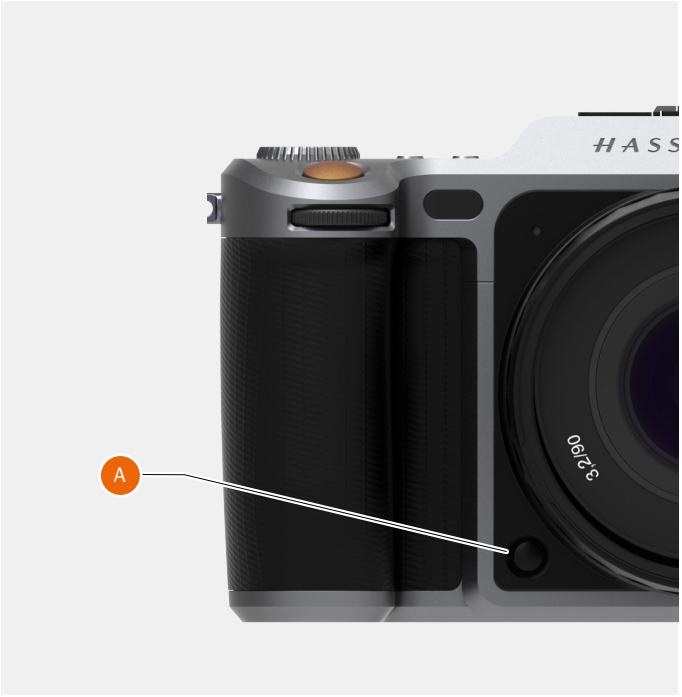
Note!
You can set the camera to automatically reset the Focus point to the centre position, or maintain the selected position, in Main Menu > Camera Settings > Focus > Reset Focus Point.

Photo A, B, C and D by Damien Demolder.

3.21 STOP DOWN BUTTON

STOP DOWN / DEPTH-OF-FIELD PREVIEW

A visual depth-of-field preview can be made by pressing the STOP DOWN button (A).



Depth-of-field is calculated as follows:

1 Focus the lens as required.
2 Make an exposure reading (auto or manual) and note the aperture setting.
3 Find the markings on either side of the central index that correspond to the chosen aperture.
4 From these two markings, read off on the required lens distance scale the two corresponding distances.
5 The depth-of-field (at that particular aperture and focus setting) is the area included between these two distances.

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.

3.22 CHANGE SETTINGS ON THE GRIP

How to change AF/MF and ISO/WB settings

AF / MF modes

1 Select AF/MF (D) on top of the Camera Grip.
2 Press the AF/MF button to toggle between AF and MF.

ISO / WB modes

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

ISO	Change ISO mode (C) by scrolling the Rear or Front Scroll Wheel (A) left or right.
WB Mode	Change WB mode (C) by scrolling the Rear or Front Scroll Wheel (B) left or right. When in WB M Manual Mode, use Rear Scroll Wheel (B) to select setting.

Mode Dial

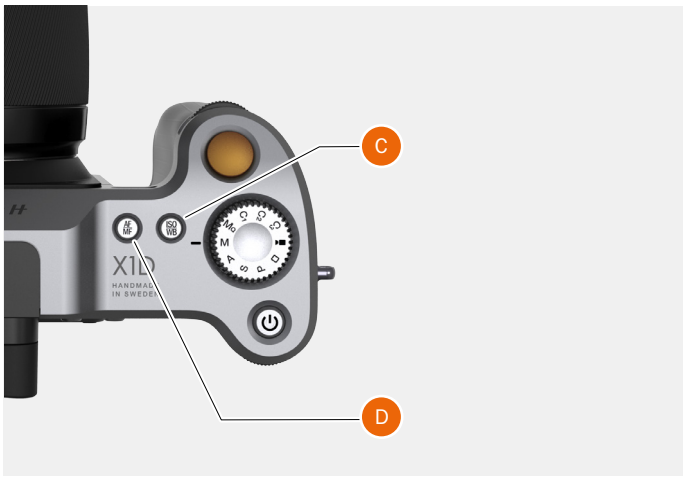
Mq	Manual Quick Mode.
M	Manual Mode.
A	Aperture Priority Mode.
S	Shutter Priority Mode.
P	Program Mode.
Rectangle	Automatic Mode. ISO are also automatically set. Several functions are limited or locked.
Video	Video Mode.
C3	Custom Program 3.
C2	Custom Program 2.
C1	Custom Program 1.

Manual Quick Mode, Mq

When selecting the Manual Quick Mode (Mq) the Shutter is closed and the Aperture is set to selected value. The Live View is turned off. This results in the shortest possible reaction time as well as saving battery time.

Custom Modes

C3, C2, and C1 are Custom Modes that can save the complete Camera settings in the Camera Memory for quick access to favourite settings.



TO ADJUST SHUTTER AND APERTURE ON GRIP

Note!
In manual mode both the shutter and aperture are electronically controlled and are adjusted by the Scroll Wheels on the grip.

Note!
There are no separate manual setting rings on the lenses or camera body. The settings are displayed in the viewfinder display.

How to adjust shutter and aperture
Turn the Front Scroll wheel (A) to adjust shutter and aperture.
Turn the Rear Scroll wheel (B) to adjust shutter and aperture.

In Manual mode (M):
Front wheel = Aperture.
Rear wheel = Shutter speed.

In Aperture priority (A) mode:
Front wheel = Aperture.
Rear wheel = Quick exposure adjustment of Shutter speed.

In Shutter priority (S) mode:
Front wheel = Shutter Speed.
Rear wheel = Quick exposure adjustment of Aperture.

In P mode:
Front wheel = Aperture/shutter speed combination.
Rear wheel = Quick exposure adjustment.

ISO AND WHITE BALANCE

ISO and White Balance are set either via the Camera Grip, the Touch Display or, when tethered, via 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 appears on the Touch Display and in the Electronic Viewfinder (EVF).
- For the Touch Display, settings are changed on the Touch Display or via the soft buttons next to the display.
- In Phocus there is a specific tool to control all Camera settings.

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

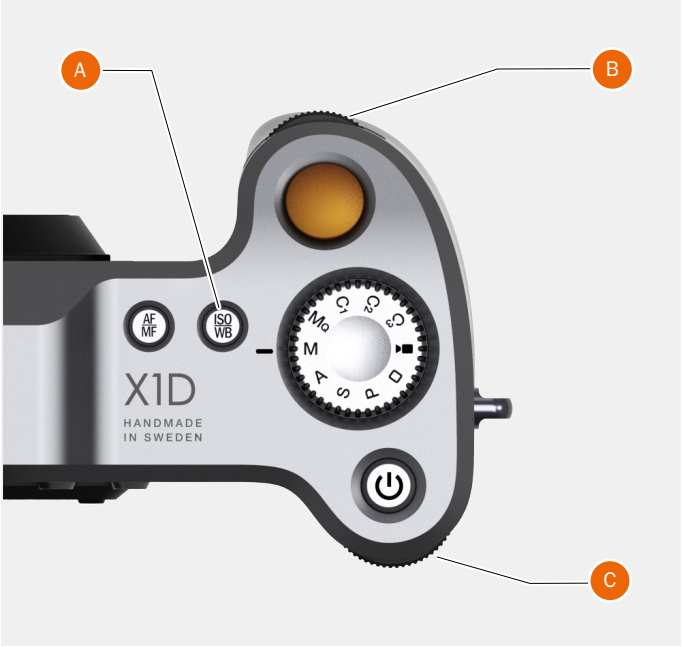
1 Press ISO / WB button (A).
2 Turn the Front Scroll Wheel (B) to select ISO setting.

White Balance WB

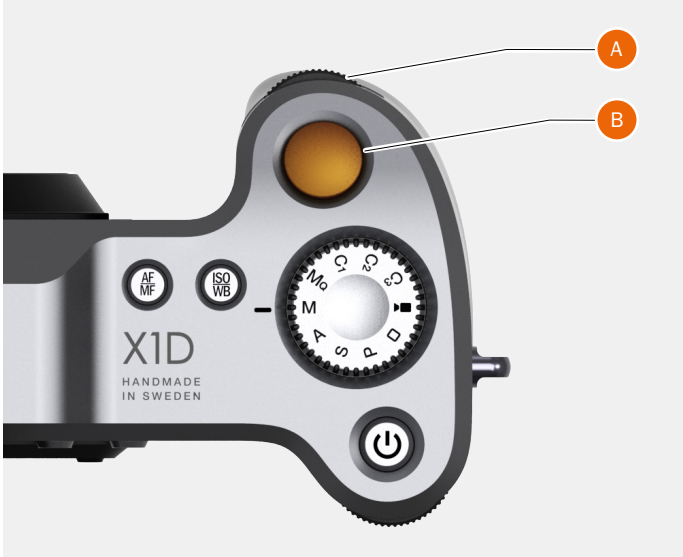
1 Press ISO / WB button (A).
2 Turn the Front Scroll Wheel (B) to select WB (Auto AWB, Daylight, Shade, Cloudy, Flash, Fluorescent, Tungsten or Manual WB).
3 To set the Colour Temperature manually, scroll the Front Scroll Wheel (B) until "M/WB" is displayed. Then the Colour Temperature value is displayed 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 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.



3.23 BROWSING, PREVIEW AND HISTOGRAM



BROWSE CAPTURES

To enter Browse mode, press the Play / Browse Button (C) next to the Touch Display.

In Browse mode use the Front Scroll Wheel (A) on the Camera Grip to Browse captures in a folder.

In Browse mode on the Main Menu, swipe right or left to Browse captures.

Delete Capture with the Soft Button (D).

Zoom out to Folder View to select another folder to Browse.

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

Browse button
The Browse Button (C) Starts the Display and shows the last image. The user can review images, browse and zoom. Preview images and zoom in to view close-ups of previews for focus checking. Zoom out to view several at once and finally to view and select folders and media.

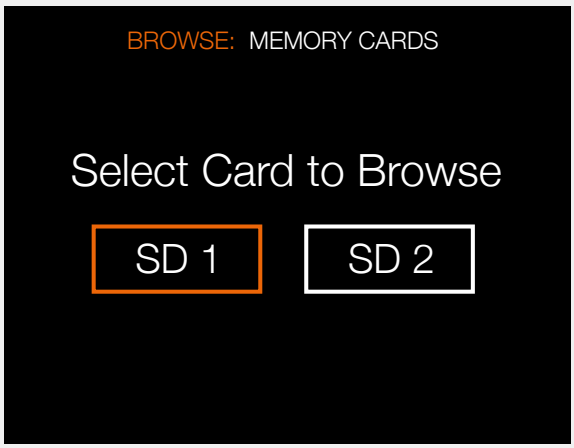
This is also a selection button for value setting in the Main Menu.

Press Menu button (E) to return to Main Menu.

SELECT CARD TO BROWSE

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

Select Card to Browse



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/8)
5 Shutter Speed (60)
6 ISO Setting (100)
7 +/- Exposure Adjust Indicator
8 Exposure Adjust (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 at the right side of the Display to scroll through all captures. Select one capture for further information.

HISTOGRAM TYPES

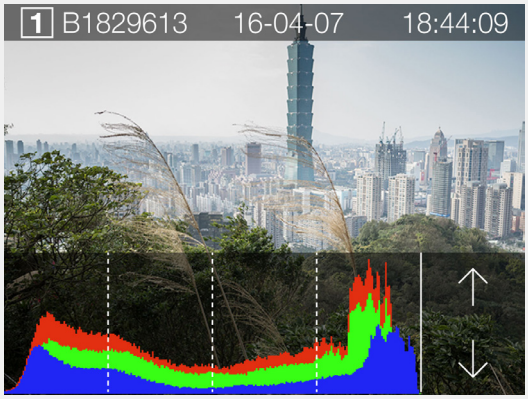
The available Histograms are: Histogram Mode, Capture Details Mode, Luminance Histogram Mode and Separate Histogram RGB Mode.

