

Phase One iXR

Reproduction Camera System

Quick Guide

PHASE**ONE**
INDUSTRIAL

Phase One iXR

Reproduction Camera System

Quick Guide

This Quick Guide shows the basic operations of your new Phase One iXR camera system.

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1. What's in the Box?

- iXR camera
- Hand release cable
- 24V DC power supply (iXR)
- EU adapter
- US adapter
- UK adapter
- IEC adapter
- AUS adapter
- Mini-USB cable
- iXR Quick Guide
- Warranty certificate

2. Overview

Camera

1. IXR camera body
2. On/off button
3. LED indicator
4. Power terminal
5. Data terminal A
6. Data terminal B
7. 3/8 inch tripod sockets (2)
8. Flash sync terminal
9. Lens release button
10. Lens mount alignment mark
11. Hot shoe
12. Mini USB port



Digital Back

1. Digital back
2. Digital back lock
3. Digital back release button
4. Battery compartment
5. FireWire 800 port
6. USB 3.0 port
7. CompactFlash card slot



Before You Start

To learn more about the capabilities of the back, download the IQ back user guide from the downloads section of the industrial.phaseone.com website.

Charge Battery for the Digital Back

Charge the battery (approximately 2.5 to 3 hours) as soon as the camera system has been unpacked.



3. Preparing the Camera

Mounting a Lens

To mount a lens on the camera:

1. Remove the front body cap, just like you would remove a lens, by pushing the lens release button inward and then turn the front body cap counter clockwise and lift out.



2. Line up the white lens mount alignment dot with the white dot on the camera to fit the lens in place, and then rotate it counter-clockwise until it clicks into place.



Mounting the Digital Back

To mount the back to the camera:

1. Remove the back cover from the camera being careful not to damage the rear shutter curtain.
2. Unlock the back by sliding the back lock away from the camera.
3. While holding down the back release button, remove the sensor cover plate from the back.
4. Place the bottom part of the back in the lower locking mechanism on the back of the camera body.



5. While holding down the back release button, push the back and camera body together firmly.



6. Release the back release button.
7. Slide the back lock to the locked position (towards the camera).

Note:

Your back should always be protected by its sensor cover plate when it is not attached to the camera.

Ensure that the camera's shutter curtain is protected with the supplied protective plastic cover or digital back at all times.

Dismounting the Digital Back

To dismount the back from the camera:

1. Slide the back lock to the unlock position (away from the camera body).
2. Push and hold the back release button.
3. Pull the back away from the camera.

Inserting the Battery in the Digital Back

To insert the battery in the back:

1. Open the battery compartment latch.
2. Slide battery into battery compartment, ensuring that the battery retainer pin locks the battery in place.



3. Close battery compartment door.

Removing the Battery from the Digital Back

To remove the battery from the back:

1. Open the battery compartment latch.
2. Slide the battery retainer pin away from the battery.
3. Slide the battery out of the back.

Connecting the Power Adapter to the Camera

To connect the power adaptor to the camera:

1. Line up the red dot on the end of the LEMO-secured external power adapter with the red dot of the Power Terminal of the iXR camera body and push into place.
2. The connector locks into place.
3. Connect the other end of the external power adapter to a power outlet (100-240 V 50-60 Hz).

The camera is automatically powered on.

4. Ensure that the back is also powered on.



Note:

When not in use, turn camera off by pressing the on/off button.

Powering camera on and off requires a long press of the on/off button.

Shutter Modes

The iXR camera system can make use of two shutters, depending on the selection of lens. The camera, with its internal focal plane shutter, accepts Schneider-Kreuznach lenses equipped with internal leaf shutters.

The three shutter modes enable you to select which shutter is given the highest priority. If Leaf Shutter mode is selected, when the camera shoots outside of the leaf shutter range, it will automatically use the focal plane shutter.

When shooting with a lens not equipped with a leaf shutter, all pictures will be taken with the focal plane shutter.

Note:

The factory settings and recommended shutter mode is Leaf Shutter.

Properties of Shutter Modes

Mixed

- The iXR utilizes the internal focal plane shutter as well as the leaf shutter.
- Automatically switches between focal plane and leaf shutter depending on the shutter speed selected.
- Uses both shutters together between 1 second to 1/1600.

Leaf

- Covers the range from one second to 1/1600 second.
- Automatically switches to focal plane if a shutter speed is selected outside of the leaf shutter range.

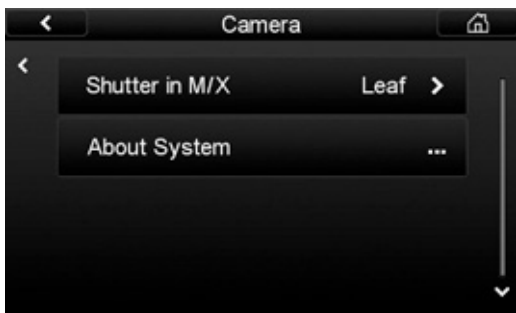
Focal Plane

- Covers the range from maximum exposure to 1/4000 second.
- Used to obtain the fastest total capture rate.

