

TRUE EXPOSURE

MAIN MENU > CAMERA SETTINGS > EXPOSURE > TRUE EXPOSURE

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

Select True Exposure Mode.

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

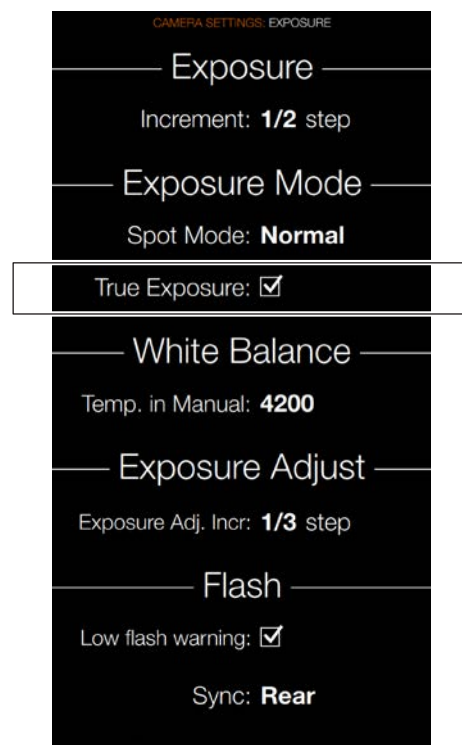
True Exposure Settings

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

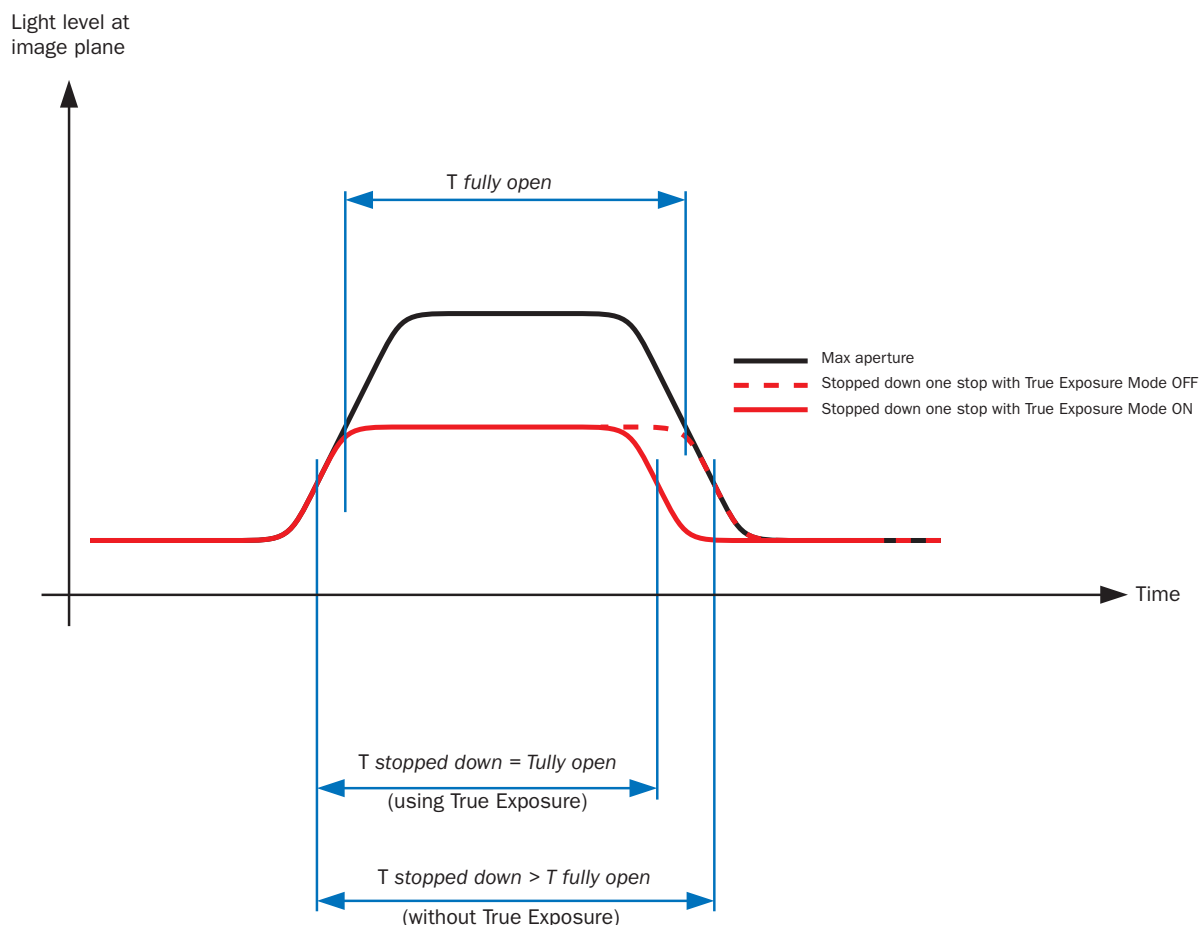
Note!

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.

Exposure Settings Menu



True Exposure explained



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

When a lens is stopped down, the effective shutter speed becomes longer, consequently affecting the set exposure. At slow shutter speeds the effect is minimal but at faster speeds, e.g. 1/500s, the effect becomes clearly visible. Automatic compensatory measures in speed setting adjustments are employed.

As compensation can only be put into effect where speeds can be adjusted, this prevents the possibility of adjusting the fastest speed 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 Sensor Unit Display.

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

WHITE BALANCE SETTINGS - PRESETS AND MANUAL

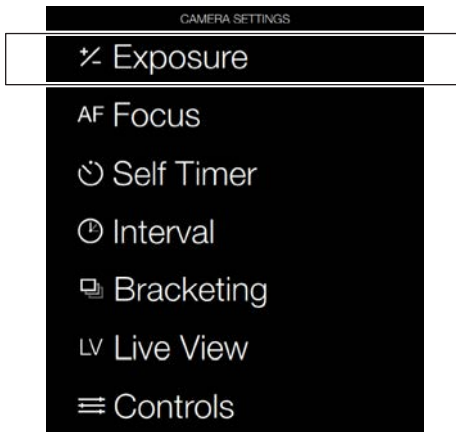
MAIN MENU > CAMERA SETTINGS > EXPOSURE > WHITE BALANCE

Set Temperature in Manual White Balance:

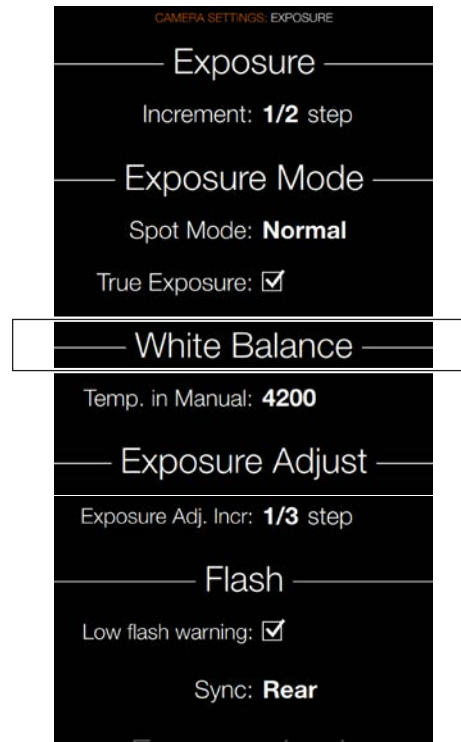
- 1 Press Camera Settings.
- 2 Choose Exposure.
- 3 Choose White Balance.
- 4 Set Temperature in Manual Mode.

White Balance can only be set from the Control Screen or on the Grip Menu.

Camera Menu



Exposure Settings Menu



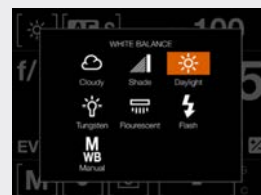
White Balance Options

There are six 'White Balance' presets plus a Manual setting to choose from.

- Cloudy
- Shade
- Daylight
- Tungsten
- Flourescent
- Flash
- Manual (M WB)

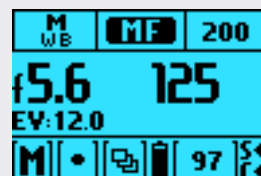
Control Screen View

White Balance Daylight mode selected.



Grip Display View

White Balance Manual mode selected.



Grip Display View

White Balance menu with Cloudy mode selected.



WHITE BALANCE SETTING BY USING A “GREY CARD”

There are two ways to make manual white/grey balance settings using a ‘Grey card’ or ‘Qp card’. If colour accuracy is not critical, you can use any neutrally coloured area or surface close to a mid grey value (concrete, overcast sky, or even white paper, for example). It won’t be perfect but just try to ensure that it is as neutral as possible in colour value.

- Make the first shot a grey card/Qp card close-up and then make the adjustment in Phocus for the session.
- Use the integral white balance from the grey card function to make an in-camera setting for the session.

White balance settings are mirrored after being saved on the grip, sensor unit and in Phocus when tethered.

The most common work flow for using a Grey Card is to make a capture with the Grey Card present during the photo session. This capture will then be used in Phocus to neutralize all other captures in that same light.

EXPOSURE ADJUST

MAIN MENU > CAMERA SETTINGS > EXPOSURE > EXPOSURE ADJUST

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

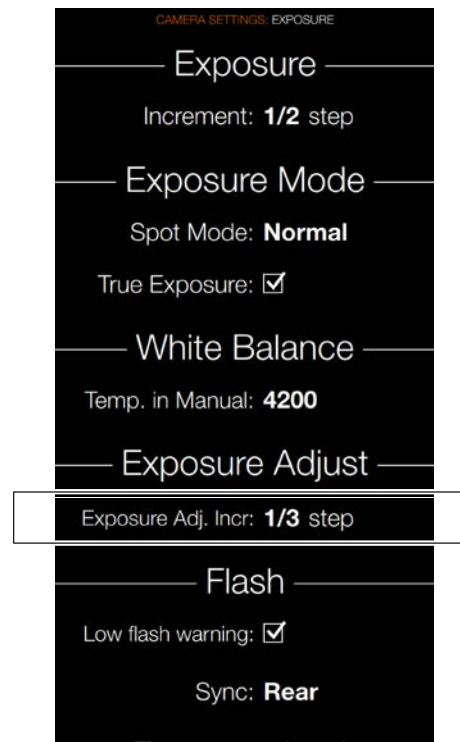
Select Exposure Adjust.

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

Exposure Adjust

Exposure Adjust Increment: Select Step.

Exposure Settings Menu



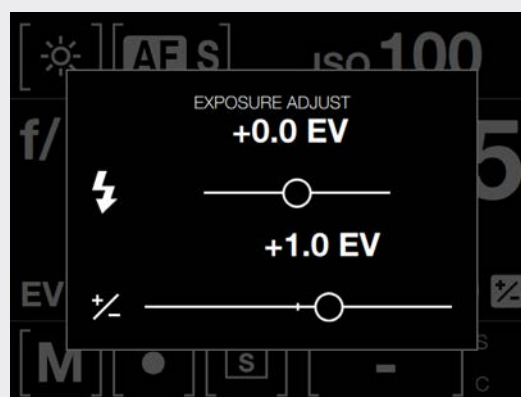
Adjust the Exposure on the Control Screen

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

The following page explains how to adjust exposure on the Viewfinder + / - button.

Control Screen View

Exposure Adjust.



EXPOSURE COMPENSATION / QUICK ADJUST

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

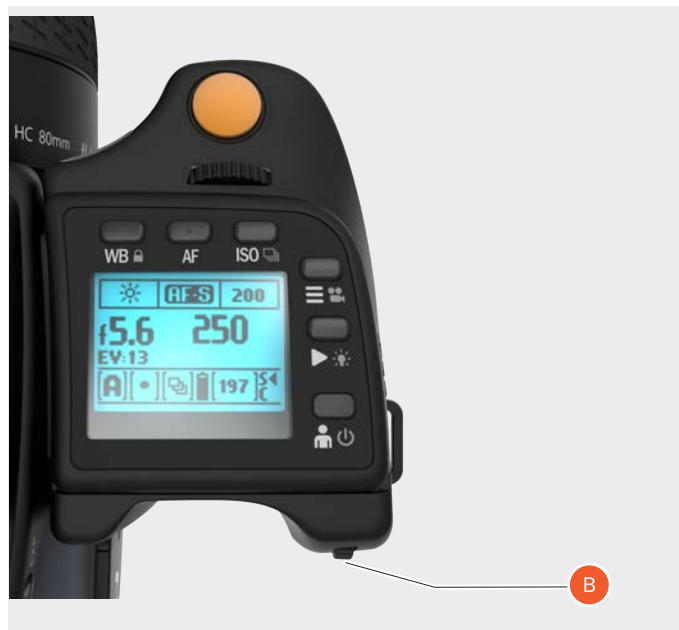
The quickest way to make an adjustment in auto exposure mode is to use the rear scroll wheel (B).

Temporary compensation setting in an auto-exposure mode using the Quick Adjust function:

- 1 Select auto exposure mode (A).
- 2 Turn the rear scroll wheel (B) to select the chosen amount of compensation.

The amount is displayed in the viewfinder 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.

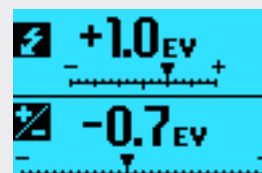


Viewfinder Display View
Exposure compensation EV +1.3

Grip Display View

Flash Exposure

Camera Exposure



FLASH SETTINGS

MAIN MENU > CAMERA SETTINGS > EXPOSURE > FLASH

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

Select Flash.

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

Flash

Low Flash warning

Select On or Off.

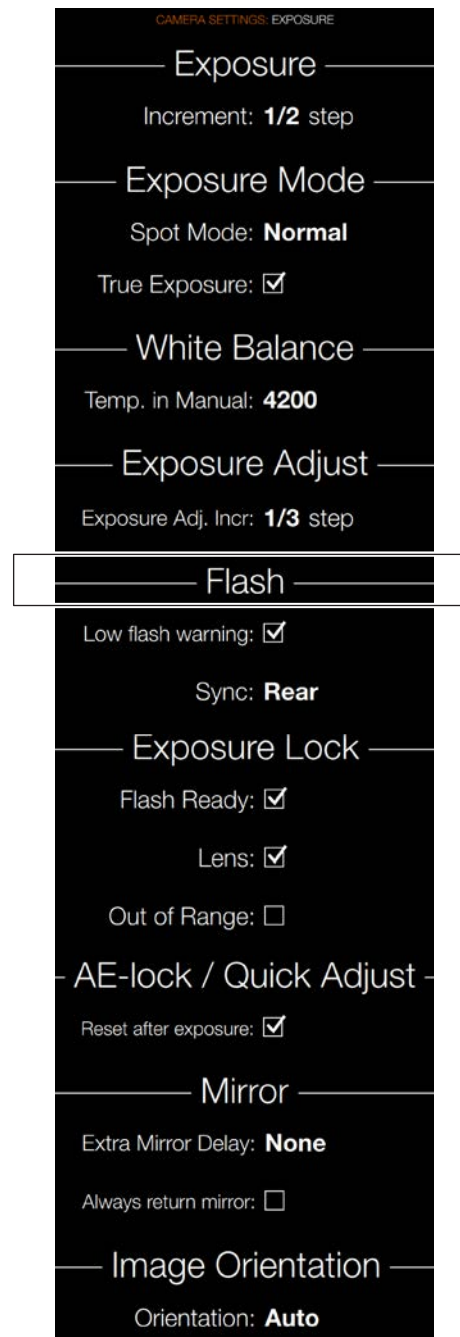
Sync

Select Flash Sync Settings.

- Normal.
- Rear.

This Chapter continues on next page.

Exposure Settings Menu



FLASH AND STROBE SETTINGS

The H6D can be used together with most flash units in manual mode. However, to make use of a TTL automatic function, it must be ensured that the flash unit is compatible with the SCA 3002 system. Connection is either by the PC socket or by the hot shoe (see warning below).

The viewfinder houses an integral fill-flash with a guide number of 12 and features OTF/TTL flash control. This flash is capable of providing enough illumination for many fill flash functions outdoors as well as simple indoor shots at shorter distances.

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 or Pv 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.

It is possible to use the flash metering capability with external flash units of all kinds (TTL flashes must be set to Manual mode).

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.

When using suitable dedicated backs (compatible with SCA3002 compatible flash unit regarding the two functions, exposure compensation and shutter sync, is via the grip. The flash measure function can be used for flash units that are not SCA 3002 compatible or for SCA 3002 compatible backs at manual setting.