HOW TO CHANGE HISTOGRAM OVERLAY

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

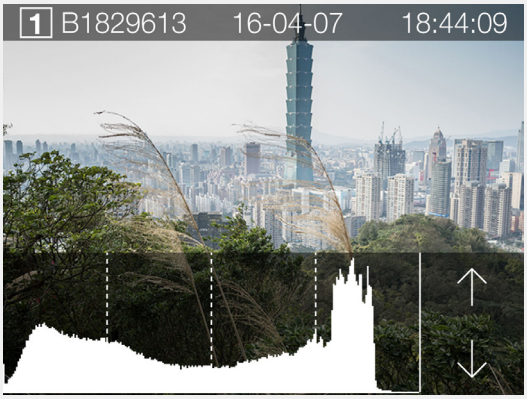
HISTOGRAM MODE

Histogram mode displays RGB Histogram with separate RGB channels visible. The RGB details are stored with the capture file, and can be referred to in Phocus and other applications.



LUMINANCE HISTOGRAM MODE

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

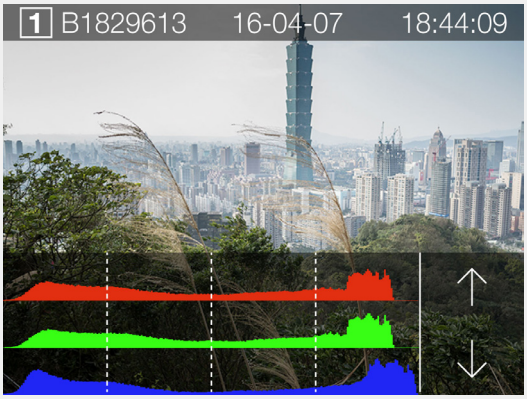


CAPTURE DETAILS MODE

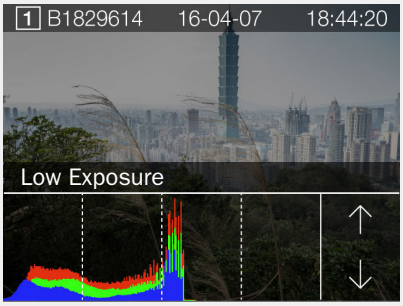
The Capture Details Mode displays SD Card (1), Date (16-04-07), Time (18:44:09), selected Aperture (f/11), Shutter Speed (60), ISO (200), EV Settings (+/- 0.0), Mode (M), Focus Method (Spot), White Balance (Daylight) and Lens info (45mm).

SEPARATE HISTOGRAM RBG MODE

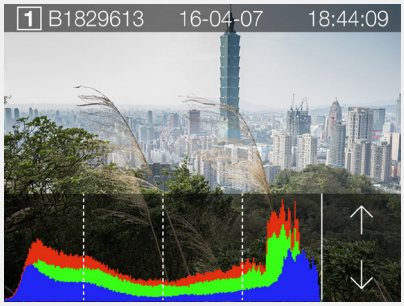
In Separate Histogram RGB Mode, the individual RBG channels are displayed. The Red R channel first, the Green G channel in the middle and the Blue B channel below the Red and Green channels.



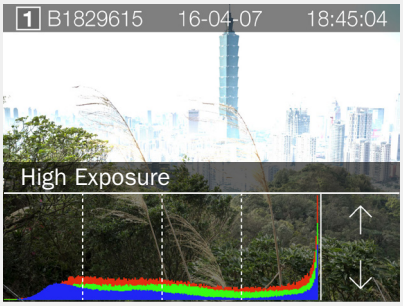
HISTOGRAM EXPOSURE MODE



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.

3.24 PHOCUS OVERVIEW

Phocus

Phocus is a Capture Processing and File Management application aimed primarily at Hasselblad 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.

Phocus Mobile

Phocus Mobile is available for iPhone® , iPad® and iPod Touch® . It enables you to connect wireless to a computer running Phocus and to remotely browse your high-resolution RAW, JPEG and TIFF images. This provides a solution for working with clients in the studio, enabling each person to view images on an individual iOS device, rather than all gathering around a single computer. Phocus Mobile also allows users to remotely operate and trigger a tethered camera, giving control of many parameters, all neatly presented in a virtual camera display. This feature is very convenient for remote control of the camera when it's located in a difficult to access position.

Phocus Mobile is available for free. Download Phocus Mobile in the Apple App Store. www.apple.com.

Phocus Mobile will soon be updated with X1D User Interface.

3.25 PHOCUS

FEATURES IN PHOCUS

Professional Image Quality

- Hasselblad Natural Colour Solution (HNCS).
- Lens corrections for X, H and V system lenses (DAC). The X1D Camera only supports X and H Lens systems.

Specialized Tools

- Advanced Tethered Camera Controls.
- Phocus Mobile*.
- 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 workflow scenarios.
- Import/Export of image adjustments, keywords, workflow settings.
- High quality printing.
- Slide show.
- RAW file support from more than 150 DSLR cameras.

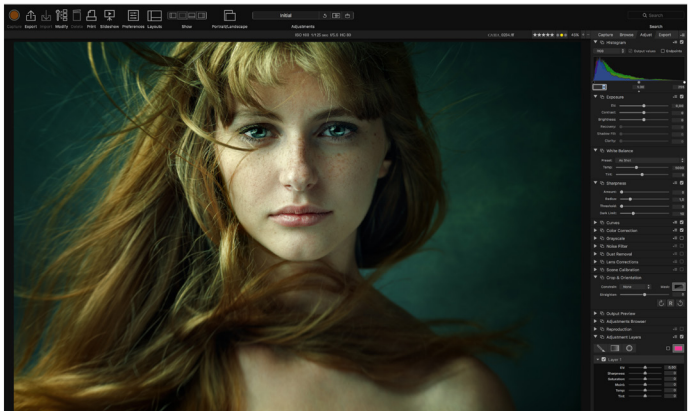
Any File from Anywhere

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, including Canon, Nikon, Leica, Sony, Fuji, Olympus **. 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 is available for free download in the Apple App Store.
** Full list available at http://www.apple.com/aperture/specs/raw.html

Note!

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

Note!

Phocus Mobile will soon be updated with X1D User Interface.

3.26 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 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.

PHOCUS AND HASSELBLAD CAPTURE FILES

The X1D 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 (which necessitates using Phocus) 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
Apple Aperture

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 workflows 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.

3.27 BATTERY

Rechargeable Battery

The environmentally approved Battery (Li-ion 3054752) is the standard Power Source for the X1D Camera (1 and 7. It is advisable to keep an extra fully recharged battery at 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. Always attach the Protection Cover (6) when storing the Battery (7).

Remove a Battery

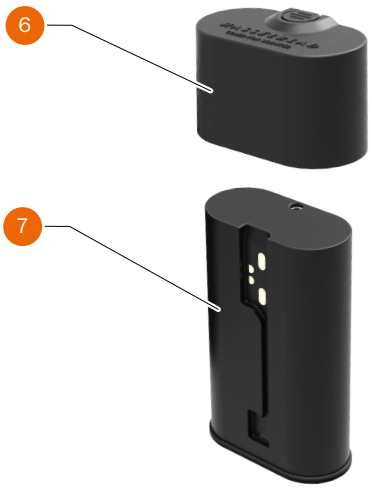
1 Remove the Battery from the camera (1) by rotating the Battery Lever (2).
2 The Battery will move up a bit (3) automatically.
3 Then press the Battery in a bit but not all the way (4), to release it from the Camera completely.
4 Remove the battery (5).
5 Mount the Battery Protection Cover (6) to protect the Battery (7) and prevent short circuit.

Mount a Battery

1 Push the Battery (1) into the Camera Battery Compartment until it locks into place.

Store a Battery

If you intend to store the battery separate from the camera, ensure the Battery Protection Cover (6) is mounted over the electric connections on the Battery (7) to prevent short circuiting.



BATTERY CHARGER

The battery charger BCX-1 (3053573) is supplied with a number of plug attachments to suit various types of domestic electrical sockets available worldwide. Other types of sockets will require a domestic socket converter.

Attach the appropriate plug by sliding it into position as in the illustration to the right. Reverse the procedure to remove the plug.

CHARGE THE BATTERY

With the battery (3054752) removed from the camera, insert the jack plug from the battery charger into the socket on the battery (1). Insert the battery charger into a standard (100–240V~ /50–60 Hz) domestic socket.

During the charging procedure, the lamp on the charger signifies the following:

Steady Green light:	Standby (no battery connected).
Steady Yellow light:	Charging.
Steady Green light:	Ready.

Note!
It can take about 6 hours to charge the battery completely up to 100% the first time.

Note!
You can still charge the battery when the protective cover is attached by lifting the lid.

See next page for more details and precautions.

RECHARGEABLE BATTERY SPECIFICATION

LI-ION/ BATTERY CHARGER 3053573 BCX-1
– PRECAUTIONS and GENERAL

The battery should be charged for approximately 6 hours before first time use.

The battery must be charged at room temperature.

Maximum battery capacity is reached only after the battery has been charged and discharged several times.

Avoid frequent full discharges (a full discharge is signalled by the appearance of the Replace battery warning). As the battery is a Li-ion type, it has no 'memory effect' of practical importance and therefore frequent recharges will cause no problems such as loss of capacity or poor performance. It is therefore better policy to recharge the battery at very regular intervals, regardless of use.

Remove the battery if you intend to store the camera for some while as it will eventually become completely drained, even though the camera is turned off. Mount the Battery Protection Cover when storing the Battery.

The battery has an integrated 'fuel gauge' capability that supports the Replace battery and Battery status functions. As with most Li-ion batteries, this capability should be occasionally calibrated, depending on how much the battery is used. To do this, leave the camera on (or use it), until the Replace battery warning appears. Then, recharge the battery for 6 hours. This will improve the accuracy of the measurements.

When removing a battery from the charger and immediately replacing it with another, allow a few seconds to elapse so that the charger can automatically reset for the next charging procedure.

It is perfectly normal for the battery to become warm when being charged.

A slight temporary loss of battery performance might be noticed at very high or low temperatures. Take the appropriate measures if this is the case.

If you do not intend to use the battery for a while, it is best to store it at room temperature with an approximate 30 to 40% charge. You can check the percentage level on the status screen.

The battery should have a usable service life of around 400 recharge/discharge cycles.

Connect the battery to the camera correctly.

Keep the Battery Protection Cover in place when not in use. (Short circuiting across keys in a pocket, for example, could cause a risk of fire).

Do not immerse the battery in liquids.

Do not incinerate the battery.

Please recycle or discard in an environmentally approved manner.

Use indoors only (protect against moisture).

Do not short circuit the jack plug.

Do not alter the charger in any way other than changing the plug attachment.

Note!
You can save battery consumption by changing the Display Off / Power Off settings as well as the Brightness settings of the display.

BATTERY LIFE AND BATTERY WARNING

Battery life is dependent on a number of variable factors and therefore cannot be exactly predicted. If the camera is left in the active state instead of Display Off or Sleep modes for long periods, for example, the battery will become exhausted much faster. A low camera battery level is indicated by a symbol on the display, as well as in the viewfinder.

3.28 TEMPERATURE WARNING

If you take several captures within a short period of time, the processor in the Camera will produce more heat. This, particularly in combination with high ambient temperature, can result in noise in the image files. To prevent this, the Camera displays a warning icon when the temperature rises. At approximately 60 °C a warning dialogue appears notifying that the Camera is temporarily shutting down to allow it to cool.

3.29 STORE THE CAMERA

Caution!
Always attach the Battery Protection Cover on the batteries, when the batteries are not in the camera. This will prevent damage to the equipment.

Caution!
Always attach the Protection Cover Lid when the Lens is not attached. This will prevent damage to the equipment.

Caution!
If you leave the camera unused for a period of time, remove the battery. This will prevent damage to the equipment.

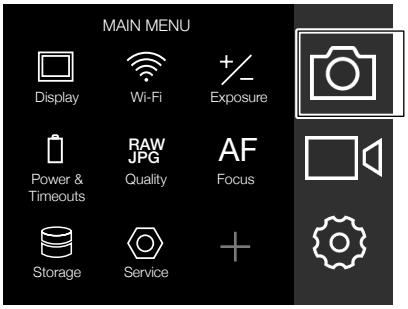
Caution!
Keep camera and equipment away from moisture. If your camera becomes wet, disconnect from electric power and let camera dry before further use. This will help prevent damage to the equipment.

Caution!
Store the equipment in a dry environment. This will help prevent damage to the equipment.

AE-L
AF-D
MAIN MENU
Display
Wi-Fi
Exposure
Power &
Timeouts
RAW
JPG
Quality
AF
Focus
Storage
Service
HASSELBLAD

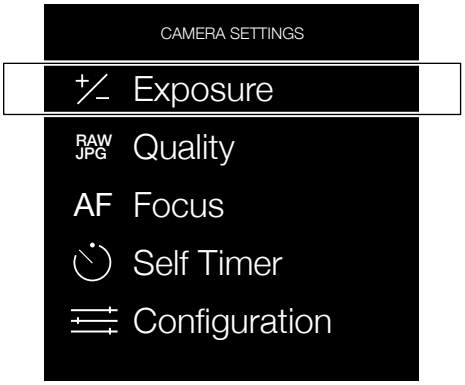
4.1 CAMERA SETTINGS MENU

Main Menu

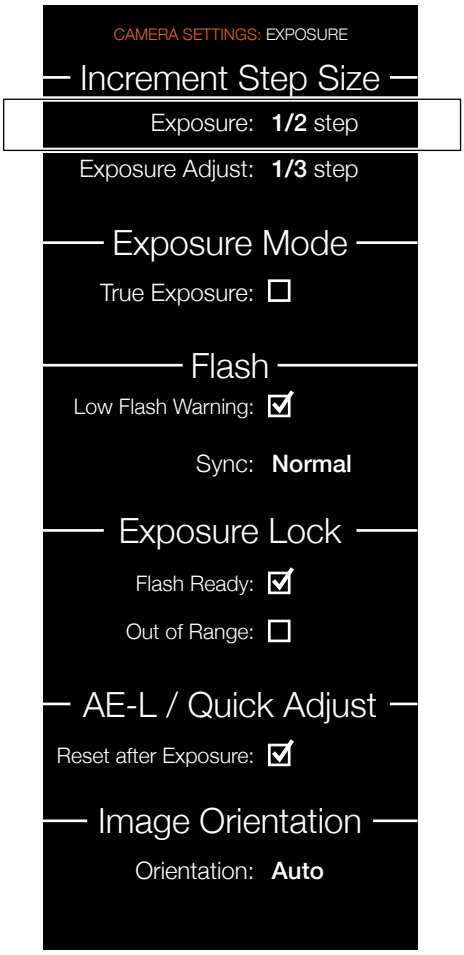


Camera icon

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 Menu / EXIT button to get back to Main Menu.

4.2 CAMERA EXPOSURE 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 Menu / EXIT button to get back to Main Menu.

Increment Step Size

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

EXPOSURE ADJUST

MAIN MENU > CAMERA SETTINGS > INCREMENT STEP SIZE > EXPOSURE ADJUST

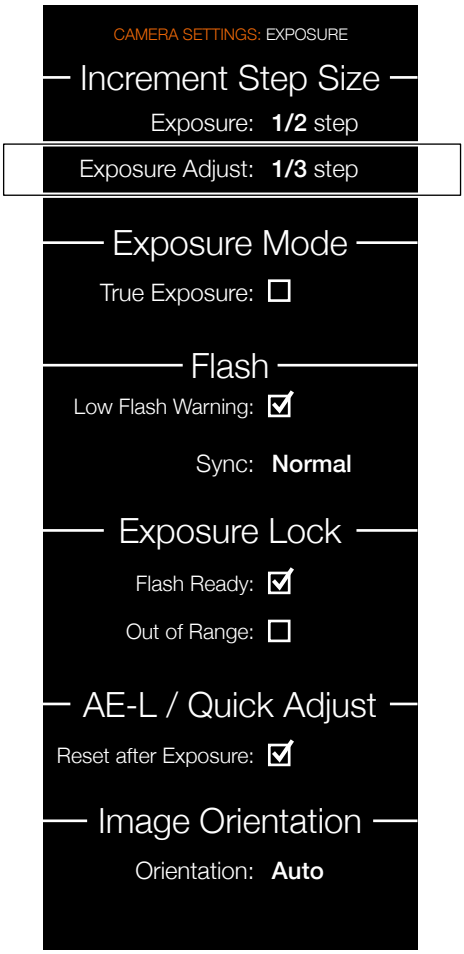
1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Exposure Settings Menu.
4 Select Exposure Adjust under Increment Step Size.

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

Increment Step Size

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

Exposure Settings Menu



TRUE EXPOSURE

MAIN MENU > CAMERA SETTINGS > EXPOSURE > EXPOSURE MODE

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

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

True Exposure Settings

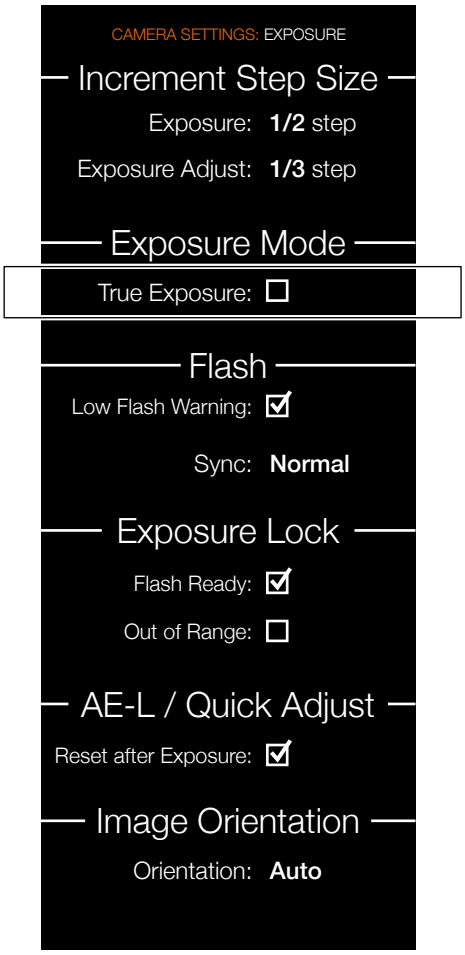
Select On or Off. The check box will be marked with a √ when On and the check box is empty when True Exposure is Off.

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

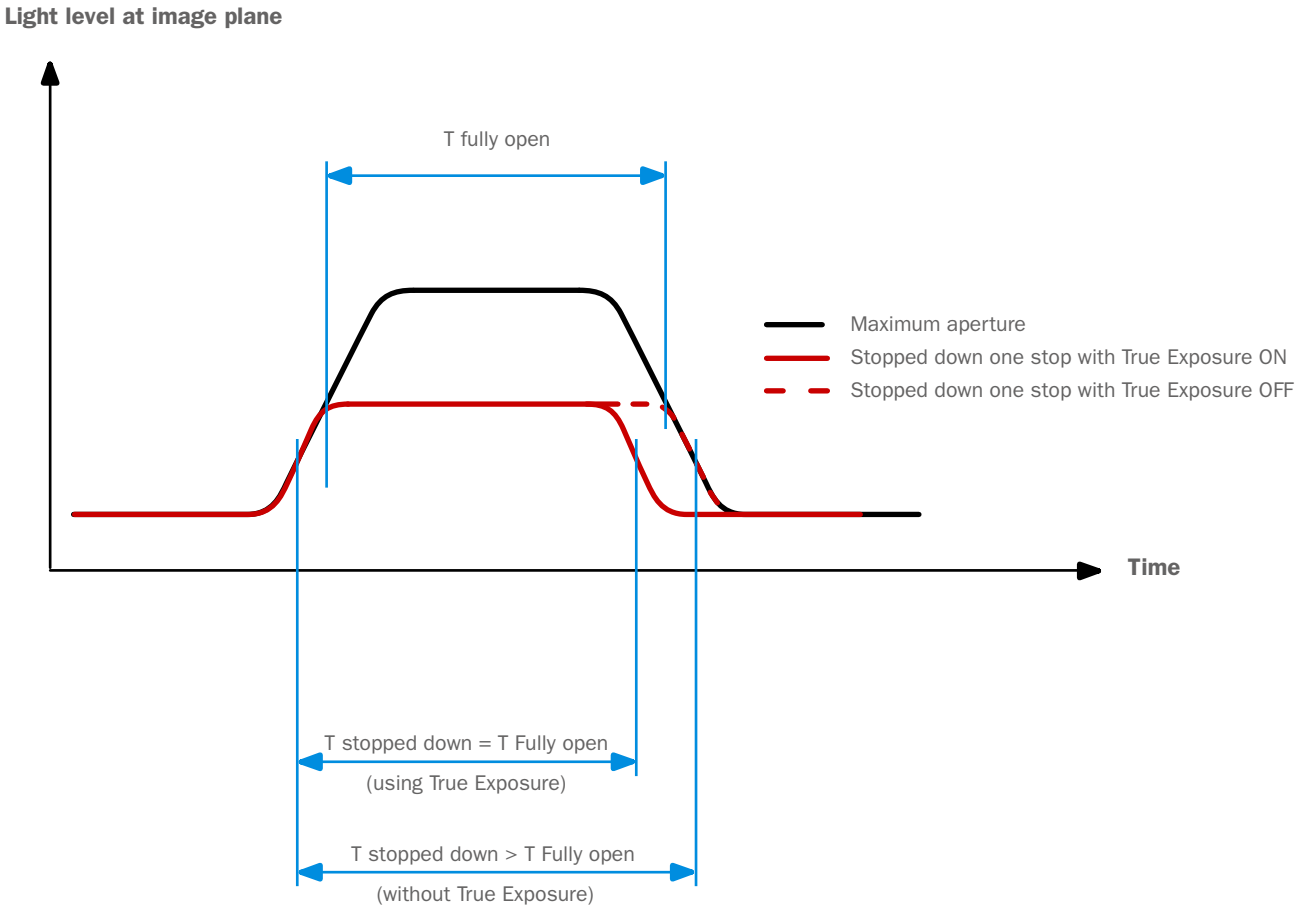
Note!
If using flash/strobe as the main light source and 1/800s or 1/1000 shutter speed (depending on lens type), remember to turn off the True Exposure option.

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

Exposure Settings Menu



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, 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 of 1/800s. 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.

FLASH SETTINGS

MAIN MENU > CAMERA SETTINGS > EXPOSURE > FLASH

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

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

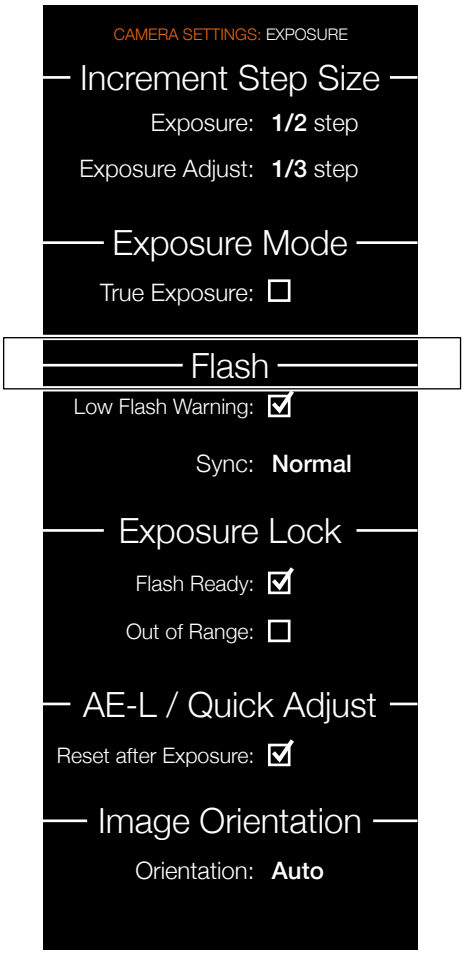
Important information!
Read the complete Chapter about flash before attaching a Flash to the X1D Camera.