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 flash units specially adapted for use with the H6D should be connected to the hot shoe on 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 shutter speed, remember to turn off the True Exposure function.

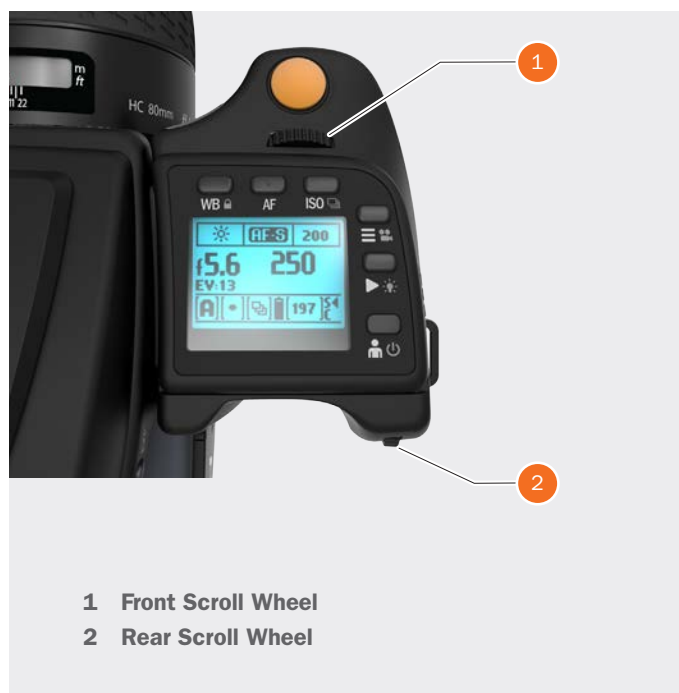
As with all strobe/studio flash use, very particular attention should be taken to ensure correct connections and general handling practice. Potential dangers might increase when cameras are also connected to electronic peripherals (computers, lighting backs, etc.) and should diminish when IR and similar wireless flash release devices are used.

Victor Hasselblad AB cannot accept any responsibility whatsoever for accidents that might occur or damage caused when Hasselblad equipment is used in combination with third party backs of any description.

This Chapter continues on next page.

ACCESS TO FLASH CONTROLS

- 1 Activate the camera and press the + / - button on the Viewfinder once.
- 2 Turn the Front scroll wheel (1) to set the amount of compensation required from +3 EV through -3 EV.
- 3 Turn the Rear Scroll Wheel (2) to set whether the flash is triggered just after the shutter opens or just before the shutter closes go to Camera Settings/Exposure/Flash and set Sync to Normal or Rear.
- 4 To set Flash Measure program a button in Camera Settings/Controls to “Flash Measure”. Then trigger Flash Measure using this button. A specific screen on the grip display request you to press the AE-L button in order to make a reading.
- 5 When set to Flash Measure, a specific screen requests you to press the AE-L button in order to make a reading.



INTEGRAL FLASH

The integral flash unit features the following specifications:

Guide no. 12

Coverage 56° horizontal, 44° vertical

Maximum light fall-off at side centres - 1EV (50%)

Colour temperature (full flash) 5,000 – 5,600° K

To raise the flash unit into its operative position, slide the flash-back catch backwards in the direction of the flash symbol. To return the flash unit into its closed position, push down on the top of the back until it clicks back into place. The flash unit is automatically activated when it is in the operative position and de-activated when returned to its stored position.

The green LED flash symbol blinks in the viewfinder when the flash unit is charging and remains stationary when fully charged. The flash output can also be adjusted for optimum light balance in fill-flash situations.

Using the integral flash:

- 1 Slide the flash-back catch backwards in the direction of the flash symbol.
- 2 On the Camera Sensor Unit Display select Camera > Exposure and scroll down to Flash..
- 3 Choose between Normal or Rear sync.
- 4 Exit the Main Menu to Save and make an exposure.
- 5 If the settings were incorrect to match the output of the flash unit, the viewfinder display shows a red triangle alongside a flashing green 'flash' symbol plus a warning message - 'Low flash'. The grip display will also show a warning message - 'Low flash'.

Conventional measures should then be taken to correct the situation, move closer to the main subject, use a larger aperture setting or use a higher ISO setting.

Note!

Do not use the integral flash together when another external TTL flash unit is connected (and used in TTL or A mode).

Note!

For full coverage with the integral flash, use 80mm or longer lenses (without a lens shade).



SEPARATE FLASH UNIT CONNECTION

Separate flash units can be electrically connected either by way of the hot shoe accessory holder (see previous warnings) on the top of the viewfinder (1) or via a cord to the PC connection port (2) on the left hand side of the camera body. Slave unit switches / transmitters can also be connected on unit the (see specific user manuals for details).

Keep the plastic safety cover in place in the hot shoe (1) when not in use.



FLASH MEASURE OF SEPARATE FLASH UNIT

You can measure the effect of an attached flash unit (with PC connected flash units and SCA3902 compatible flash units set to M mode), where the camera acts as a flash meter. The aperture setting can be adjusted and more trial exposures made until the information on the grip display is satisfactory.

To use flash measure:

- 1 Assign a button as FLASH button.
- 2 Press the Assigned button on to access the flash option screen.
- 3 Turn the Rear control wheel until Flash measure appears.
- 4 Make preliminary required aperture setting by turning the front control wheel.
- 5 Press the AE-L button. The camera will close the aperture, raise the mirror and fire the flash. Light reflected from the flash lit subject will be reflected off a white spot on the auxiliary shutter to the meter sensor.
- 6 Deviations from a normal exposure are displayed as differences in EV on the grip display and the viewfinder display. If 'High' or 'Low' appears, change the aperture accordingly and make a new test reading.
Change the aperture until Diff EV: 0 appears, or the desired amount of deviation from the normal exposure.

Diff EV

Low = more than 2 EV below.

Diff EV

High = more than 2 EV above.

Note!

The 'Low Flash' warning can be disabled in Main Menu on the Sensor Unit Display Settings.

EXPOSURE LOCK

MAIN MENU > CAMERA SETTINGS > EXPOSURE > EXPOSURE LOCK

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

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.

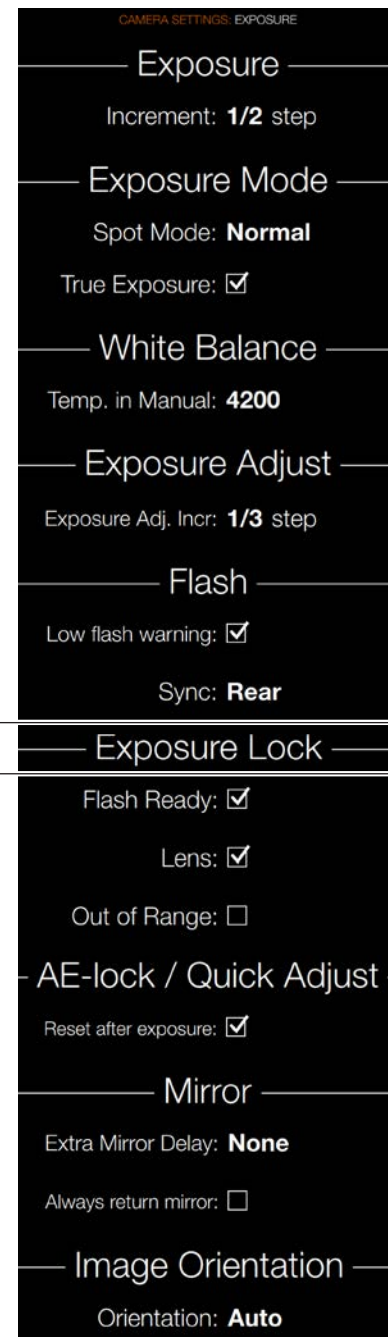
Lens

Select On or Off. If Lens is selected, it is not possible to expose without the Lens mounted.

Out of Range

Select On or Off.

Exposure Lock Settings Menu



AE-LOCK / QUICK ADJUST

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

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

Scroll down to AE-Lock / Quick Adjust.

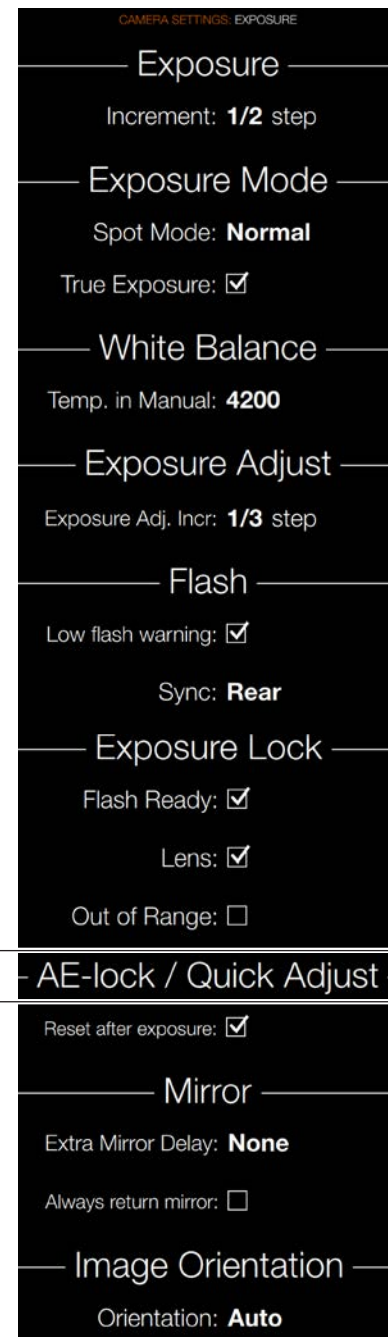
Swipe right or press Menu / EXIT button to get back to Main Menu.

AE-Lock / Quick Adjust

Reset after exposure

Select On or Off.

AE-Lock / Quick Adjust Menu



MIRROR SETTINGS

MAIN MENU > CAMERA SETTINGS > EXPOSURE > MIRROR SETTINGS

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

Select Mirror Settings.

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

Mirror Settings

Extra Mirror Delay

Select Extra Mirror Delay Settings.

- None
- 25 ms
- 50 ms
- 100 ms
- 200 ms

Always Return Mirror

Select On or Off.

Mirror Settings Menu

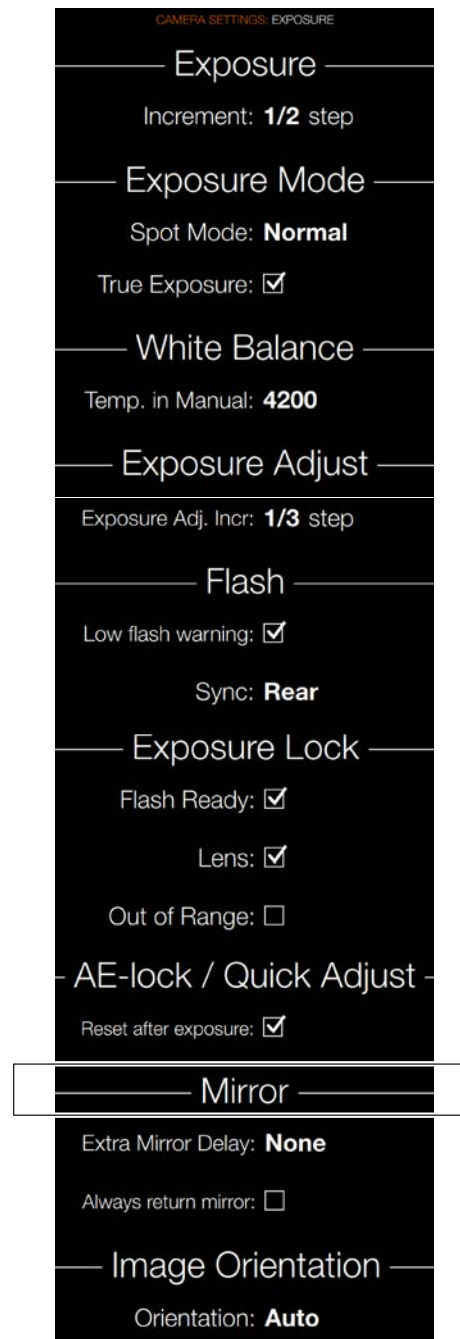


IMAGE ORIENTATION

MAIN MENU > CAMERA SETTINGS > EXPOSURE > IMAGE ORIENTATION

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Exposure Settings Menu.

Select Image Orientation Settings.

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

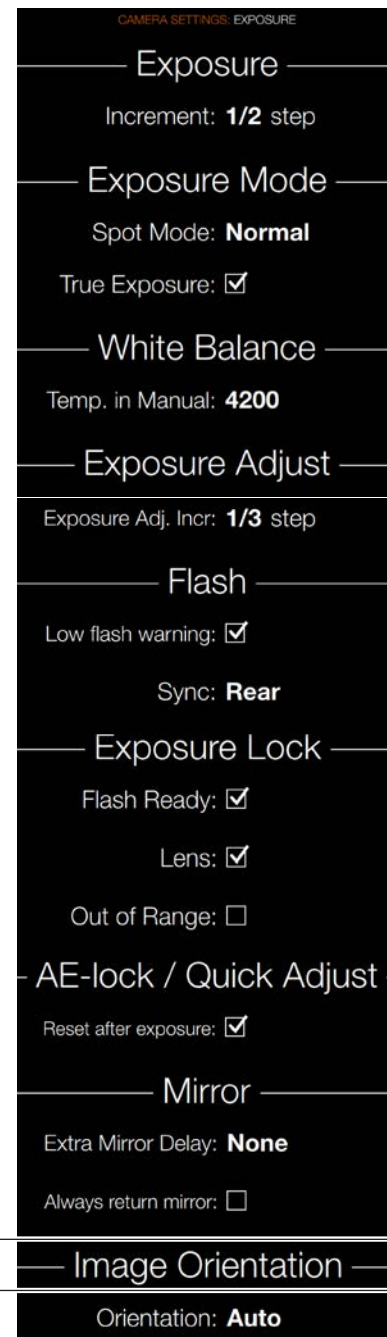
Image Orientation

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



5.5 CAMERA FOCUS SETTINGS

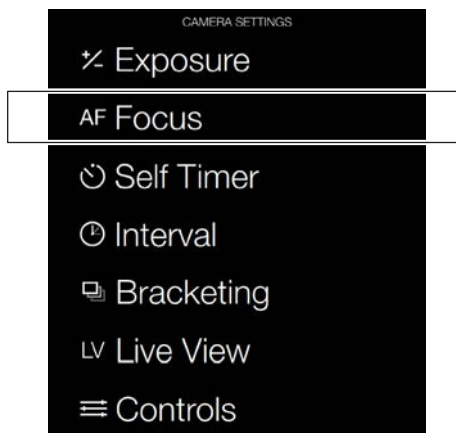
MAIN MENU > CAMERA SETTINGS > FOCUS

Select the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

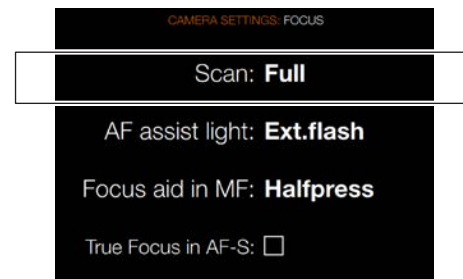
Press the Focus Settings Menu.

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

Camera Menu



Focus Settings Menu



Focus Settings Menu Contents

Scan

Settings for Scan Range (for Macro Lens only).

- Near
- Far
- Full

AF assist light

Autofocus assist light.

- Camera
- Ext. Flash
- Off

Focus aid in MF

This is a focus aid in Manual Focus Mode MF. Indicates how the focus aid arrowhead LED symbols appear in the viewfinder display in manual focus mode.

- Always. Always makes them visible all of the time when camera is active.
- Half press. Half press makes them visible when the shutter release button is pressed half way.
- Off. Off disables them completely.

True Focus in AF-S

Select True Focus in AF-S mode.

- On or Off.

FOCUSING DISTANCE CALCULATION

There are two distance scales (in feet and metres) visible through the window on the upper part of the lens barrel. The focusing distance is read off the chosen scale from the central lens index (A).