Flash

Low Flash Warning
Select On or Off.
The check box will be marked with a √ when On and the check box will be empty when Low Flash Warning is Off.

Sync
Select Flash Sync Settings.
- Normal.
- Rear.

Exposure Settings Menu



This Chapter continues on next page.

FLASH AND STROBE SETTINGS

The X1D Camera can be used together with the following Nikon Flashes in TTL mode:

SB-300
SB-500
SB-700
SB-900
SB-910

General information
When using the A or S setting together with flash, the exposure requirements of the camera will dominate which might produce slow shutter speeds indoors, for example, requiring the use of a tripod. If P is selected instead, a shutter speed of 1/60 or faster is automatically chosen by the camera enabling the camera to be hand held.

When using flash close up or when using larger aperture settings, remember that the flash unit's output has a specific minimum duration which might still be too great for correct exposure. Read the back's output specifications for further information regarding any potential restrictions.

Rear sync is a useful feature used either for effect or to produce a more 'natural' look when combining long exposures involving light trails and flash.

To change the balance between flash output and camera exposure requirements to produce a variety of effects, use the exposure compensation function. For various long exposure effects use the sync function. To make flash exposure tests use the flash measure function.

Notes and WARNINGS!
Only Nikon Flash units listed above and specially adapted for use with the X1D or Nikon compatible flashes can be connected to the hot-shoe of the camera.

Note!
Do not attempt to connect a flash unit dedicated for use with another camera brand via the hot shoe. The flash unit and / or camera could be damaged.

Note!
If using flash/strobe as the main light source and 1/800s or shorter shutter speed, remember to turn off the True Exposure function.

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.

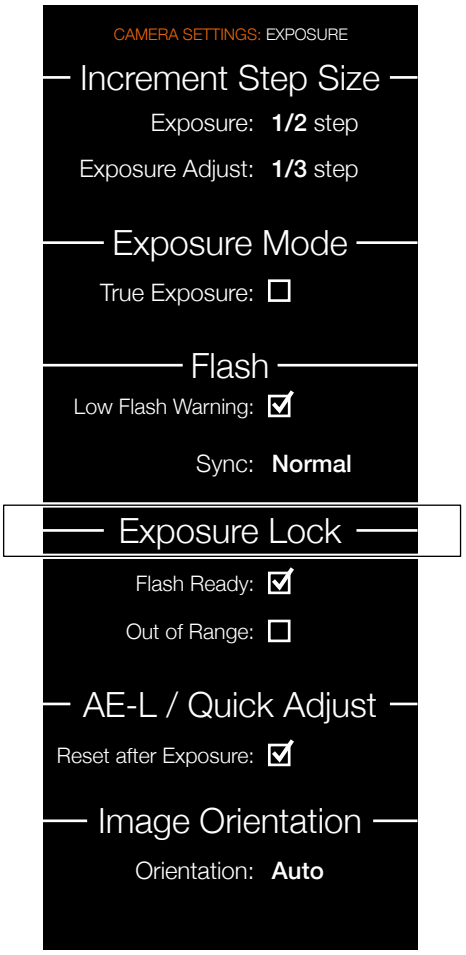
Swipe right or press Menu / EXIT button to get back to Main Menu.

Exposure Lock

Flash Ready
Select On or Off. The check box will be marked with a √ when On and the check box will be empty when it is Off. Controls if an exposure is blocked if the flash is not ready to fire.

Out of Range
Select On or Off. The check box will be marked with a v when On and the check box will be empty when it is Off. Controls if an exposure is blocked if aperture, and/or shutter speed, is outside the possible range.

Exposure Lock Settings Menu



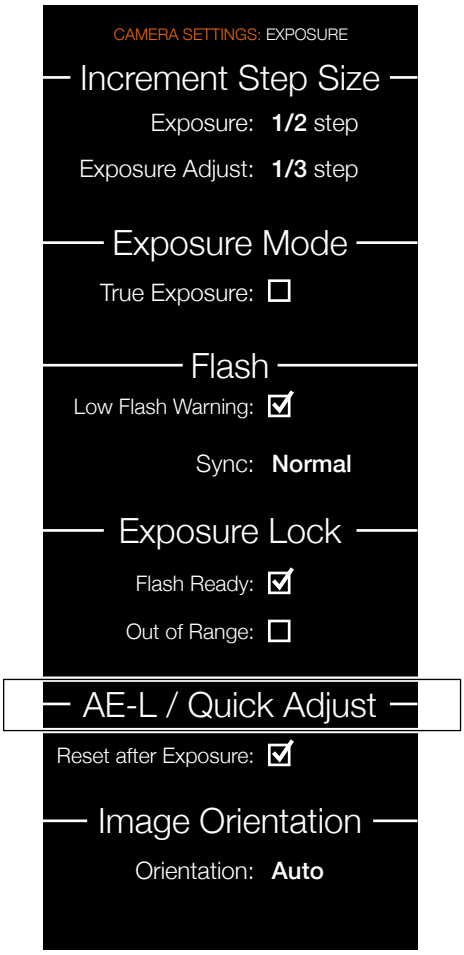
AE-L (AE-LOCK) / QUICK ADJUST

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 Menu / EXIT button to get back to Main Menu.

AE-Lock / Quick Adjust Menu



AE-Lock / Quick Adjust

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

Controls if an exposure adjustment or AE-Lock state is reset by an exposure or not.

IMAGE ORIENTATION

MAIN MENU > CAMERA SETTINGS > EXPOSURE > IMAGE ORIENTATION

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

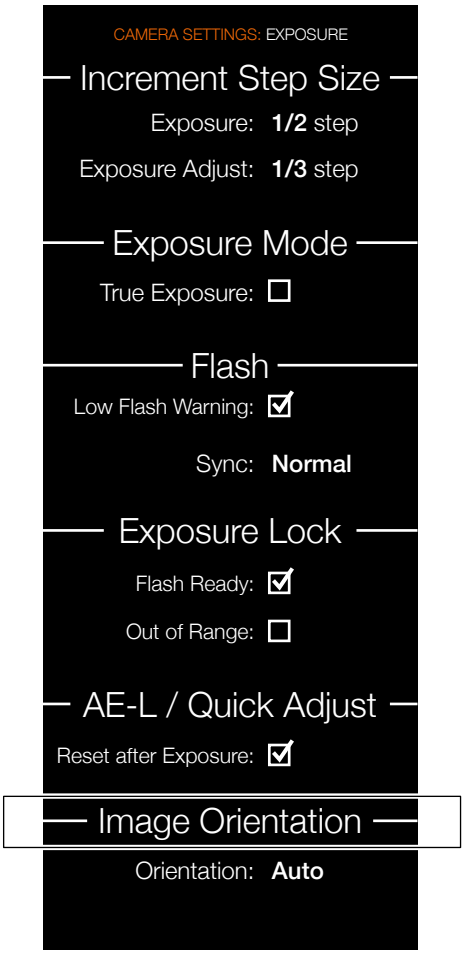
Swipe right or press Menu / EXIT button to get back to Main Menu.

Image Orientation
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.

Optional Settings

Auto.
Lock at 0 degrees.
Lock at 90 degrees.
Lock at 180 degrees.
Lock at 270 degrees.

Image Orientation Settings Menu



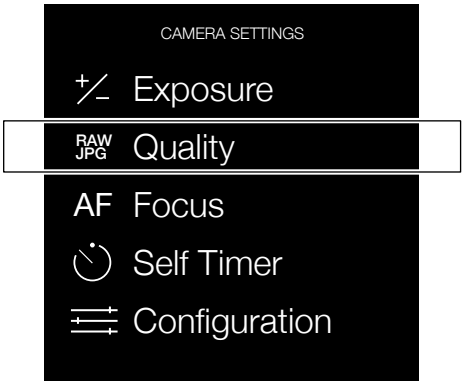
4.3 IMAGE QUALITY SETTINGS

MAIN MENU > CAMERA SETTINGS > QUALITY

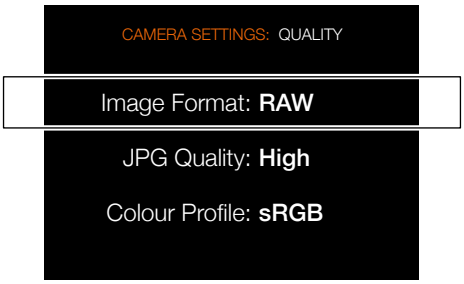
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Quality Settings Menu.

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

Camera Menu



Quality Settings Menu



Quality Settings Menu Contents

Image Format
- RAW.
- RAW + JPG.

JPG Quality
- High.
- Normal.

Colour Profile
- sRGB.
- Adobe RGB.

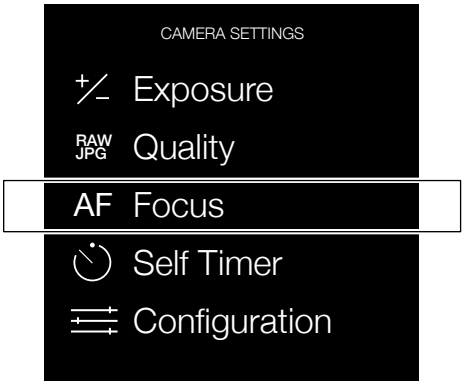
4.4 CAMERA FOCUS SETTINGS

MAIN MENU > CAMERA SETTINGS > FOCUS

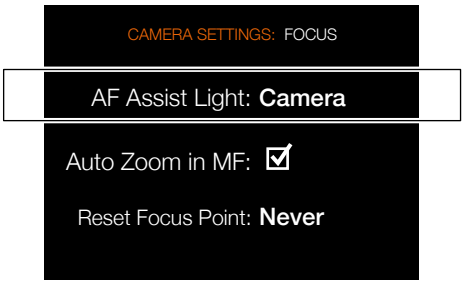
1 Select the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Focus Settings Menu.

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

Camera Menu



Focus Settings Menu



Focus Settings Menu Contents

AF assist light
Autofocus assist light.
- Camera.
- Off.

Auto Zoom in MF
- On.
- Off.

Reset Focus Point
Select any of these two settings:
- After Exposure.
- Never.

Autofocus Point can be reset to center position after every exposure. If you need the Autofocus Point to remain in the specific position, select Never.

See section Move Autofocus Point for more indepth information.

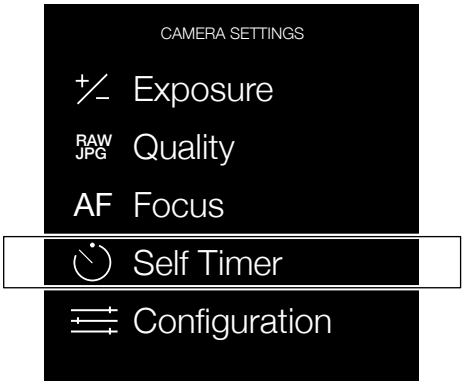
4.5 CAMERA SELF TIMER SETTINGS

MAIN MENU > CAMERA SETTINGS > SELF TIMER

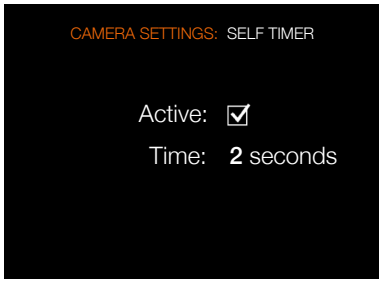
1 Press the Camera icon on the Touch Display.
2 The Camera Settings Menu appears.
3 Press the Self Timer Settings Menu.

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

Camera Menu



Self Timer Settings Menu



Self Timer Settings Menu

Active
On or Off.

The check box will be marked with a √ when Active and the check box will be empty when Self Timer is Off.

Time
2, 3, 4, 5 and so on in steps of one second up to 60 seconds.

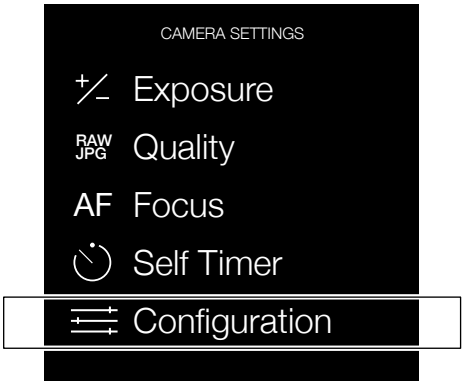
4.6 CAMERA CONFIGURATION SETTINGS

MAIN MENU > CAMERA SETTINGS > CONFIGURATION

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

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

Camera Menu



Configuration Settings Menu

Configuration Settings Menu

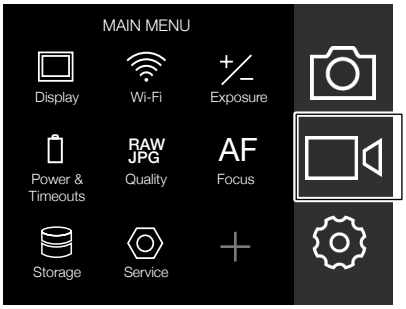
Exposure Quick Adjust

On or Off. Controls if an exposure adjustment or AE-Lock state is reset by an exposure or not.

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

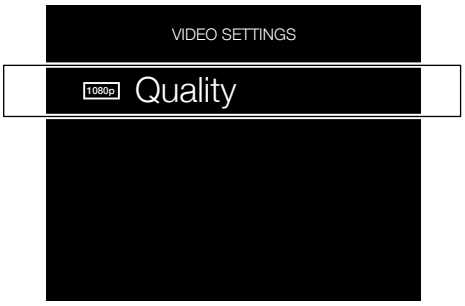
4.7 VIDEO SETTINGS MENU

Main Menu

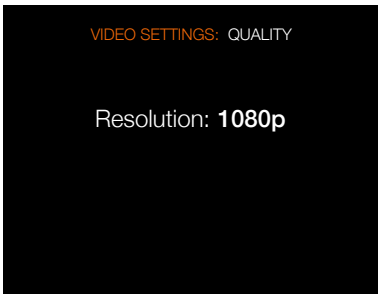


Video icon

Video Settings Menu



Video Quality Settings



MAIN MENU > VIDEO SETTINGS

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

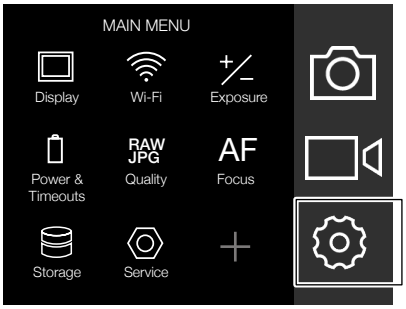
Swipe right or press Menu / EXIT button to get back to Main Menu.

VIDEO SETTINGS

Resolution
Video Quality Resolution Setting 1080p or 720p.

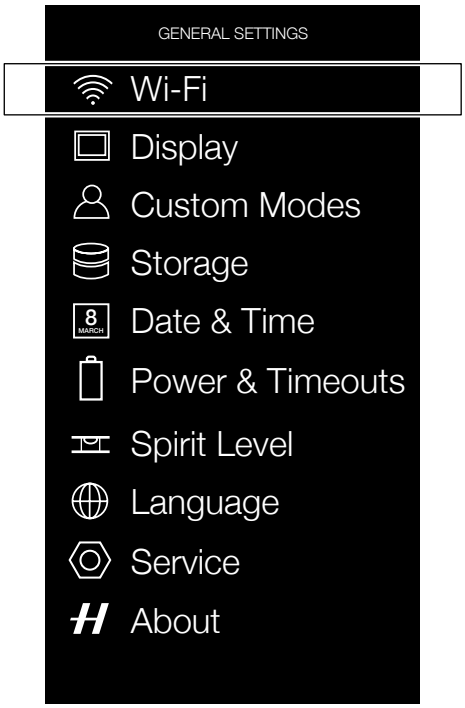
4.8 GENERAL SETTINGS MENU

Main Menu

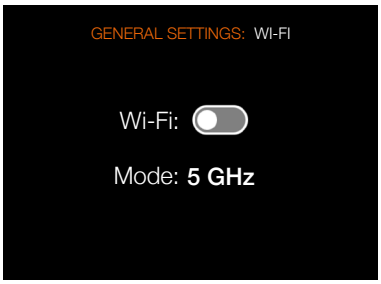


General Settings icon

General Settings Menu



Wi-Fi 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 Menu / EXIT button to get back to Main Menu.

4.9 GENERAL SETTINGS WI-FI

The Wi-Fi mode allows the Hasselblad Phocus Mobile application on an Apple iPhone, iPad or iPod to function in the same way as when a camera is tethered to a computer.

MAIN MENU > GENERAL SETTINGS > WI-FI

1 Press MENU.
2 Select General Settings in the main menu on the Touch Display.
3 Select Wi-Fi.
4 Settings:
Wi-Fi: On or Off.
Modes: 2.4 GHz or 5 GHz.

Note!
Some regions do not allow 5 GHz Wi-Fi.

Wi-Fi MODES

The Wi-Fi function has one mode of operation – Direct Access.

Direct Access is when the camera creates a new Wi-Fi network and an iPhone/iPad/iPod is connected to it.

The name of the network contains the camera serial number:

For example: “X1D-50c SQ34000123”.

Note!
If Wi-Fi has not been in use for 10 minutes, it will turn off automatically to save power.

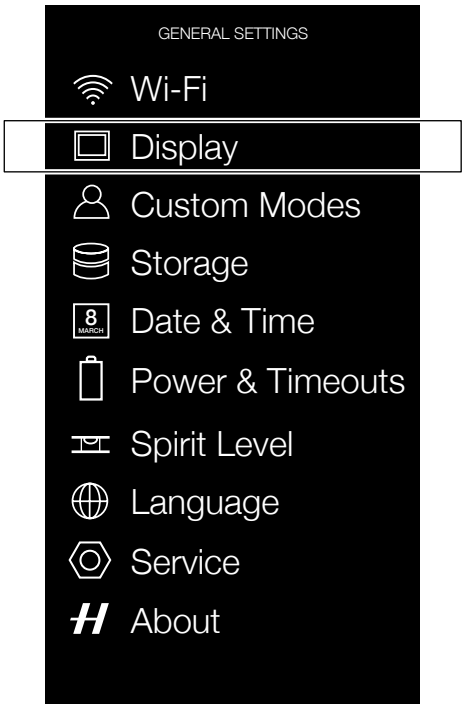
4.10 GENERAL SETTINGS DISPLAY

MAIN MENU > GENERAL SETTINGS > DISPLAY

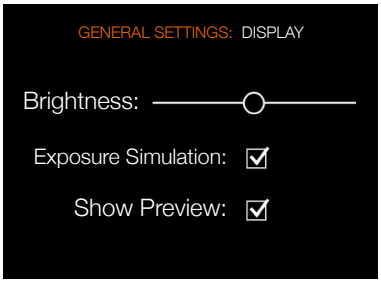
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Select Display.

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

General Settings Menu



Display Menu



Display Menu Settings

Brightness
Slide Left/Right to change Brightness. Right increases Brightness. Left decreases Brightness.

Exposure Simulation
Select On / Off.

Show Preview
Select On / Off. On displays a preview of the capture after every exposure. The check box will be marked with a √ when On and the check box will be empty when Off.

EXPOSURE SIMULATION

In Live View mode, the Exposure Simulation displays the effect of the selected exposure settings (Aperture, Shutter and ISO) and how these settings changes the photo. It is an approximation (a close but not exact example) of how the final captured photo will look. If you, for example in Manual exposure mode (M), select a smaller Aperture, the Live View displays a darker image. If you select a more open Aperture, the Live View displays an image that is lighter.

When in the A, S and P exposure modes, you can use Exposure Simulation to see the effect of an exposure adjustment before you capture the photo. As an example, a Quick Adjust of +1.0 steps results in a clearly lighter photo exposure.

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!
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.

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.

4.11 GENERAL SETTINGS CUSTOM MODES

MAIN MENU > GENERAL SETTINGS > CUSTOM MODES

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

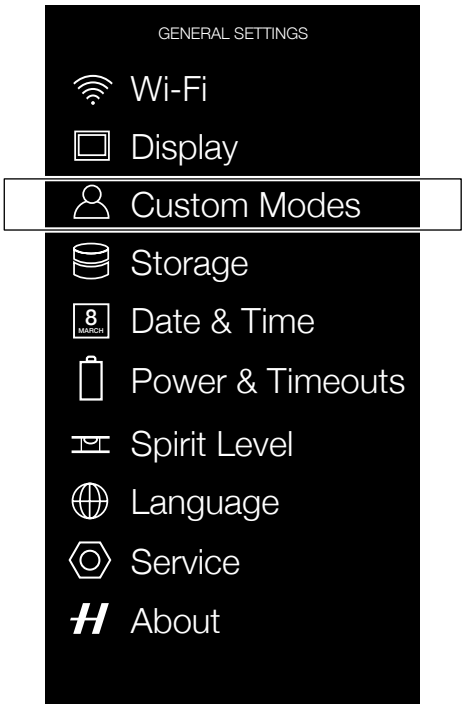
Swipe right or press Menu / EXIT button to get back to Main Menu.

Custom Modes Menu Settings

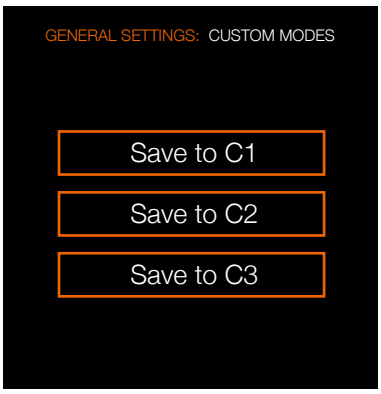
How to save to C1, C2 or C3.

1 Select Save to C1 to save to Custom Modes 1.
2 A pop up dialogue will display "Save to C1?"
3 Select "Save" to save settings to C1 program or select "Exit" to exit without saving settings.

General Settings Menu



Custom Modes Menu



Custom Modes Menu Save to C1

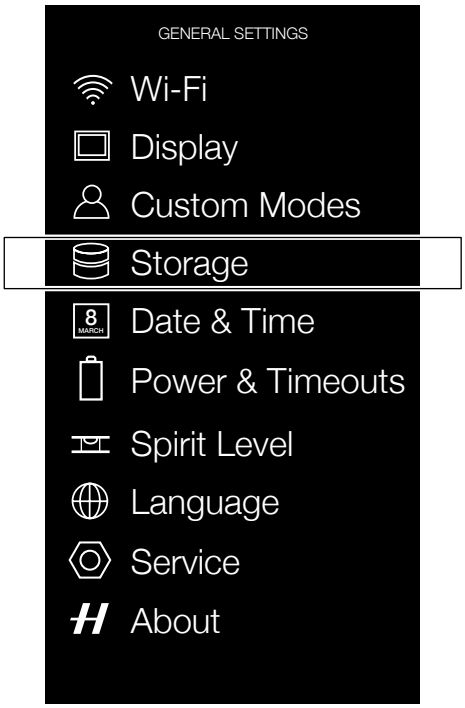
4.12 GENERAL SETTINGS STORAGE

MAIN MENU > GENERAL SETTINGS > STORAGE

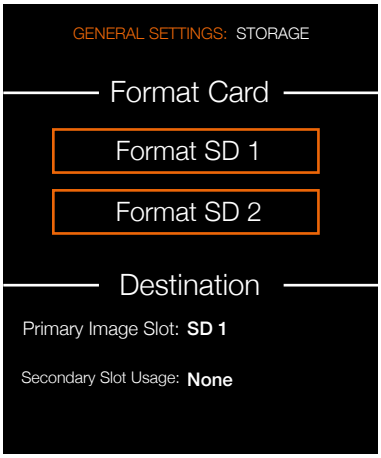
1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Storage icon.