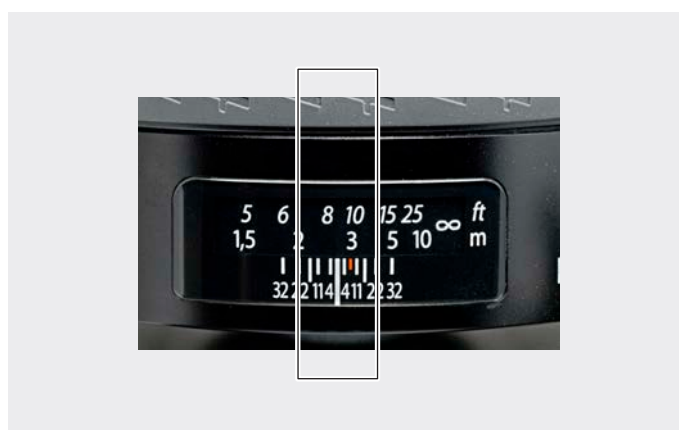
STOP DOWN / DEPTH OF FIELD PREVIEW

A visual depth-of-field preview can be made by pressing the STOP DOWN button (B) while viewing the image in the viewfinder.

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.

In the example given here, the focusing distance is set at nearly 3 metres. At an aperture of f/22, the depth-of-field would therefore extend from just over 2 m to approximately 4.5 m. Note that depth of field is not an absolute. Perception of it depends on several factors and so it should be seen only as a rough guide.



INFRARED FOCUS SETTING

As infrared rays form an image at a plane different to that formed by visible light, the normal focus settings do not apply.

Proceed as follows in manual focus mode:

- 1 Focus the lens.
- 2 Note the distance setting at the central lens index.
- 3 Realign this distance setting against the infrared mark (coloured red) instead of to the central lens index.

If the distance is calculated, a manual distance setting with use of the distance scales together with the infrared mark is made. Please contact your Hasselblad dealer for information about sensor units adapted solely for infrared photography.



FOCUS ASSIST

The camera also features a LED focus assist. Two arrowheads are displayed to the right of the viewfinder display (except for lenses with a maximum aperture of f/6.7 or smaller). The arrowheads provides confirmation of a precision focus setting and are a useful aid when making a setting with eyesight only.

Manual focus setting

When the left arrowhead appears alone it means the focus setting is too far beyond the chosen distance (the area framed within the central zone in the viewfinder) and when the right arrowhead appears alone it means the focus setting is too close. Focus is correct when both arrowheads appear together. If the focus cannot be established, then both arrowheads flash.

Automatic focus setting

Focus is correct when both arrowheads are visible together. Focus is incorrect if only one arrowhead is visible. If the focus cannot be established, then both arrowheads flash.

Note!

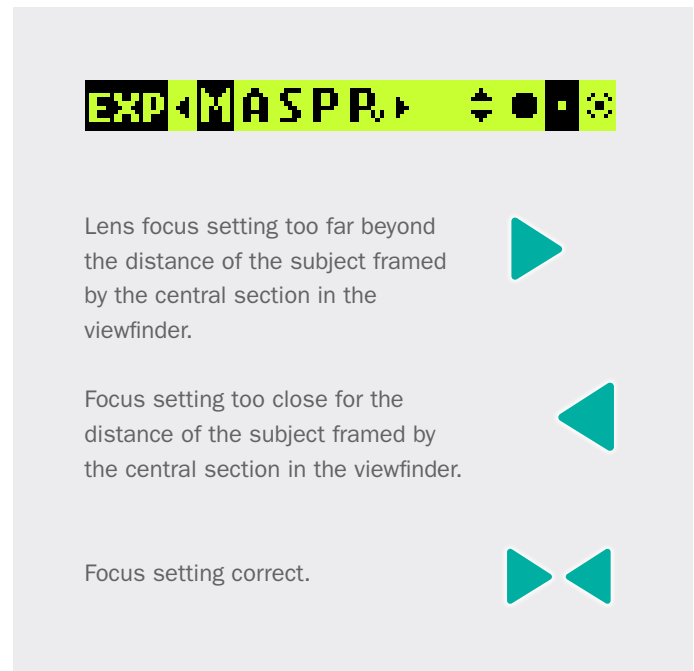
The autofocus range on the HC 4/120 Macro lens can be limited by a specific setting on the camera allowing for near range, far range or full range. This information is displayed on the grip display together with that particular lens, in the Sensor Unit Display and in the Viewfinder Display. Further information can be found in the “H-system Lenses & H-system Lens Accessories” booklet that accompanies each lens. The booklet can also be downloaded from the Hasselblad website. Also, see note here regarding HCD lenses!

Note!

HCD lenses were formulated for use with the smaller size sensors in the H-series, resulting in a reduced coverage for the larger sensors used in some models. So, if you use HCD lenses, be aware of the restrictions (vignetting and diminished quality at the edges). As notification of this situation, an auto crop function is employed and an HCD crop icon appears on the right hand side of the viewfinder display when an HCD lens is fitted. When in Phocus, however, the auto crop function can be turned off in Preferences if you wish.

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.



Info!

For users who prefer manual focus control but would like the benefits of autofocus, one method is to set the AE-L button (or any customizable button) to AF (Single) drive. The main subject can then be centred and the AE-L 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 (AF-T can also be used).

Info!

The True Focus function can also be combined with other autofocus modes for specific situations.

Info!

To expand your range of lenses, consider using a CF adapter to allow you to use most of the lenses from the Hasselblad V-system.

Note!

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

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 button (B) and select AF-S, AF-C or AF-T.

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 pinpoint 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

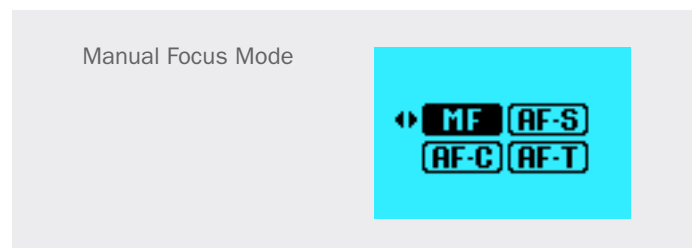
- 1 Press AF Button (B).
- 2 Turn the Front Scroll Wheel (A) to select Manual, Single Shot, Continuous, True Focus..
- 3 Press AF Button (B) to Save.

Note!

In manual focus, the infinity and closest distance marks on the lens scale can appear to be positioned beyond the central index. This is only an apparent effect and does not change the focusing range of the lens.



A Front Scroll Wheel
B AF Button



AUTOFOCUS

Autofocus modes Single Shot or Continuous are activated by pressing the shutter release to the half-press position.

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

The point of focus is determined according to the vertical and horizontal areas (see illustration) within the central rectangular zone on the focusing screen.

Alternatively, an attached flash unit that has a similar facility (a Metz 54/70, for example) can also be used. This feature can be altered in settings.

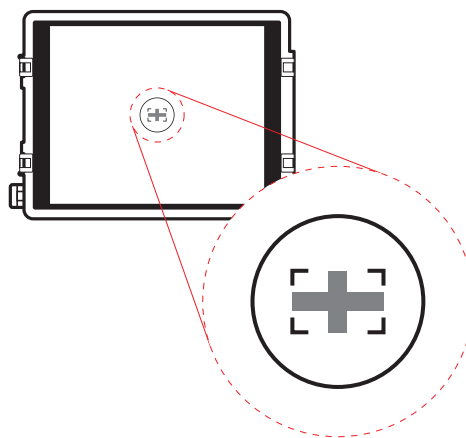
True Focus is also classified as an autofocus function and is normally activated by its own button on the grip. See later section.

AF Assist light

When light levels are too low or the contrast of the subject is too low, AF assist light is automatically activated if selected. The operative distance is approximately up to six metres from the camera.

AUTOFOCUS CHECK IN MANUAL MODE

See the following section for a description of how to use the advantages of a quick autofocus check while remaining in Manual mode.



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 though that 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. 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, 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 and pressing again half way 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 in a combined manner.

CONTINUOUS FOCUS

At Continuous setting (AF C), the shutter can be released rapidly before the lens is focused in order to capture a split-second shot (in Single Shot, a capture cannot be made until the camera has had time to focus). However, the camera will continue to focus if a moving subject is within the focusing zone or if you recompose, even though the shutter release button is half pressed.

One method to use this feature when photographing in fast changing situations is to keep the shutter release button pressed down. The lens focus continuously, and by momentarily releasing the pressure on the shutter release and then immediately pressing again, you minimize the amount of time needed for the lens to check focus ensuring a split second shot with optimum focus.

AF-S Single Shot Mode



AF-C Continuous Mode



5.6 CAMERA TRUE FOCUS

The True Focus setting (AF-T) is generally used in specific circumstances to automatically correct for camera angle/focus setting discrepancies, but it can also be combined with other autofocus settings.

To exploit True Focus correctly, a few important points should be studied in order to obtain a full understanding of how and when to use it. Basically, there are four variables to pay attention to:

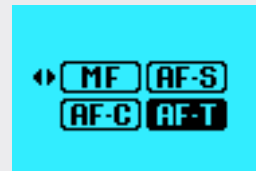
- proximity of camera to subject,
- focal length of lens,
- aperture setting and
- movement of camera and/or subject after setting.

The closer you remain to the ideal situation with regard to these variables, the more noticeable the effect of True Focus will be.

- The closer you are to the subject, the worse the original problem becomes. Consequently, the need for True Focus solution becomes greater and its application thereby becomes more noticeable.
- Short focal length (wide-angle) lenses naturally decrease camera to subject distances and therefore, following the point in (a), produce a greater need for True Focus adjustments.
- Smaller aperture increase the depth of field and therefore would lessen the need for a True Focus solution. However, smaller apertures produce a different visual effect, so True Focus therefore allows the exploitation of the shallow depth of field (produced by larger apertures) without the fear of unwanted focus restrictions.
- The calculations involved in True Focus use, amongst other things, camera to subject distances to calculate the required amount of adjustment. It therefore follows that if the camera or the subject move after the initial setting has been made, the calculations will not be applicable anymore. So, to ensure the optimum correction, both the photographer and the subject should restrict movement as much as possible. Please note that with some lenses (particularly longer length lenses) just a few centimetres movement can essentially ruin the result.

True Focus can be used with longer lenses, smaller apertures but the further you come from situations similar to the 'ideal' as described above, the less the effect will be until it has no visible effect at all. Please remember that although True Focus can noticeably improve a demanding shoot it will only work effectively in the specific circumstances it was designed for.

AF-T True Focus Mode



TRUE FOCUS AND ABSOLUTE POSITION LOCK

The obvious situation that would most benefit from using True Focus would be a fashion shoot with a fairly wide angle lens at a large aperture setting and where the central area of the image is clothing while retaining focus on the model's face. Ideally a fairly controlled and static flow should be planned. A change of pose by the model should take place only after captures. The photographer must also resist crouching down, or leaning forwards or backwards too much before capture.

With the lens at its widest aperture setting, a normal autofocus setting is made on the model's face (A), and the camera focus locked. The composition is then changed to include more of the clothing (B), but the locked focus setting now extends beyond the model's face at (B) according to the laws of geometry. This will naturally result in an image where much of the subject closest to the camera and the model's face will be unsharp. Solutions involving manual focus / focus lock / resetting of multi-point sensors are distracting to work flow and prone to error. Making a True Focus setting at (A) will ensure that focus is automatically adjusted in accordance with the change of camera angle.

True Focus uses yaw rate technology and by way of the Absolute Position Lock (APL) processor, logs camera movement as the basis for an extremely rapid compensatory focus reset without any shutter lag. The H6D's firmware then further perfects the focus using the precise data retrieval system found on all HC/HCD lenses.

A

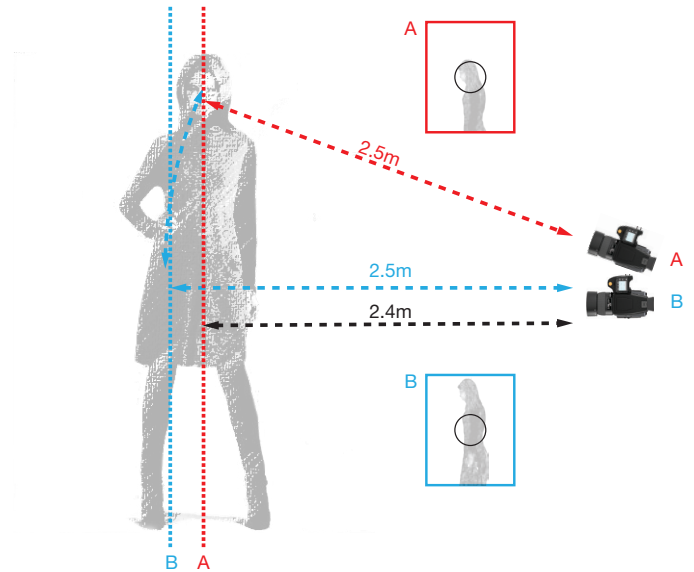
A normal autofocus setting is made on the model's face and locked.

The focus setting is approximately 2.5m.

B

When the camera is rotated back down, B, the locked focusing distance of 2.5m, according to the laws of geometry, extends beyond a perpendicular line drawn down from the face, creating unsharpness.

If a True Focus setting instead of a normal autofocus setting is now made at A and the composition is changed back to B again, the camera will automatically calculate and adjust the focus of 2.5m to approximately 2.4m, which is the actual perpendicular distance. The model's face remains sharp.



TRUE FOCUS AND CAMERA HANDLING

To obtain the maximum benefit from True Focus work within the requirements of the system. This might need a little practice but it will improve the accuracy of the measurements and thereby provide better results.

- 1 Remain as still as possible when making the first True Focus measurement and wait for the audio signal or ready light to show green again before continuing. This will not only speed up the process but also increase accuracy.
- 2 When recomposing the shot stay in the same position as closely as possible. That is, try to avoid moving your head or body forwards or backwards as this will move the camera away from the measured position.

In the upper example to the right, the photographer has swung the camera from the first measurement to recompose the shot as normal. But as you can see that the camera has now moved away from the original position.

The lower example illustrates essentially the same situation except this time the camera is rotated around its central axis, rather than swung. Practice shows that this method retains the original position more accurately and therefore results in better focusing accuracy.



Incorrect rotation of camera away from original position.



Correct rotation of camera around its own center.

FOCUS CHECKING

An effective way of checking the focus of individual captures is to assign for example Mirror Up or Stop Down button to Focus Confirm.

In browse mode or after a capture you can either double tap on the Sensor Unit Display to zoom in to 100% or spread two fingers apart to zoom in. To zoom out you can double tap again or pinch two fingers together.

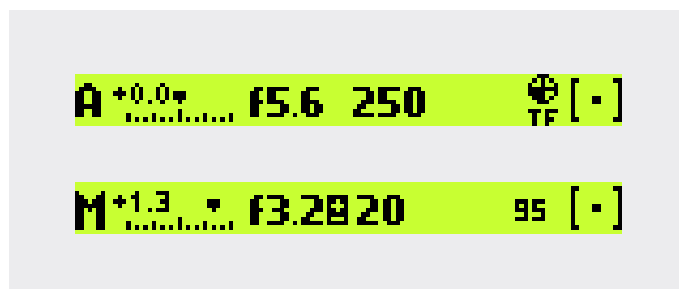
5.7 CAMERA TRUE FOCUS METHODS

ACTIVATED BY SHUTTER RELEASE - TRUE FOCUS RETAINED

MAIN MENU > GENERAL SETTINGS > CAMERA > TRUE FOCUS

In this mode the Autofocus function is effectively converted into the True Focus function. Focus is set by half pressing the shutter release button (A).

- 1 On the Sensor Unit Display, select Camera Settings.
- 2 Select Focus.
- 3 Select True Focus in AF-S On.
- 4 Aim camera to the important area of the subject and half press the shutter release button (A).
- 5 Wait for the True Focus icon to appear in the viewfinder and the audio confirmation signal.
- 6 Maintain the half-press (A) and recompose the picture. Press fully to make the capture. The True Focus icon disappears from the viewfinder. True Focus function is retained.

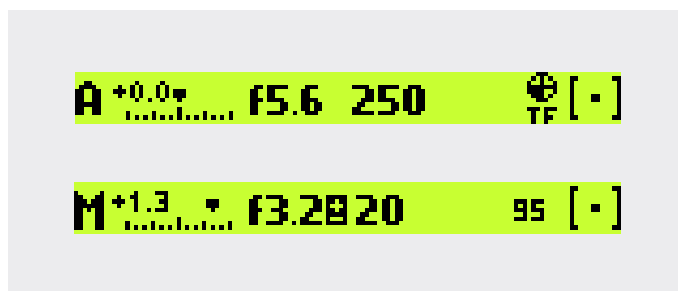


TEMPORARILY ACTIVATED - AUTOFOCUS RETAINED

MAIN MENU > GENERAL SETTINGS

In this mode the True Focus function is activated by pressing an assigned button. This produces a 'one-shot' setting where the camera reverts to its original Autofocus setting after capture. Useful if you want to quickly switch back and forth between True Focus and normal Autofocus.