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

General Settings Menu



Storage Menu



Storage Menu Settings

Format Card
- Format SD 1.
- Format SD 2.

Image Destination
- Primary slot: SD 1 or SD 2.
- Secondary slot usage.

FORMAT CARD

1 Select Card to Format, SD 1 or SD 2, on the Storage Menu.
2 A new Format Card Dialogue will be displayed.
3 Select Exit to Exit without formatting.

Format Card Dialogue Display

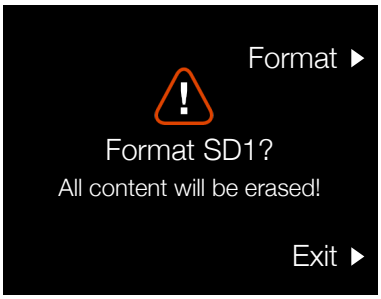


IMAGE AND VIDEO DESTINATION

MAIN MENU > GENERAL SETTINGS > STORAGE > IMAGE DESTINATION

Destination Settings.

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

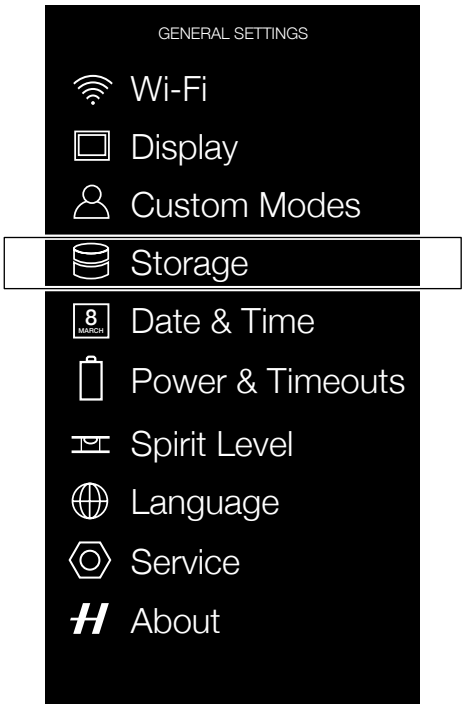
Swipe right or press Menu / EXIT button to get back to Main Menu.

Image Destination

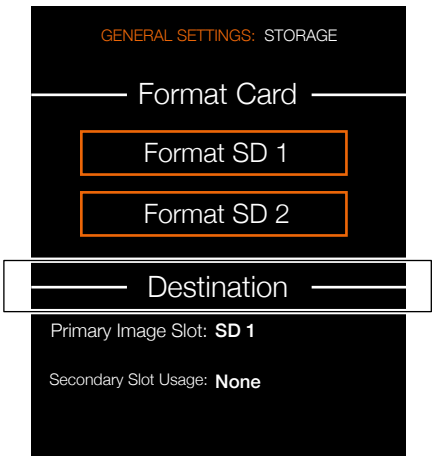
- Primary slot: SD 1 or SD 2.
- Secondary slot usage:
  - None.
  - Overflow.

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

General Settings Menu



Storage Menu



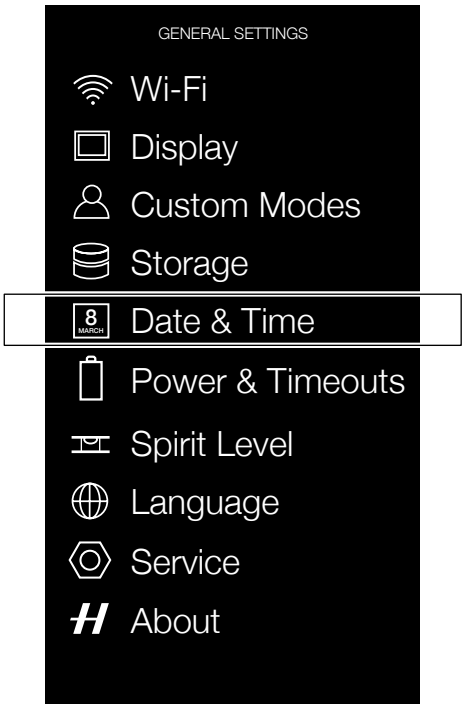
4.13 GENERAL SETTINGS DATE AND TIME

MAIN MENU > GENERAL SETTINGS > DATE AND TIME

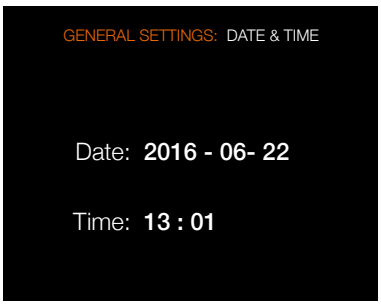
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the Date and Time icon.

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

General Settings Menu



Date and Time 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.

4.14 GENERAL SETTINGS POWER AND TIMEOUTS

MAIN MENU > GENERAL SETTINGS > POWER AND TIMEOUTS

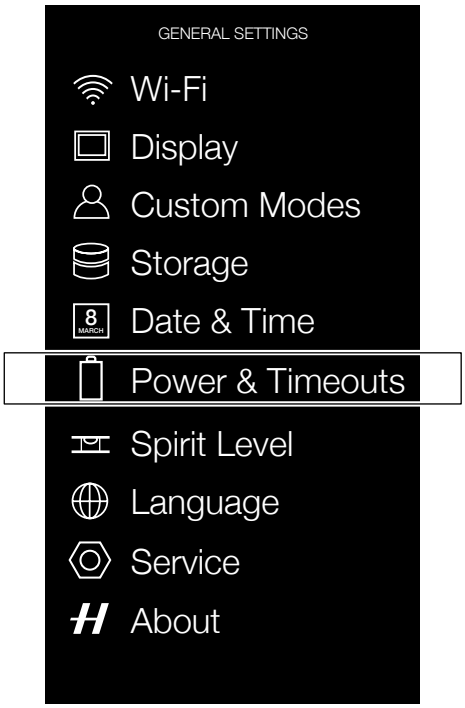
The X1D Camera can be set to automatically turn off the Touch Display or Power Off after a set amount of seconds to save battery for example.

Change Display or Power Off

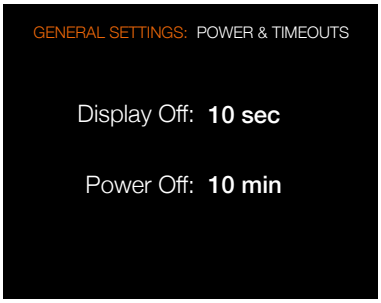
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Power and Timeouts icon.
4 Adjust the time values by pressing the value and adjust the value in the pop up menus.

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

General Settings Menu



Power and Timeouts Menu



Power and Timeouts Menu

Display Off
Select Display Off Settings.
- 3 seconds.
- 5 seconds.
- 10 seconds.
- 20 seconds.
- 30 seconds.
- 60 seconds.
- Never.

Power Off
Select Display Power Off Settings.
- 5 minutes.
- 10 minutes.
- 30 minutes.
- Never.

4.15 GENERAL SETTINGS SPIRIT LEVEL

MAIN MENU > GENERAL SETTINGS > SPIRIT LEVEL

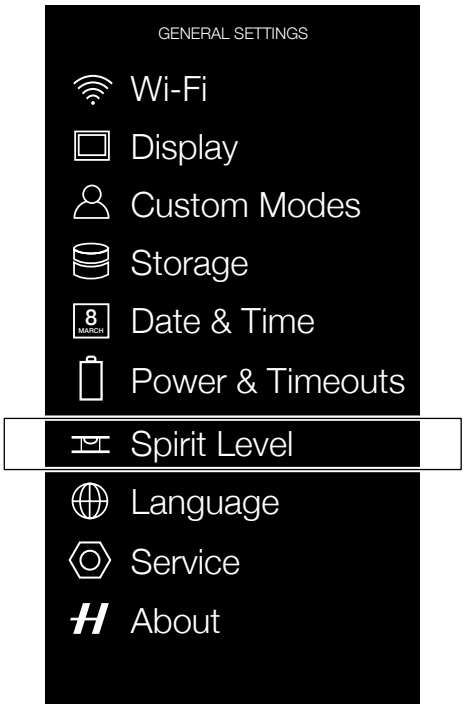
The camera is equipped with an accelerometer. The accelerometer is used to measure the tilt of the camera relative to the horizontal axis (A) and vertical axis (B).

How to align Camera with Spirit Level

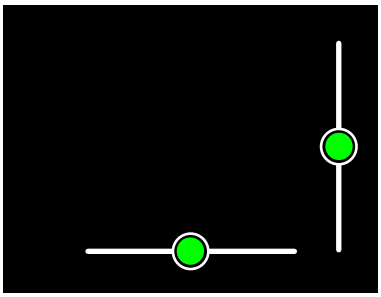
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Spirit Level icon.
4 Adjust the tilt of the camera left/ right and up/down until the white filled circle is in the centre and turns green.

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

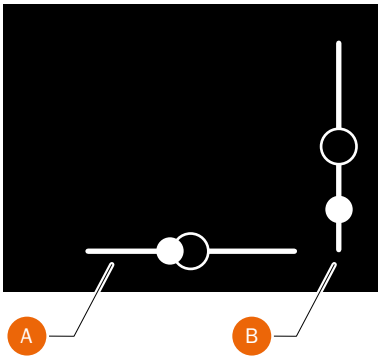
General Settings Menu



Spirit Level when camera is aligned



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

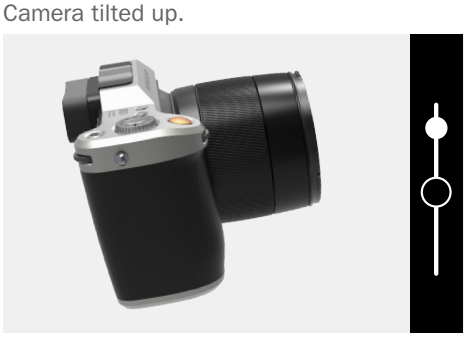


Camera tilted to the left.

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. In Factory mode, the calibration from the Factory is used.

Factory mode with Factory settings.

User mode with User settings.

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.

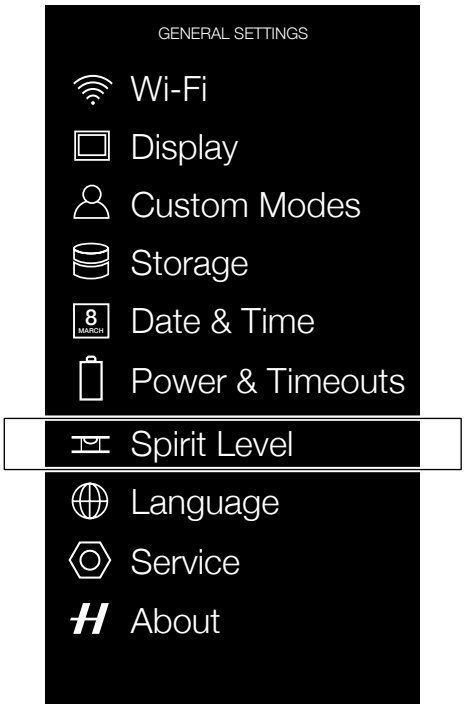
Swipe right or press Menu / EXIT button to get back to Main Menu.