- 1 Program the buttons in the Main Menu on the Sensor Unit Display.
- 2 Aim camera at important area in subject and press the selected button (the grip display now indicates AF-T mode).
- 3 Wait for the True Focus icon to appear in the viewfinder.
- 4 Recompose the picture and press Shutter Release button (A) (camera does not refocus because it is temporarily in AF-T mode). The True Focus icon disappears from the viewfinder. Camera reverts to AF-S.
- 5 Note that camera reverts to AF-S if the focusing ring on the lens is moved.



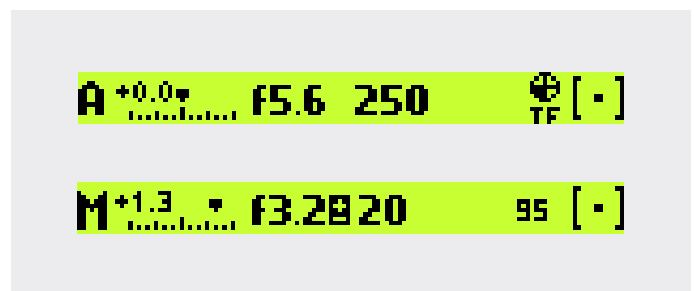
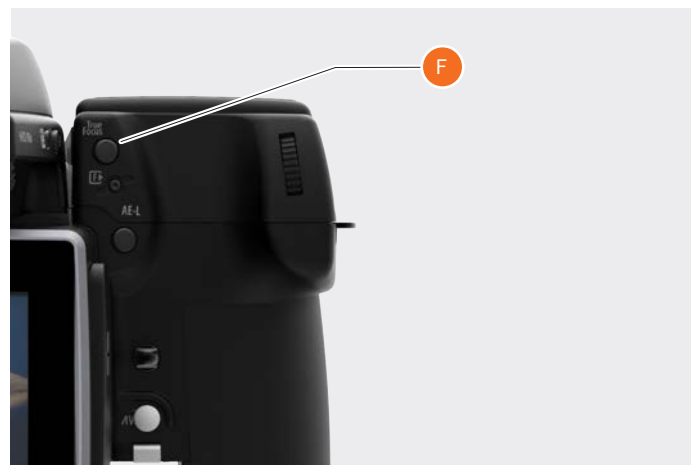
ACTIVATED BY TRUE FOCUS - AUTOFOCUS DEACTIVATED

In this mode the True Focus function is activated by pressing the True Focus button. Normal autofocus is de-activated, therefore pressing the shutter release button will not reset the focus. This method is useful when many shots are required with the same focus setting.

- 1 Press AF button (C). Select True Focus with the Front scroll wheel (B). Save.
- 2 Aim camera to the important area of the subject and press True Focus button (F).
- 3 Wait for the True Focus icon to appear in the viewfinder. Recompose the picture and press shutter release button (A).

Note!

The True Focus adjustment is applied to all following captures until True Focus button is pressed again (when a new adjustment is made).



ACTIVATED BY AN ASSIGNED BUTTON - MANUAL FOCUS RETAINED

In this mode the True Focus function is activated by pressing an assigned button. This produces a 'one-shot' setting where the camera reverts to its original Manual focus setting after capture.

Pressing the shutter release button (A) will not reset the focus. This method is useful when many shots are required with the same focus setting.

- 1 Press MENU, select General Settings, select the desired button to reassign with the Front scroll wheel (M.UP button in this example). Select True Focus with the Rear scroll wheel. Save.
- 2 Aim camera at important area in subject and press the selected button.
- 3 Ensure that the True Focus icon appears in the viewfinder. Recompose the picture and press shutter release button. The True Focus icon disappears from the viewfinder. Camera reverts to Manual focus setting.

Note!

The True Focus adjustment is applied to all following captures until the True Focus button is pressed again (when a new adjustment is made).



Viewfinder Display View

True Focus TF symbol visible

M +1.3 • f3.2 20 95 [-]

5.8 CAMERA SELF TIMER

MAIN MENU > CAMERA SETTINGS > SELF TIMER

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

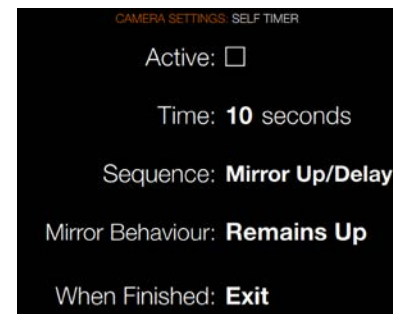
Press the Self Timer Settings Menu.

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 / Off

Time

Select time in seconds. Select between 2 - 60 seconds.

Sequence

Delay / Mirror Up.
Mirror Up / Delay.

Mirror behaviour

Mirror moves up.
Mirror remains up.

When Finished

Exit or Stay.

Grip Display View
Self Timer Settings



5.9 CAMERA INTERVAL SETTINGS

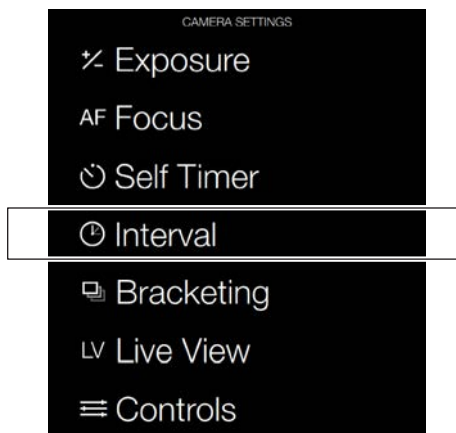
MAIN MENU > CAMERA SETTINGS >
INTERVAL

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

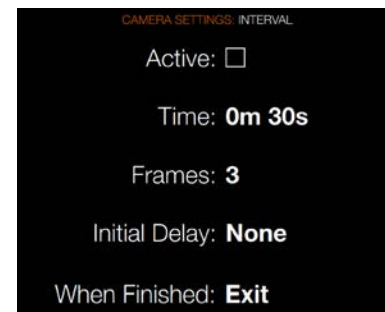
Select the Interval Settings Menu.

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

Camera Menu



Interval Settings Menu



Interval Settings Menu

Active

On / Off.

Time

Select time between Exposures in minutes and seconds.

Frames

Select number of Frames from 2 - 99 or no limit.

Initial Delay

Select initial Delay. None or Interval time 60 s, 10 s, 2 s.

When Finished

Settings for Action When Finished. Exit or Stay.

5.10 CAMERA BRACKETING SETTINGS

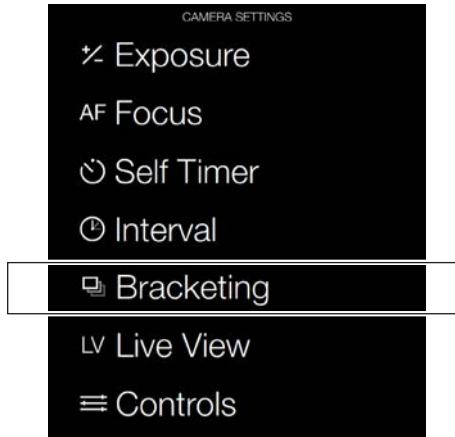
MAIN MENU > CAMERA SETTINGS >
BRACKETING

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

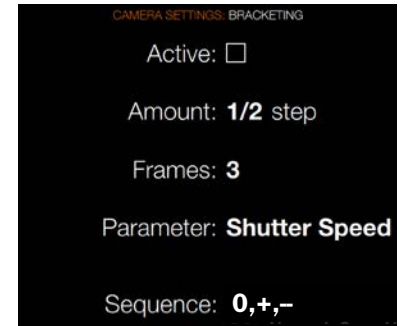
Press the Bracketing Settings Menu.

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

Camera Menu



Bracketing Settings Menu



Bracketing Settings Menu

Active

On / Off.

Amount

Select Amount of Bracketing.

Frames

Select number of Frames.

Parameter

Aperture or Shutter speed.

Selects either the shutter speed or the aperture as the parameter which changes in a bracketing sequence when in Manual exposure mode.

Shutter speed selects changes in shutter speed.

Aperture selects changes in aperture settings.

Sequence

Select the sequential order of the over- or underexposures.

A: 0 + -

B: 0 - +

C: + 0 -

D: - 0 +

BRACKETING FUNCTION

The bracketing function provides an automatic series of captures, one at the standard exposure setting (Manual or Auto) and the others with pre-determined deviations in EV from the standard exposure. This is particularly useful for images containing a very wide tonal range, for example. First you make an assessment concerning the number of extra frames required, the order in which they should be taken, and by how much the EV deviation there should be and the setting made accordingly. The first metered exposure (Manual or Auto) is the EV that determines the calculations for the bracketing sequence. Note the difference in operation between Single and Continuous drive settings:

- At the Single setting you must press the shutter release button separately for every separate capture until the sequence is finished.

- At the Continuous setting you can either maintain the pressure on the button to take all frames without stopping or you can release the pressure on the button and press again to continue to the end of the sequence without losing any frames within the set sequence.

5.11 CAMERA LIVE VIEW SETTINGS

MAIN MENU > CAMERA SETTINGS > LIVE VIEW

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Live View Settings Menu.

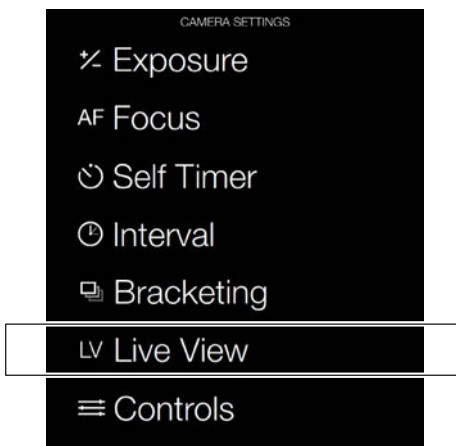
Swipe right or press Menu / EXIT button to get back to Main Menu.

Self Live View Settings Menu

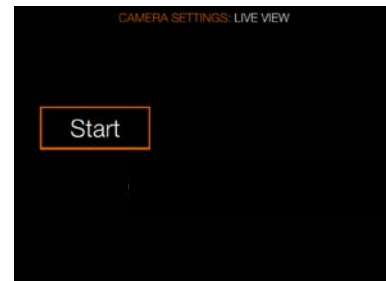
Start

Start Live View Mode.

Camera Menu



Live View Settings Menu



This Chapter Continuous on the next page.

LIVE VIEW

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

- 1 Select Camera Settings > Live View.
- 2 Press Start to activate Live View.
- 3 Press button D to toggle overlay forward.
- 4 Press button B returns on step.
- 5 Button A, C, and E to Exit Live View.

Live View Settings

Overlay

Select Overlay Displayed during Live View. Scroll between options with button (B) and (D).

- Exposure Information
- Grid
- None

ZOOMING IN LIVE VIEW

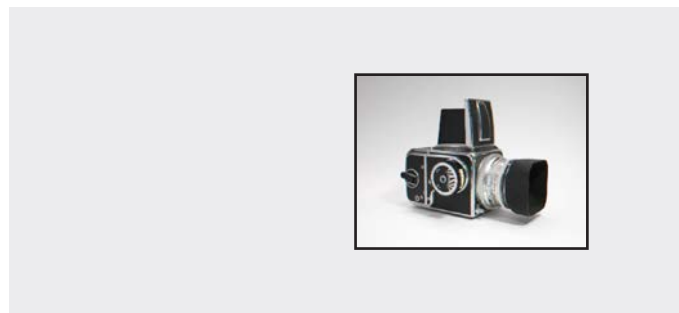
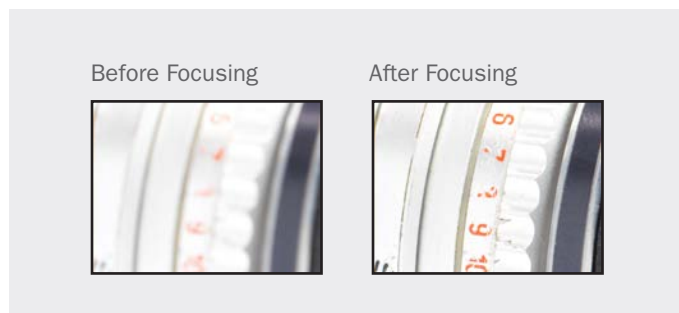
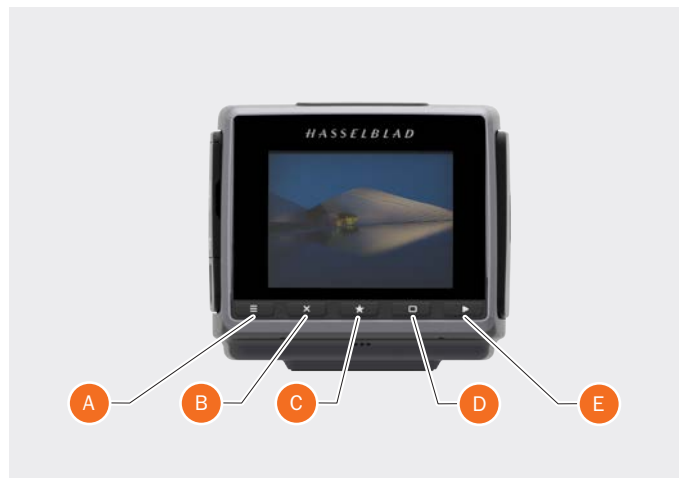
- 1 Double click on Sensor Unit Display to Zoom in to Actual Pixel Size (100%) to that specific area.
- 2 Double click again to Zoom out to Display the entire Capture.
- 3 You can move the image to view different areas by swiping.

FOCUS IN LIVE VIEW

- 1 Double click on Sensor Unit Display to Zoom in to selected Focus Area.
- 2 Adjust Focal Point manually on the Lens.
- 3 Double click again to Zoom out to Display the entire Capture.

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 via HDMI.

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.

5.12 CAMERA CONTROLS SETTINGS

MAIN MENU > CAMERA SETTINGS > CONTROLS

Press the Camera icon on the Sensor unit display. The Camera Settings Menu will appear.

Press the Controls Settings Menu.

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

Camera Controls Settings Menu

Camera Body Top

Front Wheel

-Aperture
Shutter Speed

Normal Aperture

Normal
Light Meter

Allows choice of aperture indication display (in Manual mode only).

Normal selects conventional display (f5.6, f8, etc).

Light meter selects 'light meter' type display (f5.6, f8, etc).

Hide B/T mode

Select On / Off.

Camera Body Front

AE lock when half pressed

Select On / Off.

Mirror Up

Settings for Mirror Up button.

Stop Down

Settings for Stop Down button.

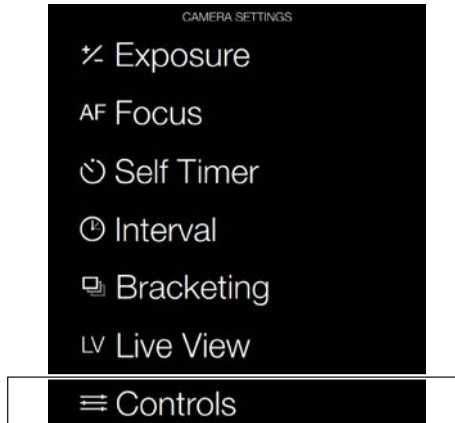
Camera Body Back

True Focus

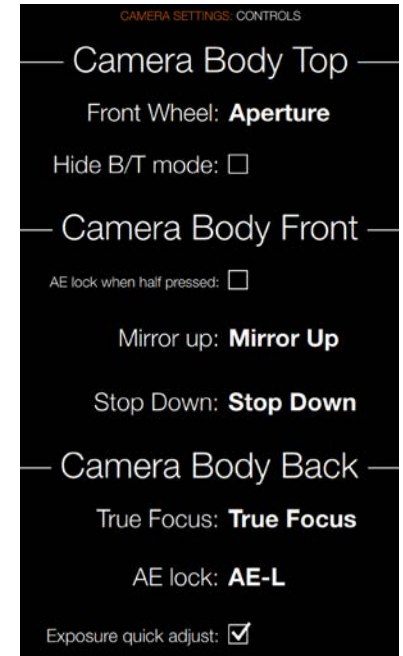
Settings for True Focus.

AE Lock

Camera Menu



Controls Settings Menu



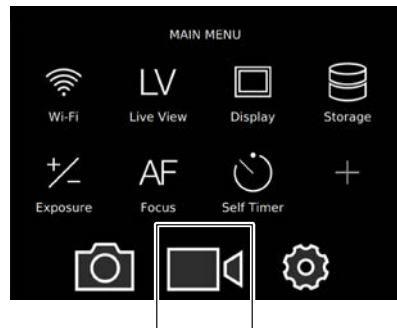
Settings for AE Lock.

Exposure quick

Select On / Off.

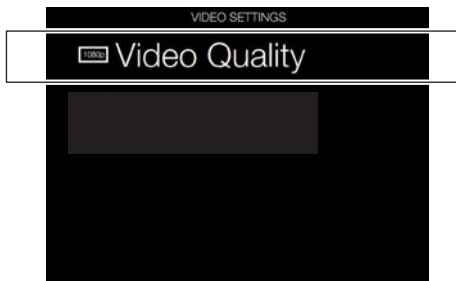
5.13 VIDEO SETTINGS MENU

Main Menu

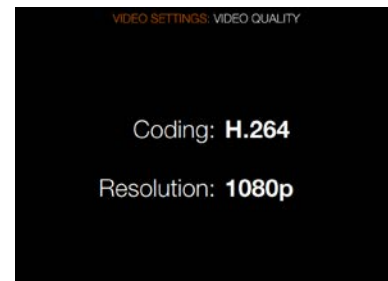


Video icon

Video Settings Menu



Video Quality Settings



MAIN MENU > VIDEO SETTINGS

Press the Video icon on the Sensor unit display. The Video Settings Menu will appear.

Select the Video Settings Menu.

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

VIDEO SETTINGS

In this release it is not possible to change the Coding or Resolution Settings. In a future firmware release there will be more options.

Coding

Video Quality Coding Settings.

Resolution

Video Quality Resolution Settings.

5.14 VIDEO QUALITY SETTINGS

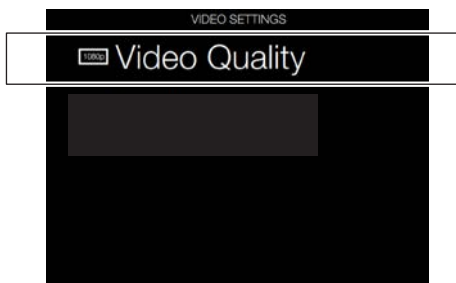
MAIN MENU > VIDEO SETTINGS >
VIDEO QUALITY

Press the Video icon on the Sensor unit display. The Video Settings Menu will appear.

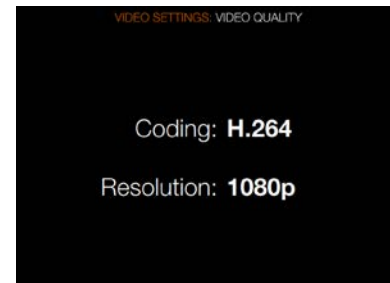
Press the Video Quality icon.

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

Video Settings Menu



Video Quality Settings



VIDEO QUALITY SETTINGS

In this release it is not possible to change the Coding or Resolution Settings. In a future firmware release there will be more options.

Coding

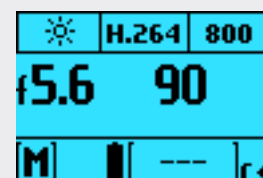
Video Quality Coding Settings
- H.264

Resolution

Video Quality Resolution Settings.

Video Coding

H.264 Video Coding.



5.15 VIDEO RECORDING

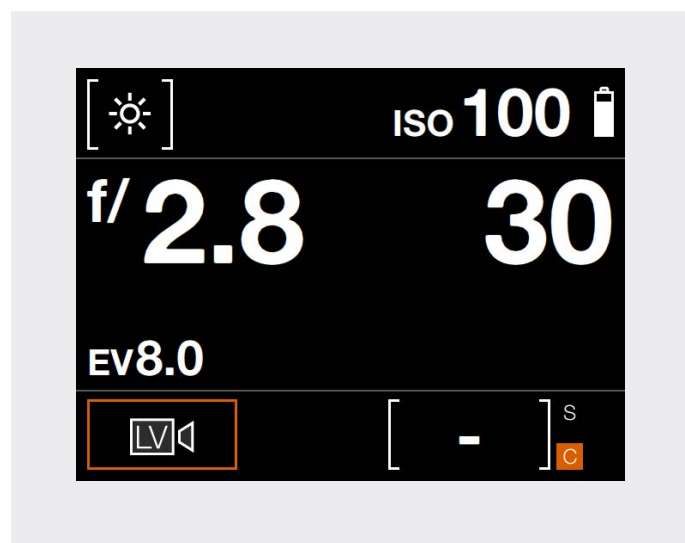
To Record Video

- 1 Enter Video mode by a long press on the Video icon (1) on the Grip Display.
- 2 The Video Control Screen is displayed.
- 3 Start the Live Video Stream by pressing the Live Video icon.
- 4 The Video Stream is displayed on the Sensor Unit Display.
- 5 Start Recording by pressing the Exposure Trigger Button (2) or by pressing the red recording icon on the sensor unit display.
- 6 Stop the Recording by pressing the Exposure Trigger Button (2) or by pressing the stop icon on the sensor unit display.



- 1 Video Mode Button
- 2 Exposure Trigger Button

Video Control Screen



Video Display when capturing video

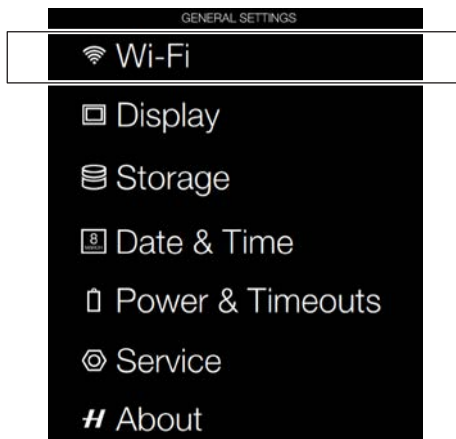


5.16 GENERAL SETTINGS MENU

Main Menu



General Settings Menu



Wi-Fi Settings Menu



MAIN MENU > GENERAL SETTINGS

Press the Settings icon on the Sensor unit display. The General Settings Menu will appear.

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

Wi-Fi Settings Menu Options

There are 2 options:

- 2.4 GHz.
- 5 GHz.

Continues on the next Page.

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 Sensor Unit 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.

Share Photos on Mobile Phocus App

When working with the Phocus Mobile App on your iPhone/iPad/iPod you can select the Share button in Phocus Mobile and share the photo in a text message, e-mail or on Facebook. You can also select Save as Image.

Note!

No images are stored on the iPhone/iPad/iPod. If you want to send a Photo via e-mail, use the Share function in Phocus Mobile or take Screen shot function on the iPhone/iPad.

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: “H6D-50c SQ34000123”

Wi-Fi Settings Menu



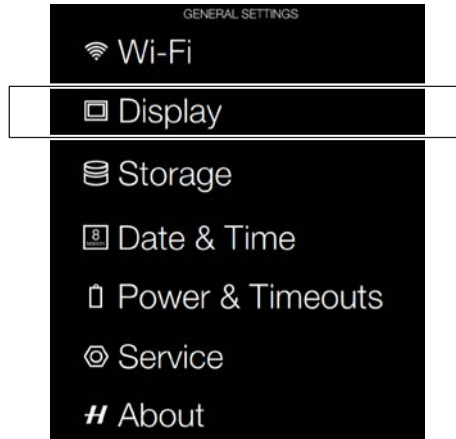
5.17 GENERAL SETTINGS DISPLAY

MAIN MENU > GENERAL SETTINGS >
DISPLAY

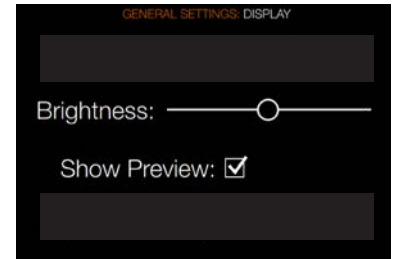
- 1 Press the Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Select Display.

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

General Settings Menu



Display Menu



Display Menu Settings

Brightness

Slide Left or Right to change Brightness.

Show Preview

Select On / Off. On displays a preview of the capture after every exposure.

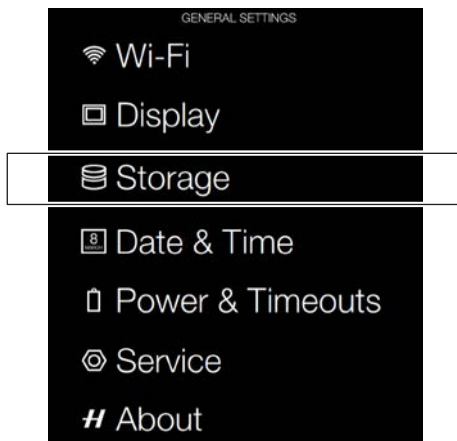
5.18 GENERAL SETTINGS STORAGE

MAIN MENU > GENERAL SETTINGS > STORAGE

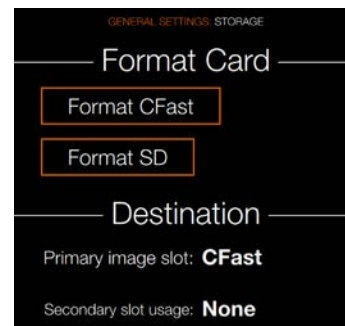
- 1 Press the Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Storage icon.

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

General Settings Menu



Storage Menu



Storage Menu Settings

Format Card

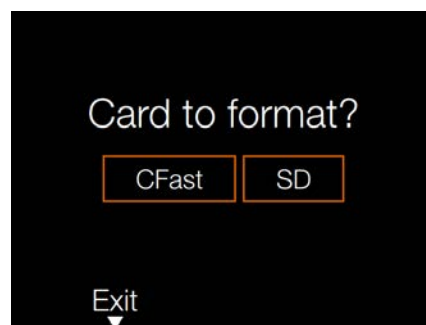
- Format CFast.
- Format SD.

Image Destination

- Primary slot: CFast or SD.
- Secondary slot usage.

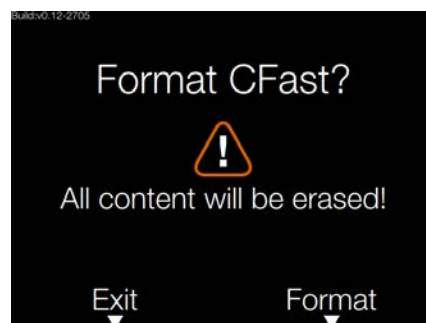
Format Card

Select Card to Format. CFast or SD Card.
Select Exit to Exit without formatting.



Format CFast Card Dialogue

Select Format to Format CFast Card.
All content will be erased.
Select Exit to Exit without formatting.



FORMAT CFAST AND SD CARDS

MAIN MENU > GENERAL SETTINGS > STORAGE > FORMAT CFast

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 CFast cards and SD cards in the sensor unit for H6D use.

There are two ways to format cards. The quickest way is to use the Format card button on the grip but if you prefer, you can also use the menu on the sensor unit.

FORMAT BUTTON

Press the Format button (A) on the camera grip. It is purposely recessed to avoid unintentional use, so use a ballpoint pen or similar. A prompt is displayed on the sensor unit for confirmation. It is also possible to press the format button with a hard press with a fingertip.

FORMAT MEMORY CARDS VIA SENSOR UNIT

MAIN MENU > GENERAL SETTINGS > STORAGE > FORMAT SD

- 1 Press MENU.
- 2 Navigate to Storage (use the Rear scroll wheel or navigate via the touch screen).
- 3 Navigate to Format Card (use the Rear scroll wheel or navigate via the touch screen).
- 4 Click on the button Format CFast or Format SD.
- 5 Confirm by pressing Format.

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

Note!

All CFast and SD memory cards should be formatted in the sensor unit before using them the first time.

Note!

Only UDMA/type 4/60MBs (or 400x) cards or better are recommended for H6D use.



Storage Menu

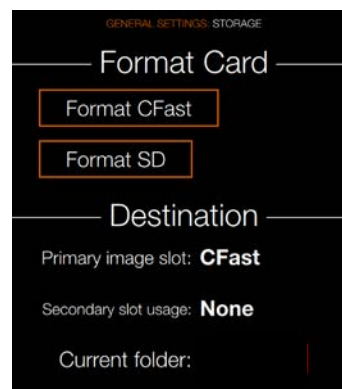


IMAGE AND VIDEO DESTINATION

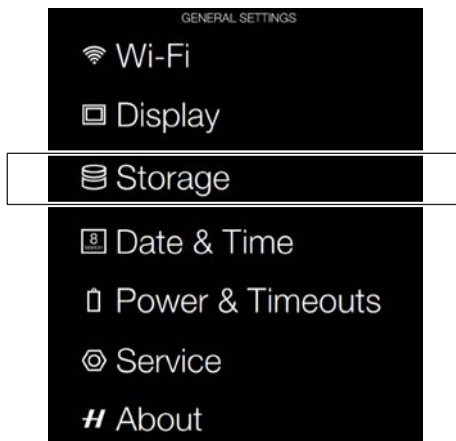
MAIN MENU > GENERAL SETTINGS >
STORAGE > IMAGE DESTINATION

Destination Settings.

- 1 Press the Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Storage icon.
- 4 Select Image Destination.

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

General Settings Menu



Storage Menu

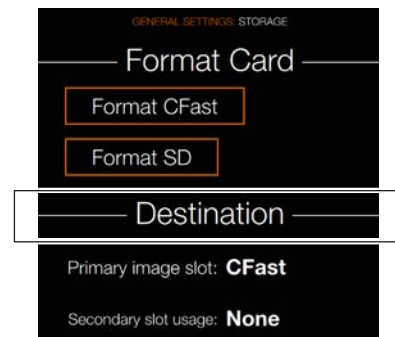


Image Destination

- Primary slot: CFast or SD.
- Secondary slot usage:
 - None.
 - Overflow.

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

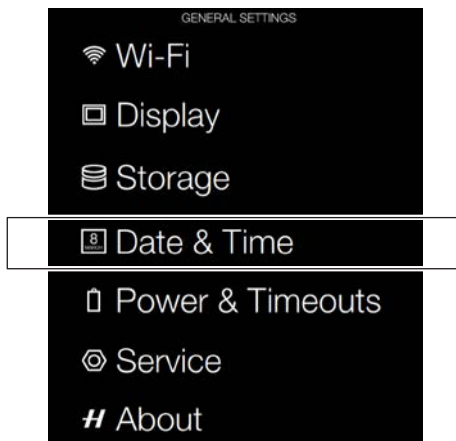
5.19 GENERAL SETTINGS DATE AND TIME

MAIN MENU > GENERAL SETTINGS >
DATE AND TIME

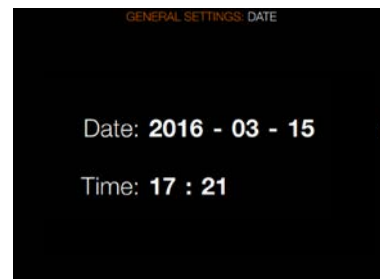
- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the Date and Time icon.

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.

5.20 GENERAL SETTINGS POWER AND TIMEOUTS

MAIN MENU > GENERAL SETTINGS >
POWER AND TIMEOUTS

The H6D Camera can be set to automatically turn off the Sensor Unit Display after a set amount of seconds to save battery for example.

It can also be set to Power Off after 10, 30 or 60 minutes.

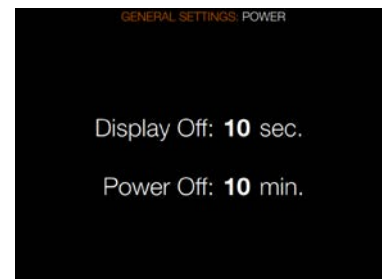
- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Power and Timeouts icon.
- 4 Adjust the time values by pressing the value and adjust the value in the pop up menus.

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

General Settings Menu



Power and Timeouts Menu



Power and Timeouts Menu

Display Off

Select Display Off Settings.

Power Off

Select Display Power Off Settings.

SET DISPLAY OFF MODE

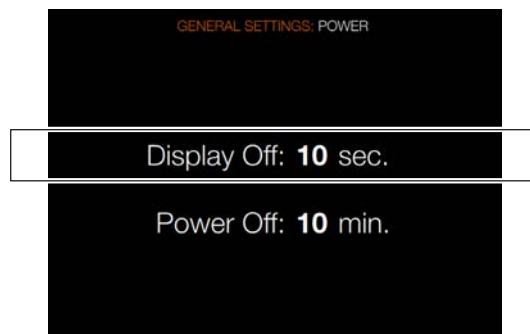
MAIN MENU > GENERAL SETTINGS > DISPLAY > POWER MODES AND TIMEOUTS

- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Power and Timeouts icon.
- 4 Select Display Off.