How to reset Spirit Level to Factory calibration

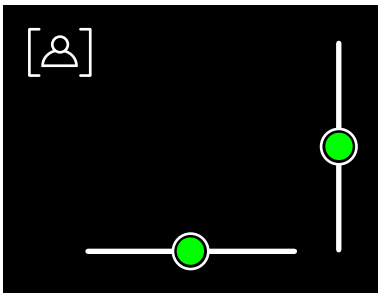
1 Press the General Settings icon on the Main Menu display.
2 The General Settings Menu appears.
3 Press the General Settings Spirit Level icon.
4 Press the icon in the top left corner (A).
5 The Spirit Level dialogue appears.
6 Press the Factory settings icon (C).
7 The Factory settings icon (D) is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

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

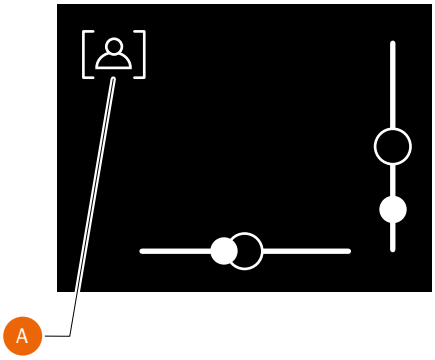
General Settings Menu

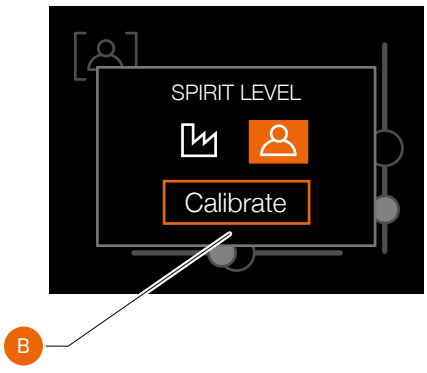


Spirit Level when camera is aligned

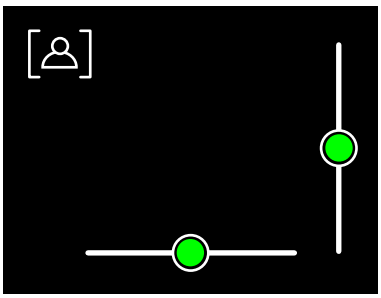


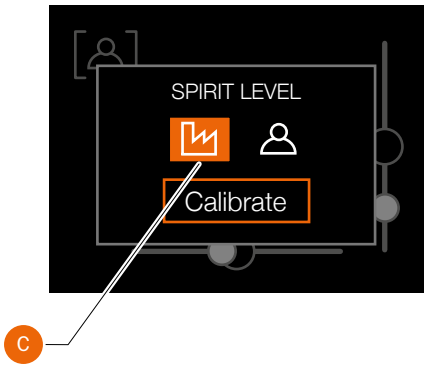
Spirit Level when camera is tilted a little to the right and more down.

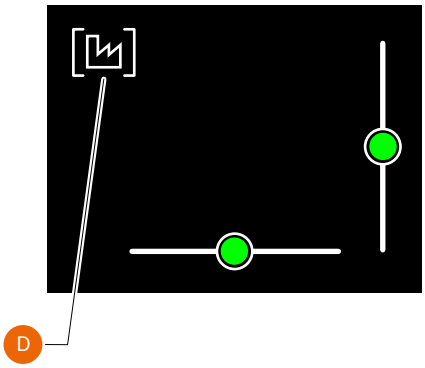




Spirit Level when calibrated by user.







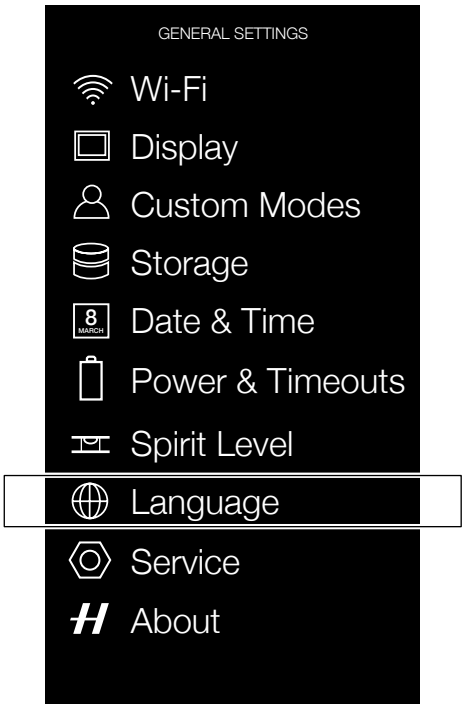
4.16 GENERAL SETTINGS LANGUAGE

MAIN MENU > GENERAL SETTINGS > LANGUAGE

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

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

General Settings Menu



Language Menu

Available Languages:

English.
Español.
Français.
Deutsch.
Italian.
Russian.
Chinese.
Japanese.
Korean.

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.

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

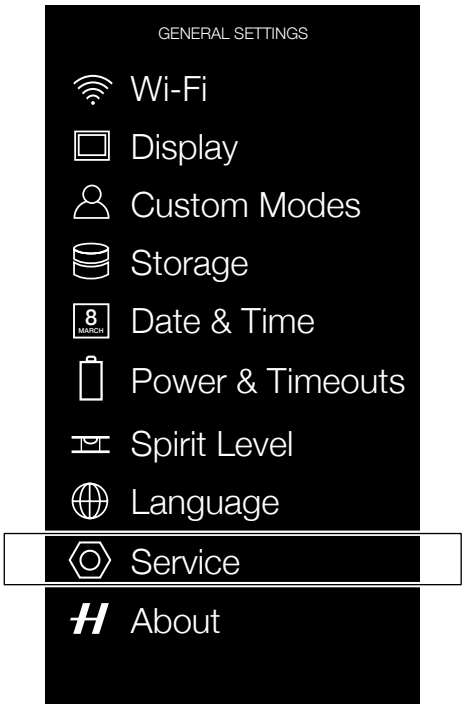
4.17 GENERAL SETTINGS SERVICE

MAIN MENU > GENERAL SETTINGS > SERVICE

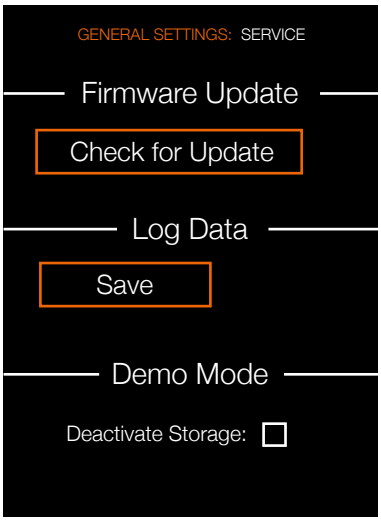
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Service icon.

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

General Settings Menu



Service Menu



Service Menu Settings

Firmware Update
Check For Update.

Log Data
Press Save to Log Data for Service.

Demo Mode
Deactivate Storage: Select the check box and a dialogue screen is displayed. Select Deactivate to deactivate storage.

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

Note!
The Demo Mode is only intended for Retail Demo Purpose.

Note!
The Storage Deactivation is only active until the camera is restarted.

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 button.
6 Save Log Data saves a log file on the SD 1 card or SD 2 card.
7 Save the chosen selection by pressing EXIT (MENU button).

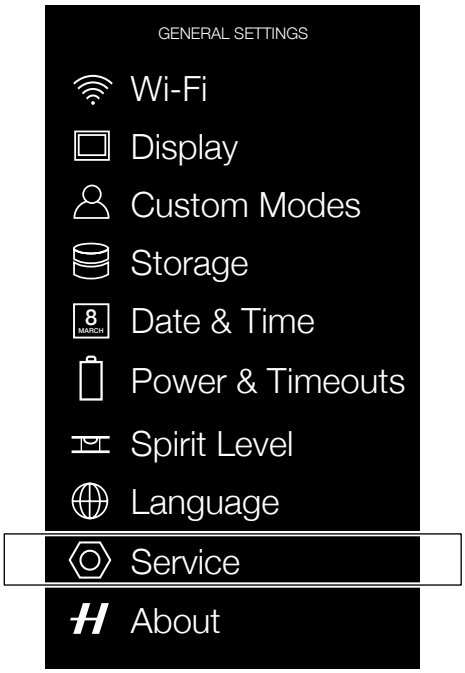
4.18 UPDATE X1D CAMERA FIRMWARE

MAIN MENU > GENERAL SETTINGS > CHECK FOR UPDATE

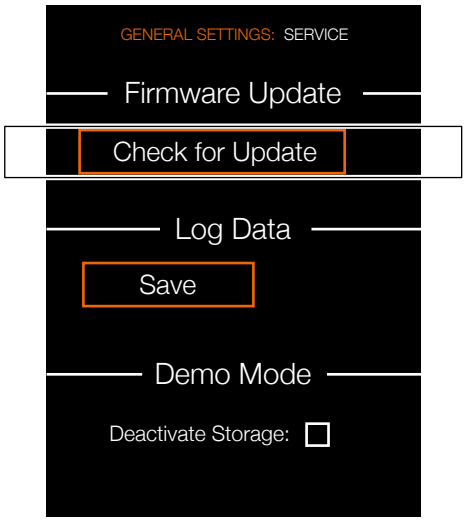
1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Check for Update button.
4 The camera will now check the inserted card/cards for update files.

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

General Settings Menu



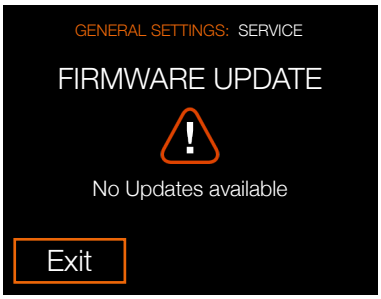
Service Menu



UPDATE X1D FIRMWARE PROCEDURE

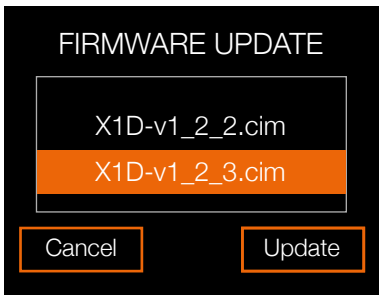
1 Download the latest X1D Firmware from www.hasselblad.com.
2 Save the Firmware file to a SD Card.
3 Insert the SD Card in the X1D Camera.
4 Select Settings from the Main Menu.
5 Select Service / Firmware Update / Check for Update.
6 Make sure the Firmware File Name and Number corresponds to the latest Firmware File you have downloaded.
7 Select Update.
8 Select Update in the Update Dialogue to start the X1D Firmware Update.
9 During the update the text "Update in progress" is displayed on the X1D Camera Display.
10 Do not turn off the X1D 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 X1D Camera.
15 The new X1D Firmware is now installed!

Check for Update



Firmware Update dialogue when no Firmware Updates are available.

Firmware Update



Firmware Update dialogue when two Firmware Updates are available.

Update Dialogue

Firmware Update Confirm dialogue to continue Update process. The update can take up to 15 minutes. Select Update or Exit.

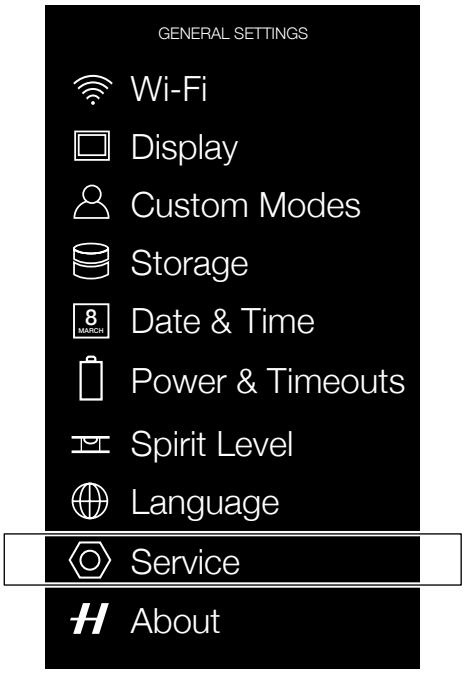
4.19 UPDATE X1D LENS FIRMWARE

MAIN MENU > GENERAL SETTINGS > CHECK FOR UPDATE

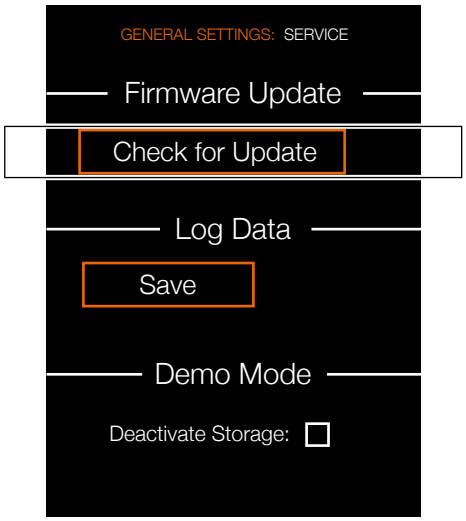
1 Press the Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings Check for Update button.
4 The camera will now check the inserted card/cards for update files.