In this mode the camera turns off the grip and sensor unit displays but remains ready to be immediately reactivated to the ON mode.

The time intervals are:

- 10 seconds.
- 20 seconds.
- 30 seconds.
- 60 seconds.
- Never.



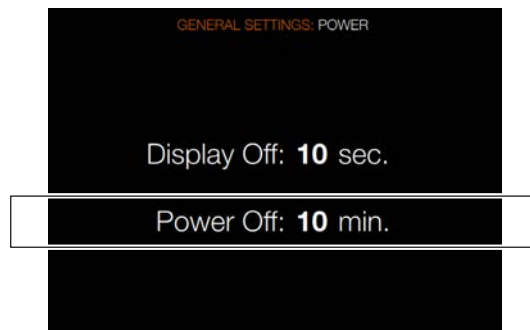
POWER OFF

MAIN MENU > GENERAL SETTINGS > DISPLAY > POWER MODES AND TIMEOUTS > POWER OFF

Sets the amount of elapsed time before the camera enters complete power off mode. See 'Power Modes' section in this manual for further details.

Power Off options

- Power Off after 5 minutes.
- Power Off after 10 minutes.
- Power Off after 30 minutes.
- Power Off: Never



RE-ACTIVATE CAMERA FROM DISPLAY OFF/POWER MODE

Do any of the following actions:

- Press the Shutter release button half way.
- Press the Stop down button.
- Click the ON.OFF button.
- Press the Mirror up button.

5.21 GENERAL SETTINGS LANGUAGE

MAIN MENU > GENERAL SETTINGS > LANGUAGE

- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Language icon.

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

Language Menu Settings

More language options will be added in a future Firmware release.

Available Language:

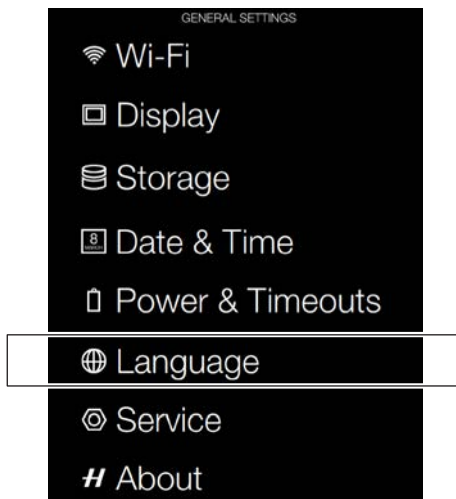
- English

- 1 Press MENU button on the Sensor Unit 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 sensor unit has been set to a language you don't understand (a rented camera, for example), see Chapter Troubleshooting for solution.

General Settings Menu



Language Menu



5.22 GENERAL SETTINGS SERVICE

MAIN MENU > GENERAL SETTINGS > SERVICE

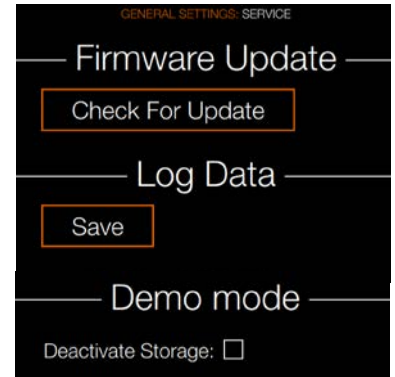
- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Service icon.

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

General Settings Menu



Service Menu



Service Menu Settings

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.

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 CFast card or SD card.
- 7 Save the chosen selection by pressing EXIT (MENU button).

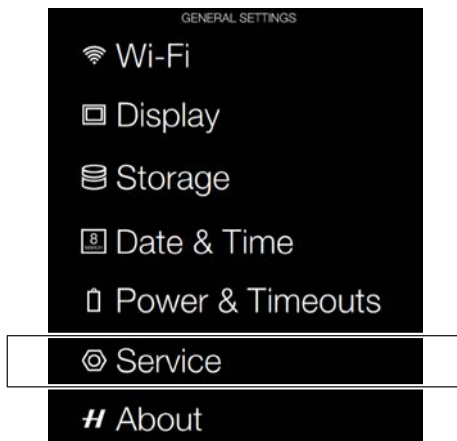
5.23 GENERAL SETTINGS CHECK FOR UPDATE

MAIN MENU > GENERAL SETTINGS >
CHECK FOR UPDATE

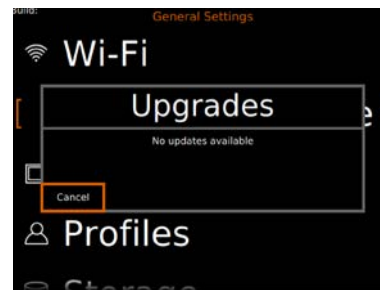
- 1 Press the Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings Check for Update button.

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

General Settings Menu



Check for Update Menu



Check for Update Menu Settings

When connected to internet you can check for Firmware Upgrades.

5.24 GENERAL SETTINGS ABOUT

MAIN MENU > GENERAL SETTINGS >
ABOUT

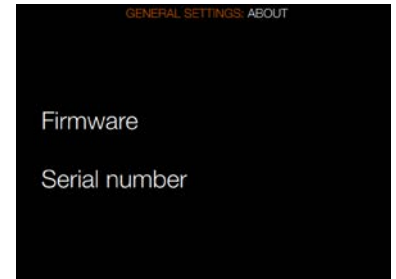
- 1 Press the General Settings icon on the Sensor unit display.
- 2 The General Settings Menu will appear.
- 3 Press the General Settings About icon.

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

General Settings Menu



About Menu



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). The serial number is also displayed in case Hasselblad Support need to know it for problem solving.

5.25 GRIP DISPLAY NAVIGATION

BUTTONS AND CONTROLS ON GRIP DISPLAY

Press the buttons that surrounds the display and turn the scroll wheels to navigate the menu and access the settings on the grip. Note that some of the buttons have several functions which is indicated by the designation that appears closest to that particular button when navigating. For example, the Menu button (F) also acts as a Video button. The Play button (G) also acts as Illumination On for the Grip Display. The ON / OFF button (H) also acts as the Profiles button.

List of the various terms describing the various actions that appear on the grip display:

Quick save - half press shutter release button.

Escape - press ESC button (H). Terminates an action and returns to the main screen. Does not save any settings.



- A Shutter release button
- B Front scroll wheel
- C WB button
- D AF button
- E ISO
- F MENU / Video button
- G PLAY / Illumination
- H ON / OFF (Profiles) button
- I Rear scroll wheel
- J Exposure and flash compensation button
- K Exposure mode / Metering mode

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 both on the grip display and in the viewfinder display.

How to adjust shutter and aperture

- 1 Turn the front scroll wheel (A) to adjust the shutter and aperture.
- 2 Turn the rear scroll wheel (B) to adjust the 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 or Pv mode:

- Front wheel = Aperture/shutter speed combination.
- Rear wheel = Quick exposure adjustment.

See under Light Metering and Exposure Control/Exposure Method for a complete description.



GRIP DISPLAY NAVIGATION

Main Screen

This is the Main Screen of the Camera Grip Display. These are the most important camera settings. The top row displays WB, AF and ISO. The middle displays Aperture, Shutter Speed, EV (Exposure Value) and Exposure Compensation values are displayed. At the bottom of the screen Exposure Mode, Light Meter Method, Drive Mode, Battery Level, Exposure Counter and Status of the memory cards are displayed.

Menu

Normally the front and rear wheels are used to control aperture and shutter-speed values. If you would like to use the wheels to navigate the menus of the Sensor Unit, first press the MENU button. Then the Menu symbol is shown in the center of the display.

As long as the Menu Mode is active it is possible to use the wheels to navigate the menu system of the Sensor Unit. If you want to leave the Menu Mode (and use the wheels for aperture and shutter-speed) press the Menu button again or half-press the exposure trigger button.

White Balance (WB)

Press the WB button above the Grip Display to show the WB Menu. Select WB mode by scrolling left or right with the front wheel. Get back to the Main Screen by half-press or by clicking the WB button again.

White Balance Manual (WB)

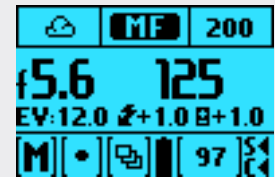
To set the Colour Temperature manually, scroll the Front Scroll Wheel until "M" is displayed. Then the colour temperature value is displayed at the bottom of the screen.

ISO

Press the ISO button to show the ISO menu. Use the Front Scroll Wheel to scroll up and down between available ISO numbers. Half-press or click the ISO button once again to leave the menu.

Main Screen

Grip Display Main Screen.



Menu

Grip Display Menu symbol on Screen.



WB

Grip Display White Balance (WB) Screen.



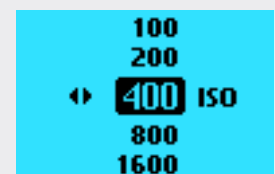
WB Manual

Grip Display Manual White Balance (WB) Screen.



ISO

Grip Display Manual ISO Screen. ISO 400 displayed.



Auto Focus (AF)

Press the AF button above the Grip Display to show the AF menu. Select AF mode by scrolling the Front Scroll Wheel left or right until the desired mode is selected.

Auto Focus (AF) with Macro Lens 120mm

When the 120mm Macro Lens is used the AF menu displays an additional setting – Focus Range. To limit the large focus range of the Macro Lens can improve the AF performance significantly. It is possible to select one of the three modes below for Focus Range.

The first limits the AF to scan the close-up range only (less than 1 meter).

The second scans far away distances only (between 1 meter and infinity).

The third option is to scan the Full Range.

Browse

To easily reach Image Browse mode, click the Browse (Play) button to right of the Grip Display. The Browse Mode is activated and it is possible to browse images using the wheels. To Exit Browse Mode half-press or press the Browse button again.

Video Display

In Video Mode the Grip Displays some essential settings for example White Balance (WB M selected), Focus (MF Manual Focus Selected), ISO (200), Play icon, Pv and Spot Metering.

Auto Focus (AF)

Grip Display Auto Focus (AF) Screen.



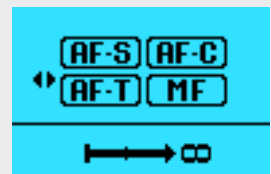
Close-up Scan



Far Away Scan



Full Range Scan



Browse

Grip Display Browse Screen.



Video Display

Display when in Video Mode.

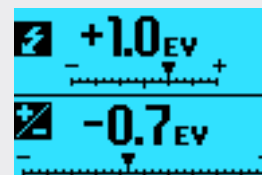


+/- Button on Viewfinder

Press the +/- button on the Viewfinder to reach the Exposure Adjust menu. Use the Front Scroll Wheel to set the exposure compensation for flash and the rear wheel to set the exposure compensation. The exposure compensation can be set between -5.0 and 5.0 stops and the flash compensation between -3.0 and 3.0 stops. Leave the menu by half press or by pressing the +/- button again.

+/- Button

Grip Display +/- Button on Viewfinder Screen.



EXP Button on Viewfinder

Press the EXP button on the Viewfinder to the menu for Exposure Mode and Light Meter Mode. Set the Exposure Mode using the front wheel and the Light Meter Mode using the rear wheel. Leave the menu by half press or pressing the EXP button again.

EXP Button

Grip Display EXP Button on Viewfinder Screen.



Exposure Modes

- M = Manual
- A = Aperture priority
- S = Shutter priority
- P = Program
- Pv = Program (variable)

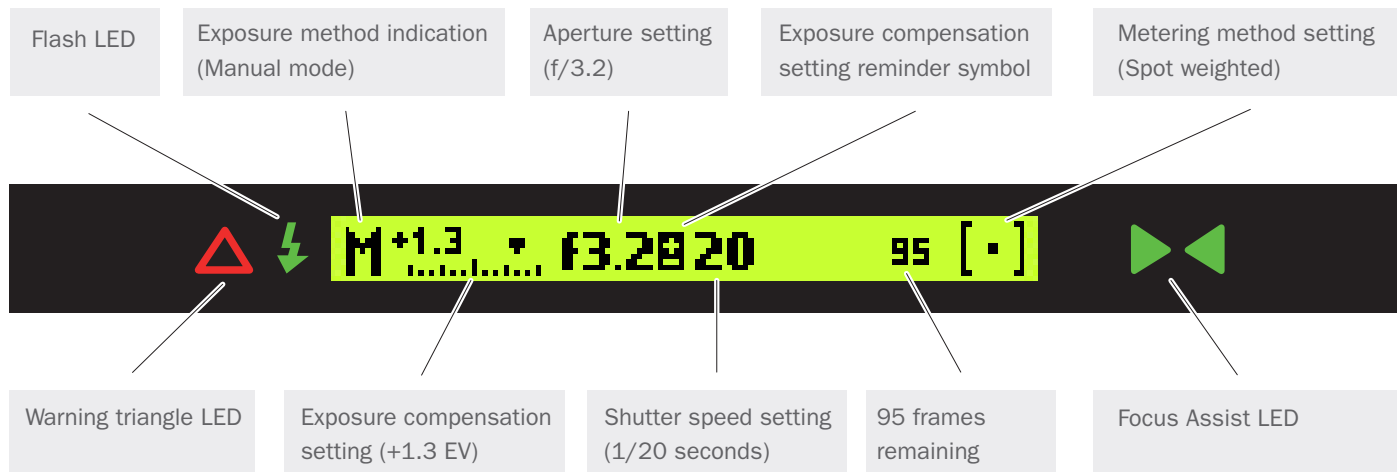
Light Meter Modes

- Center Weighted
- Spot
- Center Spot

5.26 VIEWFINDER DISPLAY NAVIGATION

TYPICAL VIEWFINDER DISPLAY

Viewfinder Display Visual User Interface



Note!

The LED's will only be visible when activated by the camera or a setting.

VIEWFINDER DISPLAY NAVIGATION OVERVIEW

How to Navigate the Viewfinder Display

Select WB, AF, or ISO near the Grip Display or Exposure Compensation mode and Exposure and Metering Modes on the right side of the Viewfinder.

- 1 Turn the front scroll wheel (A) to adjust settings.
- 2 Turn the rear scroll wheel (B) to adjust settings.

On the right side of the Viewfinder you can select:

- + / - button Exposure Compensation
- EXP button Exposure and Metering Modes

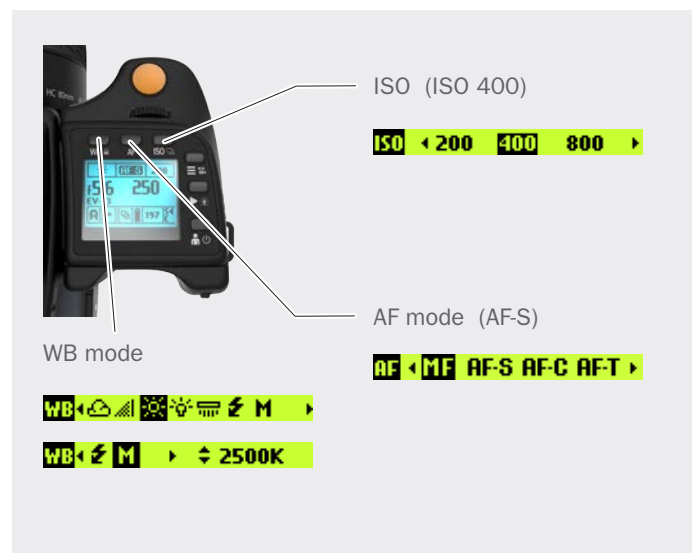


ISO, WB and AF modes

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

WB Mode Change WB mode by scrolling the Front Scroll Wheel (A) left or right.

AF Mode Change AF mode by scrolling the Front Scroll Wheel (A) left or right.

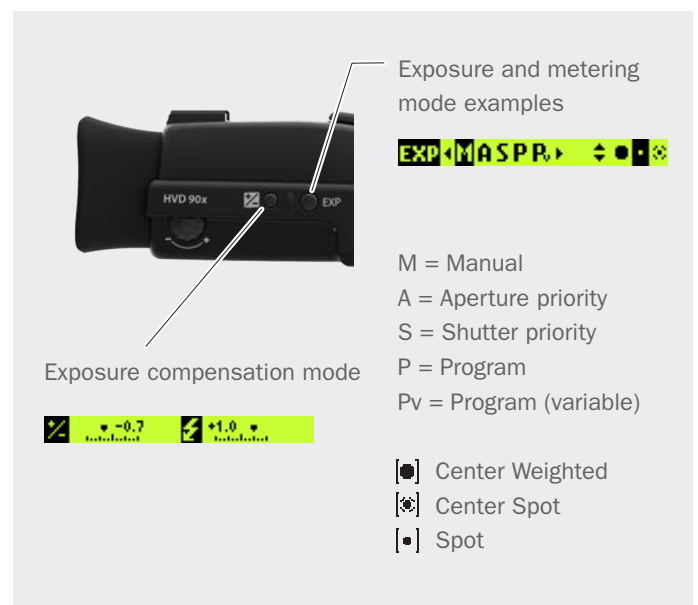


Exposure and metering mode examples

- M = Manual
- A = Aperture priority
- S = Shutter priority
- P = Program
- Pv = Program (variable)

- Center Weighted
- Center Spot
- Spot

Change Exposure by scrolling the Front Wheel (A) up and down.
Change Metering mode by scrolling the Rear Scroll Wheel (B) up or down.



VIEWFINDER DISPLAY EXAMPLES

Main Menu

This is the Main Menu Screen of the Viewfinder Display. It shows the most important exposure information.

To the left the exposure mode is displayed, Manual Mode in this case. The scale with an arrow shows the exposure compensation setting. In the center of the display the aperture and shutter speed are displayed. If an exposure compensation is set, a sign with a plus and minus is displayed between the aperture and shutter speed value. Second from the right the exposure counter is shown. To the far right the light meter mode is displayed, Spot meter mode in this case.

Main Menu

Normally the Front and Rear Scroll Wheels are used to control aperture and shutter speed values. If you would like to use the wheels to navigate the menus of the Sensor Unit, first press the MENU button. Then the menu symbol is shown in the center of the display to remind you that the camera is now in menu mode.

As long as the menu mode is active it is possible to use the wheels to navigate the menu system of the sensor unit. If you would like to leave the menu mode, and use the wheels for aperture and shutter speed, press the menu button again or half-press the exposure trigger button.

Browse

To reach Image Browse Mode, press the Browse (play) button on the right side of the Grip Display. Then the Browse Mode is activated and it is possible to Browse Images on the Sensor Unit using the wheels. To exit Browse Mode half-press or press the Browse button again.

ISO Settings

Press the ISO button to display the ISO Settings Menu. Use the Front Scroll Wheel to scroll left and right between available ISO numbers. Half-press or press the ISO button once again to leave the menu.



M +1.3 f3.2 20 95 [•]

Main Menu, Manual mode selected.



Main Menu Icon.



Browse Mode icon.



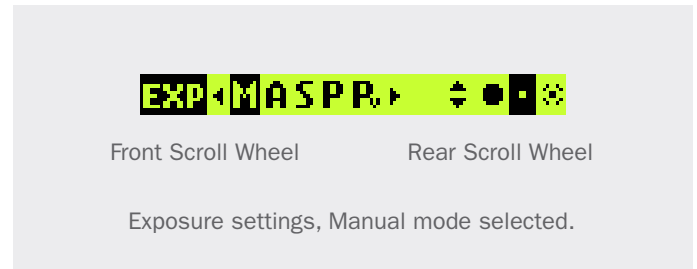
ISO ◀ 200 400 800 ▶

ISO settings, ISO 400 selected.

Exposure settings

Press the EXP button on the Viewfinder to display the Exposure Mode and Light Meter Mode menu.

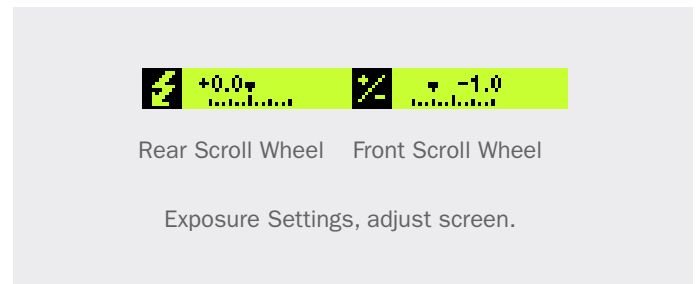
Set the Exposure Mode using the Front Scroll Wheel and the Light Meter Mode using the Rear Scroll Wheel. Leave the Menu by half-pressing or by pressing the EXP button again.



Exposure Settings, adjust screen

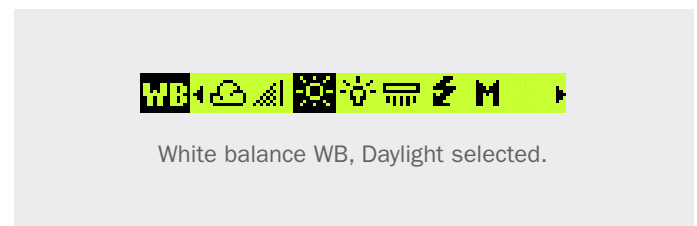
Displays the Camera Exposure Settings to the left and the Flash Exposure Settings to the right.

Press the +/- button on the Viewfinder to reach the Exposure Adjust menu. Use the Front Scroll Wheel to set the Exposure Compensation for Flash and the Rear Scroll Wheel to set the Exposure Compensation. The Exposure Compensation can be set between -5.0 and 5.0 stops and the flash compensation between -3.0 and 3.0 stops. Leave the menu by half-press or by pressing the +/- button again.



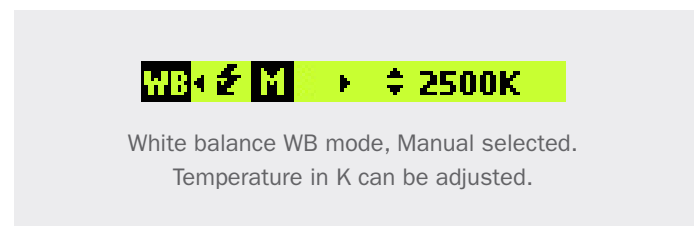
White balance WB settings

Press the WB button above the Grip Display to show the WB Settings Display. Select WB mode by scrolling left or right with the Front Scroll Wheel. Return to the main screen by a half-press or press the WB button again.



White balance WB mode, Manual

To set the Colour Temperature manually, scroll the Front Scroll Wheel until "M" is displayed. Then the Colour Temperature value is displayed in the right upper part of the screen. Change the value by scrolling the Rear Scroll Wheel up or down. It is possible to set values between 2000 K and 10000 K, in steps of hundred K. Leave the WB menu by half-press or by pressing the WB button again.



Autofocus Settings

Press the AF button above the Grip Display to show the AF menu. Select AF mode by scrolling the Front Scroll Wheel left or right until the desired mode is selected.

The image shows a camera's AF menu with five options: AF, MF, AF-S, AF-C, and AF-T. The AF-S option is highlighted in yellow, indicating it is the selected mode.

Autofocus Settings, AF-S selected.

AF with Macro 120mm

When the 120mm Macro Lens is used the AF menu displays an additional setting – Focus Range. It is possible to select one of the three modes below for Focus Range.

The first limits the AF to scan only the close-up range (less than 1 meter).

The second option scans only far away distances (between 1 meter and infinity).

The third option is to scan the full range. The Macro Lens has a large focus range and to limit the scan range can improve the AF performance significantly.

The image shows the Macro AF-S menu with three focus range options: Close-up Scan, Far Away Scan, and Full Range Scan. The Close-up Scan option is highlighted in yellow.

Macro Autofocus settings, Close-up Scan.

The image shows the Macro AF-S menu with three focus range options. The Far Away Scan option is highlighted in yellow.

Macro Autofocus settings, Far Away Scan.

The image shows the Macro AF-S menu with three focus range options. The Full Range Scan option is highlighted in yellow.

Macro Autofocus settings, Full Range Scan.

Information Screen

This is the Information Screen with Storage medium missing displayed.

The image shows a message on the camera's information screen that reads "Storage medium missing" in yellow text.

Information Screen, Storage medium missing.

Frame Count

This is the Frame Count with more than 1000 frames left displayed. 1k9 = 1900 images left.

The image shows the camera's frame count display with the text "1k9" followed by a battery icon, indicating more than 1000 frames are left.

Frame Count, more than 1000. 1k9 = 1900.

5.27 REMOVE / ATTACH VIEWFINDER

REMOVE THE VIEWFINDER

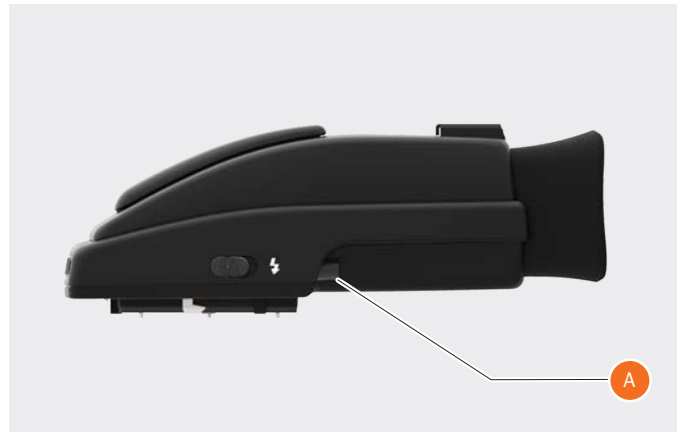
Caution!

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.

- 1 Hold the Viewfinder in your right hand.
- 2 Press and hold down the Viewfinder release button (A).
- 3 Lift the rear of the Viewfinder up and away from the camera body.



ATTACH THE VIEWFINDER

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.

- 1 Hold the Viewfinder at a slight angle and rest it on the top of the camera.
- 2 Slide the Viewfinder forward until the front locating pin is in position in the recess in the front edge of the viewfinder screen aperture (B) on camera body.
- 3 Press the rear part of the Viewfinder firmly downwards until it clicks into place.
- 4 Make sure that both sides of the Viewfinder are seated correctly and that it has been firmly attached and locked into position.



ADJUST THE EYEPIECE

No corrective lenses are needed to adjust the eyepiece to suit most requirements. The dioptre range is from -5 to +3.5D. Eyeglass wearers can rapidly and accurately change the settings according to whether they wish to wear eyeglasses for viewing or not.

- 1 Hold the camera in your left hand.
- 2 Point the camera at the sky or a similar smoothly toned area.
- 3 Turn the adjustment wheel (A) until the markings on the Viewfinder screen reach the optimum sharpness for your eyesight.



CHANGE FOCUSING SCREEN

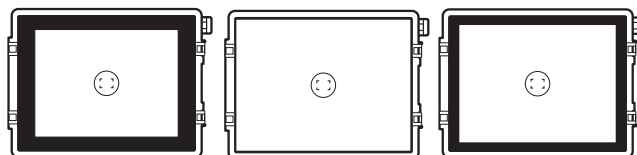
The H6D is fitted with a Spherical Acute-Matte D Focusing Screen for extreme brightness, clarity and even illumination. An optional accessory screen with a grid pattern is also available.

To change the Focusing Screen, remove the viewfinder to access the Focusing Screen.

To remove the screen, place the tip of a ballpoint pen or similar in the Focusing Screen removal lug and pull upwards. To replace the Screen, position the right side of the Screen in place so that it sits correctly in the recess. Place the tip of a ballpoint pen or similar in the Focusing Screen replacement indentation and press downwards until the Screen snaps into position. Try to avoid touching either surface of the Screen with bare fingers.

Note!

Do not attempt to clean the Focusing Screen by immersing it in water, or use any kind of cleaning fluid. If the Screen becomes damp, do not use hot air to dry it. Use a soft cloth on the upper surface only. Seek advice from an Authorized Hasselblad Service Center if the Screen becomes particularly soiled. Remember that particles or greasy marks on the Screen might impair the viewfinder image but have no effect on the recorded image.



Focusing Screens showing the difference in masking and composition frame marking. Type varies according to sensor size. See under Accessories for other types (with grid pattern, for example).

5.28 PREVIEW, HISTOGRAM AND BROWSING

PREVIEW MODES

Use the Rear Scroll Wheel to scroll through the available preview modes when in Browse Mode or single click on the Meta Data information to change Preview Mode.

- Standard Preview: Displays a Preview Image with the most important settings. Note that the information covers some of the image. Go to Full Screen mode to see the complete Capture area.
- Histogram: Displays a Preview Image with a Histogram.
- Full Screen Preview: Displays the preview only with no frame or settings information.

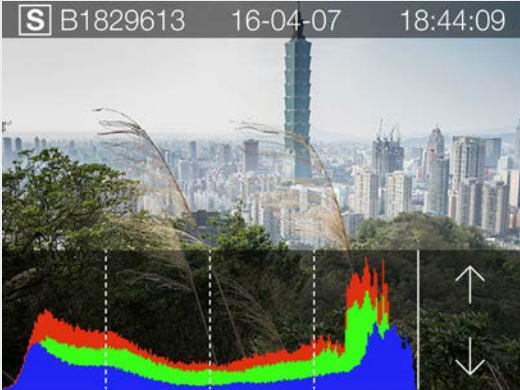
Two additional screens are also available, accessible from the Histogram screen:

- Combined Histogram: Displays a Preview Image with a combined histogram of the three components red, green and blue.
- Capture Details Mode: Displays a Preview Image with camera settings details in a layer in front of the Preview Image.


Histogram and Combined Histogram can be accessed by navigating to Histogram mode.

- 1 Press one time on the desired Mode.
- 2 Scroll Up or Down with the Rear Wheel when in Browse Mode to change Mode.
- 3 When in Browse Mode, Tap once in the lower part of the Sensor Unit Display. Step through the different Modes.


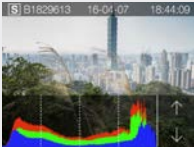

Change Preview and Histogram Mode by a single press on desired Mode or use the Rear Scroll Wheel.



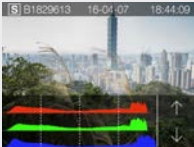
Histogram



Luminance Histogram

Standard Preview	Histogram	Full Screen Preview
		

The Standard Preview displays information described on the next page.

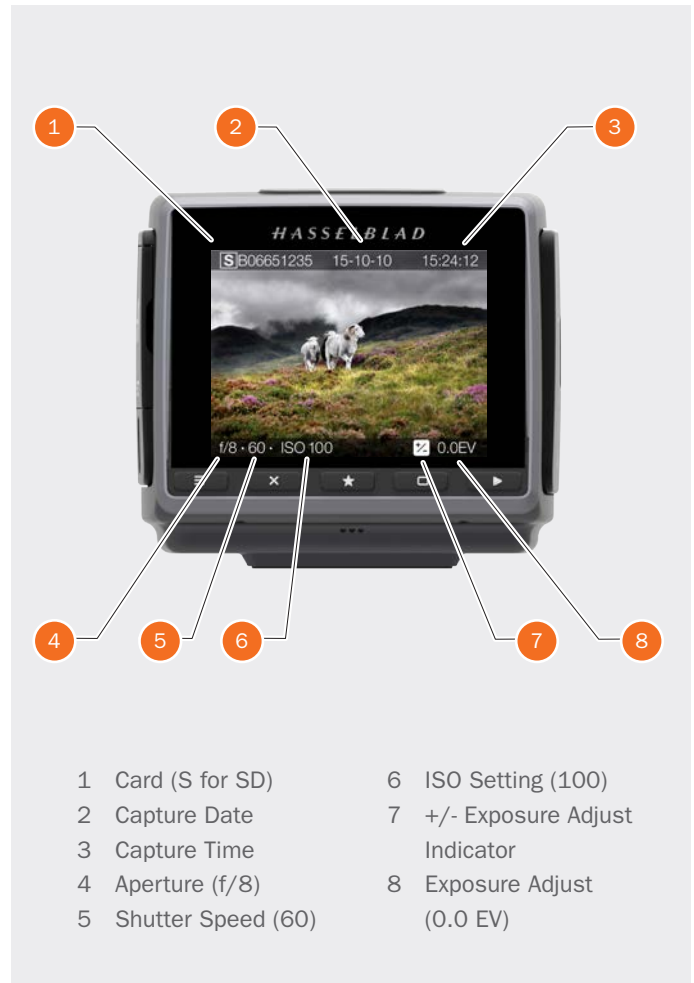


The Full Screen Preview displays the Full Capture View without other information.