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

General Settings Menu



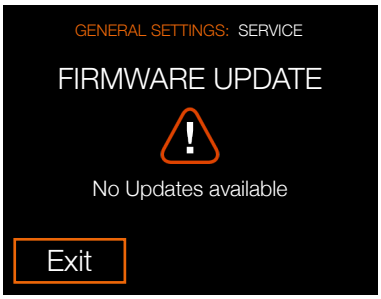
Service Menu



UPDATE LENS FIRMWARE PROCEDURE

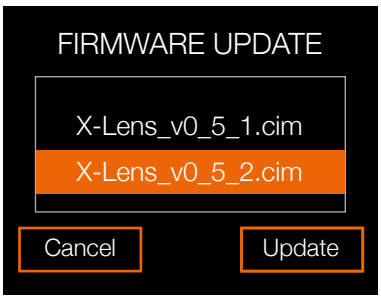
1 Attach the lens to the X1D Camera.
2 Download the latest XCD Lens Firmware from www.hasselblad.com.
3 Save the Firmware file to a SD Card.
4 Insert the SD Card in the X1D Camera.
5 Select Settings from the Main Menu.
6 Select Service / Firmware Update / Check for Update.
7 Make sure the Firmware File 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 X1D Lens Firmware Update.
10 During the update the text "Update in progress" is displayed on the X1D Camera Display.
11 Do not turn off the X1D 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!

Check for Update



Lens Firmware Update dialogue when no Lens Firmware Updates are available.

Firmware Update



Firmware Update dialogue when two Lens Firmware Updates are available.

Update Dialogue

Firmware Update Confirm dialogue to continue Update process. The update can take up to 15 minutes. Select Update or Exit.

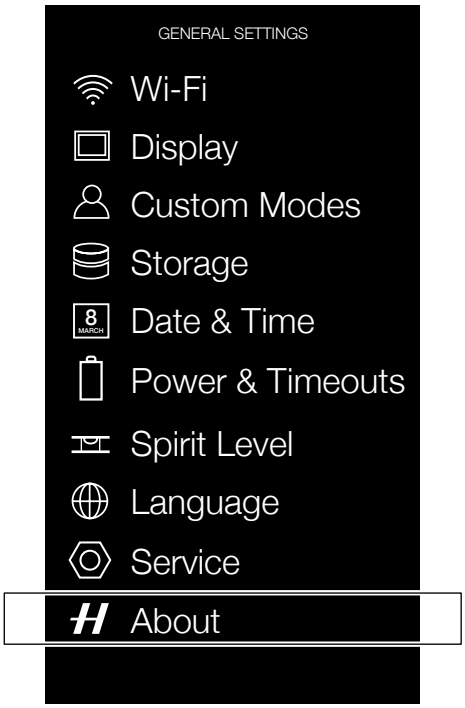
4.20 GENERAL SETTINGS ABOUT

MAIN MENU > GENERAL SETTINGS > ABOUT

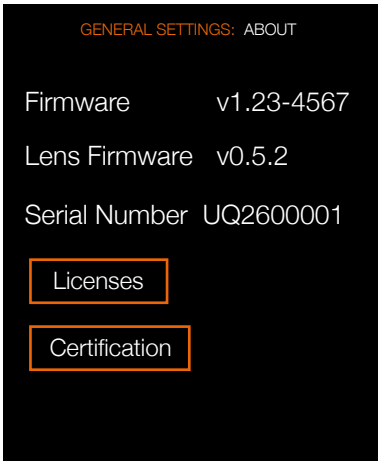
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings About icon.

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

General Settings Menu



About Menu



About Menu Settings

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 (v0.5.2) is displayed in the About menu.

Serial Number
The serial number is also displayed in case Hasselblad Support needs to know it for problem solving.

Licenses
Displays the available Licenses.

Certification
Displays the available Certification.

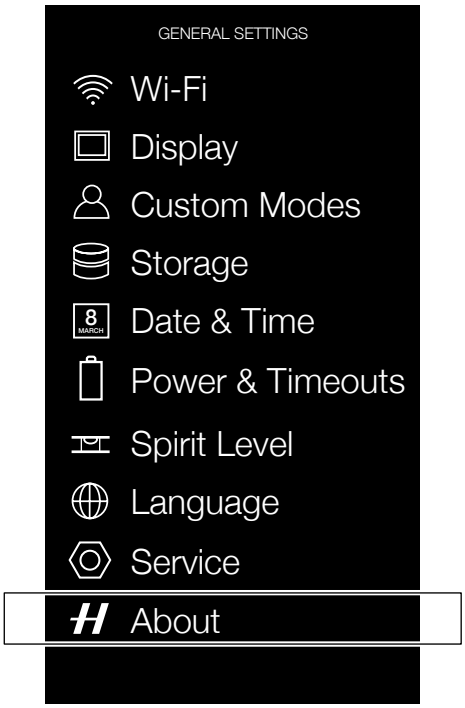
4.21 GENERAL SETTINGS ABOUT CERTIFICATION

MAIN MENU > GENERAL SETTINGS > ABOUT > CERTIFICATION

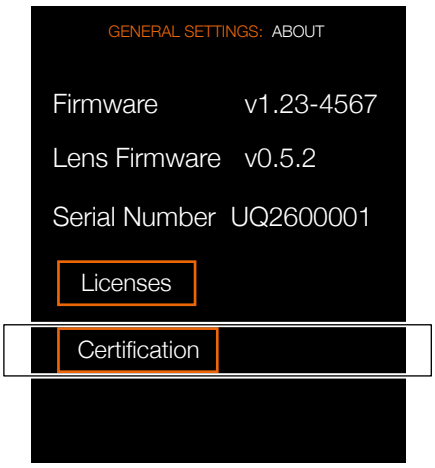
1 Press the General Settings icon on the Touch Display.
2 The General Settings Menu appears.
3 Press the General Settings About icon.
4 Press the Certification icon.

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

General Settings Menu



About Menu



Certification E-label
Depending on region certification information in addition to what is engraved on the camera bottom can be found on an E-label.

From the Main Menu this label is reached by pressing General Settings > About > Certification.

HASSELBLAD
XID
HASSELBLAD

5.1 XCD LENS RANGE

XCD 30 LENS

The XCD 30 is a fixed 30 mm Lens that has Autofocus and Manual Focus capabilities.

Hasselblad XCD 30 Lens, 30 mm

XCD 45 LENS

The XCD 45 is a fixed 45 mm Lens that has Autofocus and Manual Focus capabilities.

Hasselblad XCD 45 Lens, 45 mm

XCD 90 LENS

The XCD 90 is a fixed 90 mm Lens that has Autofocus and Manual Focus capabilities.

Hasselblad XCD 90 Lens, 90 mm

XCD HC LENS ADAPTER

(3025000)
The XH Lens Adapter can be used to connect a HC or HCD Lens, for example HC 80 mm Lens.

5.2 OPTIONAL HC LENS ACCESSORIES

H 13, 26 AND 52 EXTENSION TUBES

(3053513, 3053526 and 3053542)
The Extension tubes attach between the lens and the body 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 has a TTL light metering system, exposure compensation is automatic.

MACRO CONVERTER H

(3023720)
The Macro Converter H is mounted between the Camera and the Lens. The Macro Converter H can be used together with Hasselblad HC/HCD lenses.

5.3 OPTIONAL ACCESSORIES

PRO SHADE V/H 60 – 95

(3040740)
An adjustable bellows lens shade that provides highly efficient protection against stray light. Its compact, flat folding design saves space in the equipment case. Also features a filter holder for glass, gelatin, or plastic filters.

PRO SHADE ADAPTERS

(3043415, 3043417, 3043419)
67mm, 77mm and 95mm adapters with bayonet mount for HC lenses. Features lock to provide positive and secure attachment.

X1D XCD LENS FILTER DIMENSIONS

XCD 30	77 mm.
XCD 45	67 mm.
XCD 90	67 mm.

UV SKY FILTERS

(3053470, 3053474 and 3053478)
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: UV Sky 67mm (3053470), UV Sky 77mm (3053474) and UV Sky 95mm (3053478).

POLA FILTERS

(3053482, 3053486 and 3053490)
Reduces non-specular reflections and glare. Increases colour saturation in general. Can intensify a blue sky. Available in three sizes.

CAMERA STRAP H

(3054754)
Extra wide camera strap with anti slip backing Included as standard accessory.

HASSELBLAD
AF MF
ISO WB
X1D
HANDMADE IN SWEDEN
C1
C2
C3
M
A
S
P
D

Problem	Possible cause	Suggested correction
Camera is deactivated	The camera can be affected by a discharge of electricity. This can happen when the area around the control buttons on the grip accidentally touches a conductive cord or material connected to earth. This can deactivate the camera and does not cause any damage.	Remove and re-insert the battery, then press the ON - OFF button on the camera to turn on the camera.
Wrong language	If the Camera has been set to a language you don't understand, you can navigate to your preferred language by following the actions and appearance in the illustrations in the suggested section.	See section To Change Language On the Camera From Unknown Language.
Dark or coloured spots or lines in your images	Dirt or particles on the surface of the sensor infrared (IR) filter.	See "6.4 Clean the Sensor Filter" on page 123.
Temperature warning icon appears	Rapidly taken captures make heavy demands on the processor in the Camera which in turn produces heat. This can in combination with high ambient temperature result in noise in the image files. At around 60 °C a warning dialogue appears notifying that the sensor is temporarily shutting down to allow the Camera to cool.	Let the Camera cool down for at least 20 minutes.

6.1 ERROR MESSAGES

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

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 Wait 10 seconds.
3 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.

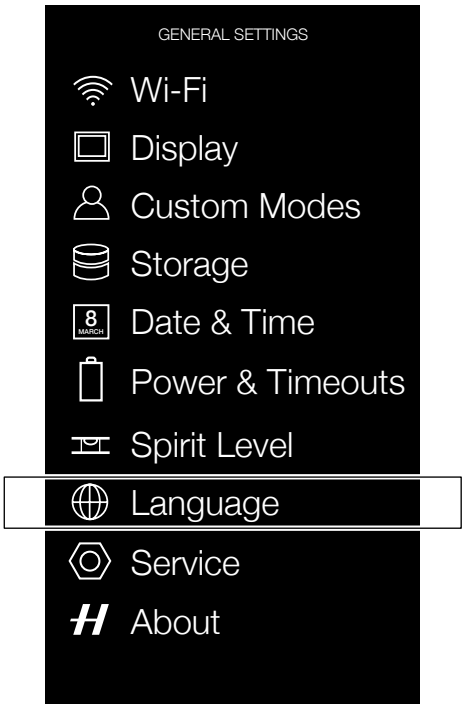
6.2 CHANGE FROM UNKNOWN LANGUAGE

MAIN MENU > GENERAL SETTINGS > LANGUAGE

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 8 on the list from the top, Language).
4 Scroll down to select your Language.

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

General Settings Menu



Language Menu

6.3 CLEAN THE LENS GLASS

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.

6.4 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 on the filter, use an E-wipe. Do as follows:

6 Tear at the notch to break seal.
7 Remove an E-wipe from the package and fold the tissue to match the width of the IR filter.
8 Apply firm pressure using two or three fingers at the edge of the wipe to ensure an even, firm contact with filter surface.
9 Wipe the surface in one unbroken motion.

Note!
Do not use same side of the E-wipe twice as you will be likely to reapply particles removed in the first pass.

10 Attach the Lens again to the camera immediately after cleaning.
11 Capture a number of images.
12 Inspect the images.

If you still see spots on your 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.

User Guide for Hasselblad X1D

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