STANDARD PREVIEW

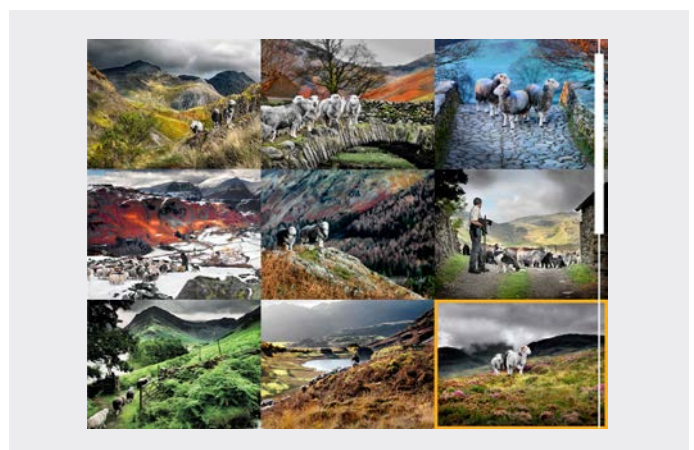
The Standard Preview is displayed when you first turn on the camera and is probably the view you will use most often.

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



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.

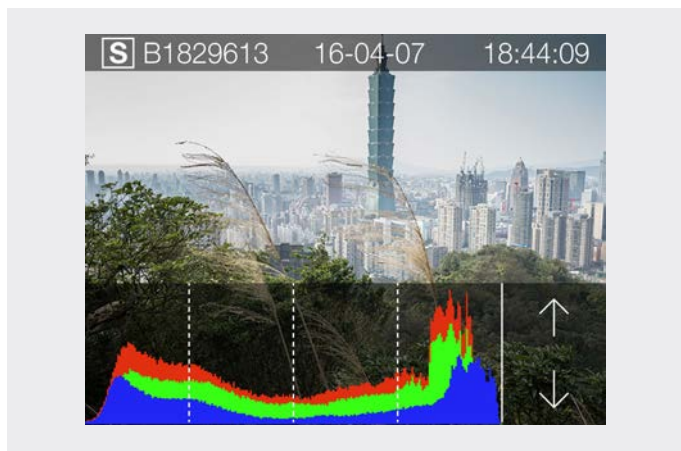


HISTOGRAM TYPES

There are different types of Histogram representations available. Histogram Mode, Capture Details Mode, Combined Histogram Mode and Separate Histogram RGB Mode.

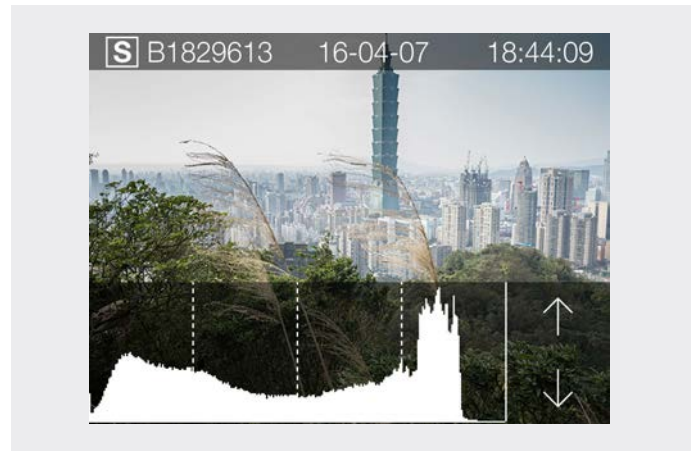
HISTOGRAM MODE

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

In Luminance Histogram mode, the RGB channels displays the the luminosity Histogram. The RGB info is represented by a White Combined RGB Graph.



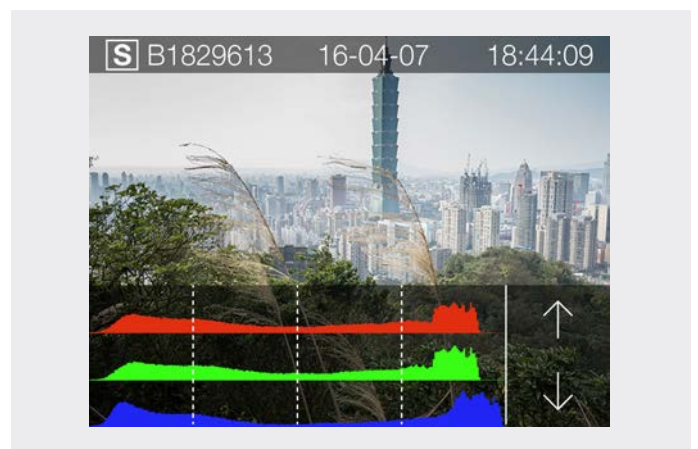
CAPTURE DETAILS MODE

This mode displays SD Card (S), 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 (50mm).

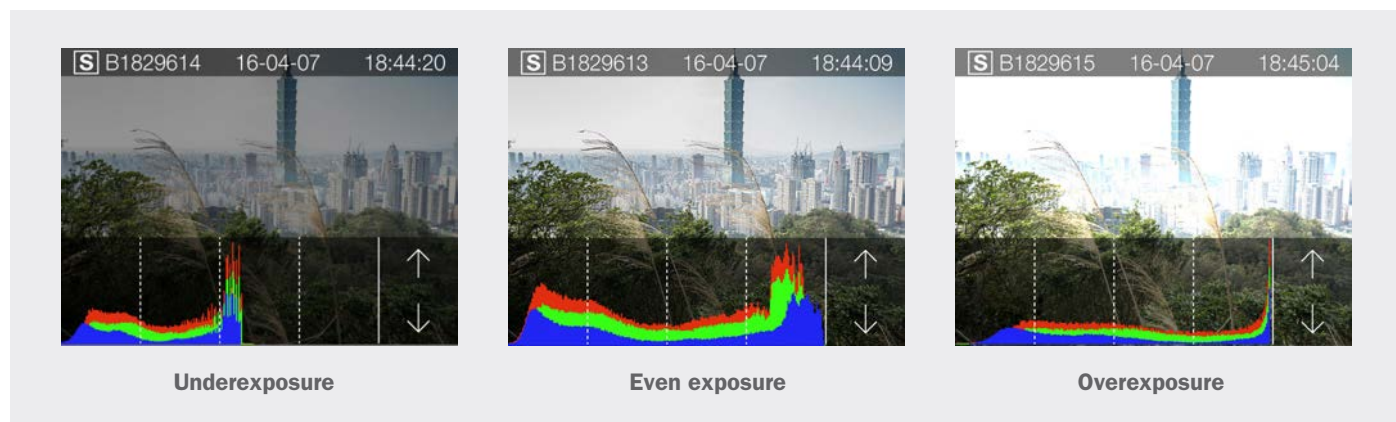


SEPARATE HISTOGRAM RGB MODE

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



HISTOGRAM MODE - EXPOSURE



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.

BROWSING

Press Play button (B) on the Grip Display or on the Sensor Unit (G) to enter Browse mode.

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

In Browse mode on the Sensor Unit 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.

Browse button (B) and (G)

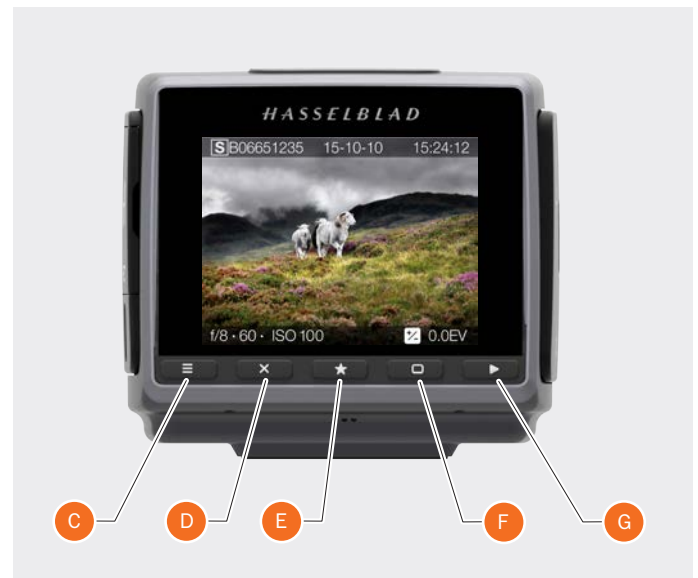
Starts display and shows the last image. The user can review images, browse and zoom. Preview images and zoom in to view close-ups of previews for focus checking. Zoom out to view several at once and finally to view and select folders and media.

This is also a selection button for value setting on the Sensor Unit Menu.

Image rating button (E)

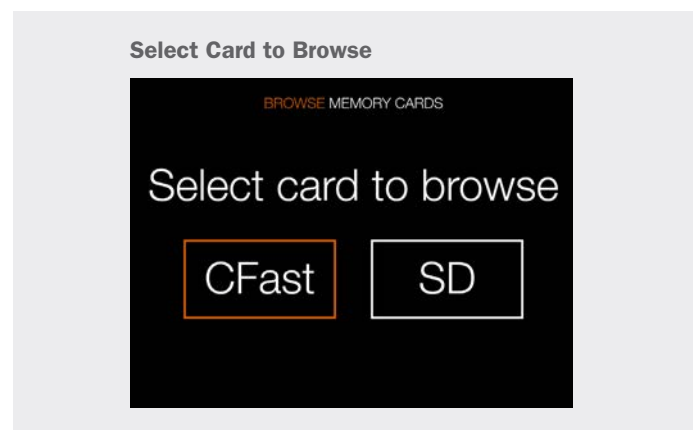
Rate image 1-5 stars or green/yellow/red. Also works as soft button.

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



Select Card to Browse

You can select CFast Card or SD Card to Browse Captures.



ZOOM IN AND OUT

The Touch Screen on the H6D Sensor Unit is similar to a Phone or Tablet with touch sensitivity. The following gestures can be used to navigate and control the H6D Camera:

Function	Action
Zoom in	Spread (move two fingers apart).
Zoom out	Pinch (move two fingers together).
Select	Tap / Press with one finger.
Move back	Swipe right.
Display Control Screen	Swipe down from the top of the screen.
Hide Control Screen	Swipe up.
Action	Function
Double Tap	Zoom in to 100%. Double Tap again to Zoom out to full View.
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.

9 View Mode

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

Folder View

Folder View displays the list of folders saved. The highlighted folder is the current folder and contains the images you are browsing. Navigate to another folder and then zoom in to reveal its contents if desired.

Zoomed View



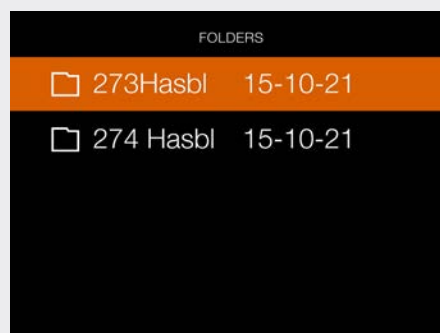
Standard Preview



9 View Mode



Folder View



5.29 PHOCUS

Phocus is the 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 the APPLE App Store for both iPhone and iPad.

FEATURES IN PHOCUS

Professional Image Quality

- Hasselblad Natural Colour Solution (HNCS).
- Lens corrections for H and V system lenses (DAC).

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.
- Camera Configuration and Capture Sequencer.
- Easy-to-use interface.
- Extensive customization options for individual work flow scenarios.
- Import/Export of Image Adjustments, Keywords, Work flow 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.

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

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 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.

PHOCUS AND HASSELBLAD CAPTURE FILES

The H6D can capture files and store them as Hasselblad RAW format files or Hasselblad RAW + JPEG formats simultaneously. (not applicable to 60 Mpix / 50MS/200MS models).

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, PSD etc. according to requirements. However, 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 CFast card can be processed to completion using:

- Hasselblad Phocus
- Adobe Camera Raw
- Adobe Lightroom
- Apple Aperture

Capture files can be stored as 3FR files (from a CFast or 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 work flow if you choose. Or if you prefer, you can include Hasselblad files in Adobe / Apple work flows as stated above.

Note!

Using Phocus is the most comprehensive method. The Phocus and Adobe methods can produce almost identical results (in most cases, but not all) regarding RAW conversion so it is a matter of personal choice regarding which method would best suit your preferred ways of working. Alternatively you can use Apple Aperture though you should take note that the benefits of DAC and HNCS etc., will be lost in this case.



5.30 LENSES AND FOCUS MODES

REMOVE 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 Hold the lens 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 (E) 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!

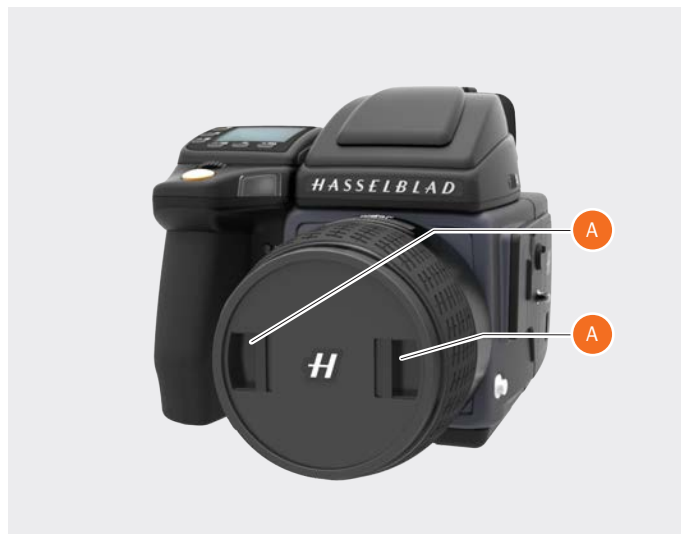
Do not insert fingers into the camera body. This can cause damage to the equipment.

- 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 into the camera body (E) 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.



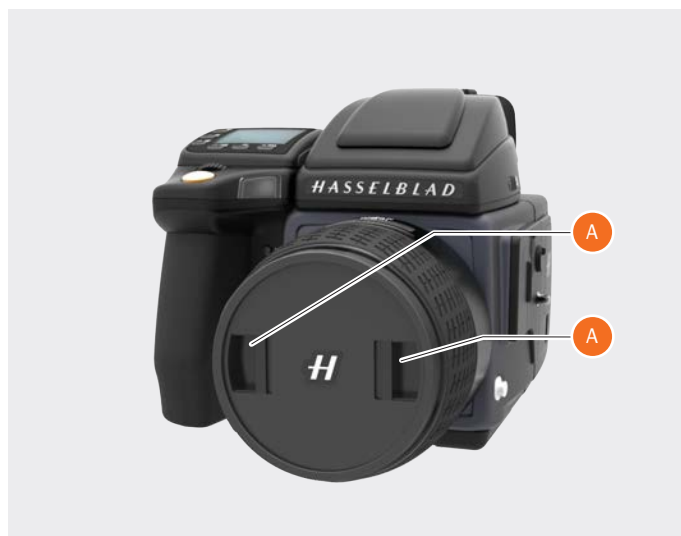
REMOVE THE LENS CAP

- 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

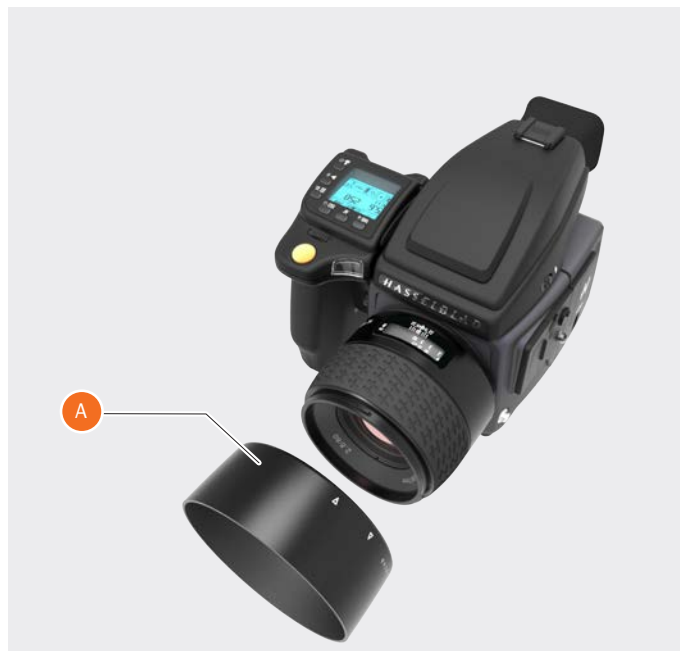
- 1 Insert thumb and index finger into the recesses (A).
- 2 Attach the front lens cap on the lens until it snaps into place.



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 (67/77/95 mm, according to lens) and are rotated clockwise into place. 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.



TO SET FOCUS DISTANCE

- 1 Estimate the distance to the target.
- 2 Inspect the focus distance scale (A) and turn the manual focus ring (B) to adjust the focus distance.

Note!

There are two distance scales (in feet and metres) visible through the window on the upper part of the lens barrel.