Selecting the Shutter Mode

To manually select the shutter mode:

1. Go to Menu > Camera > Shutter in M/X
2. Select Mixed, Leaf or Focal Plane
3. The Shutter Mode is saved automatically



iXR Camera Shutter Modes

Shutter Mode	Max exp to 1.3 sec	1 to 1/1600 sec	1/2000 to 1/4000
Mixed	FPS	LS+FPS	FPS
Leaf Shutter with Leaf Shutter Lens	FPS	LS	FPS
Focal Plane	FPS	FPS	FPS

Connecting a Hand Release Cable

When the iXR camera is not in tethered mode or if you need to capture from the camera, use the supplied hand release cable.

To connect a hand release cable:

1. Line up the red dot on the end of the LEMO-secured hand release cable with the red dot of one of the data terminals of the iXR camera body and push into place.
2. The connector locks into place.
3. Depress the button at the other end to actuate the shutter when needed.



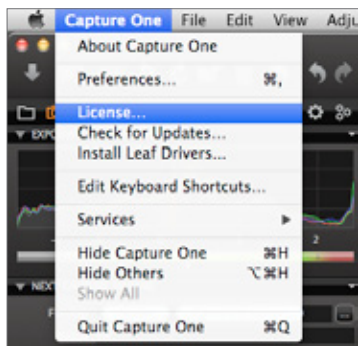
4. Installing and Activating Capture One

Ensure that you have an Internet connection to activate Capture One (Express and Pro versions).

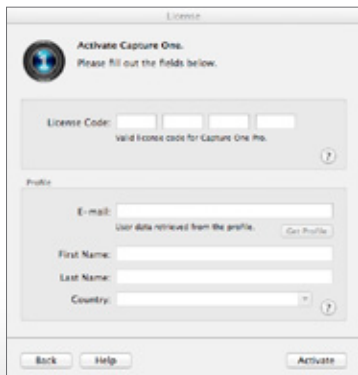
Installing and Activating Capture One for Mac

To install Capture One for Mac:

1. Open License Dialog



2. Open the License Activation dialog box in the application by going to Capture One > License.

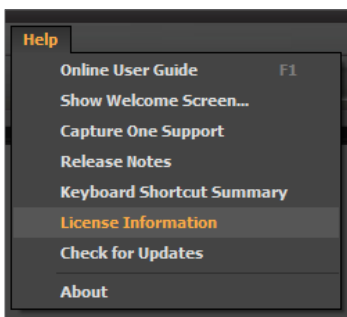


3. Type your license code and personal account details in the required fields.
4. Click Activate License. Your license is validated by Phase One's Activation Server.
5. Your software is now activated and ready for use.

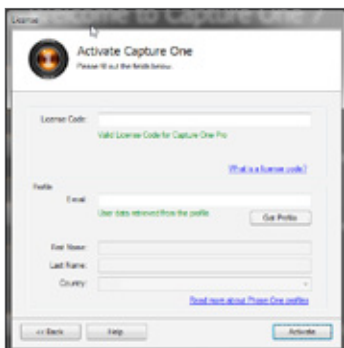
Installing and Activating Capture One for Windows

To activate Capture One for Windows:

1. In the Help menu, select License Information.



2. Fill in the License Activation form and click Activate.



Attaching a FireWire Cable for Tethered Shooting

To attach a FireWire cable:

1. Insert the end of the FireWire cable into the FireWire port on the back.
2. Connect the other end of the FireWire cable into the FireWire port on the back of your computer or laptop.



Attaching a USB 3.0 Cable for Tethered Shooting

To attach a USB 3.0 cable:

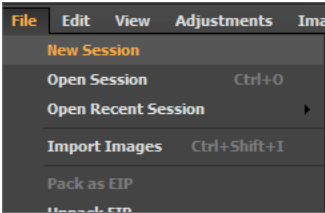
1. Insert the end of the USB 3.0 cable into the USB 3.0 port on the back.
2. Connect the other end of the USB 3.0 cable into the USB port on the back of your computer or laptop.



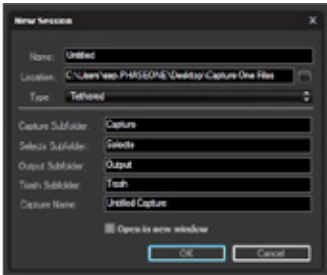
Starting a Tethered Session

To start a tethered session:

1. From the File menu, select New Session.



2. From the Type drop down menu, select Tethered.



3. Fill in the information to customize your session.
4. Click OK to start your session.

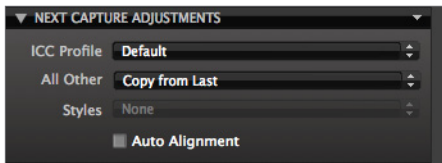
Note:

The back must have a charged battery in it in order to shoot tethered.

Selecting Next Capture Adjustments

In the Next Capture Adjustments section, make selections for:

- ICC Profile
- All Other
- Styles
- Auto Alignment



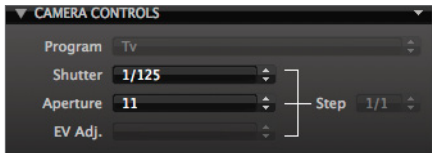
Selecting Camera Controls

In the Camera Controls Section, make selections for:

- Shutter
- Aperture

Note:

Program is set to M automatically



Selecting Camera Settings

In the Camera Section, make selections for:

Camera (automatically shows back model)


- Format
- Sensor+
- ISO
- Balance



Camera Settings in Capture One

Working with Live View

To work with Live View

1. Ensure that the lens focus is set to AF.
2. Start a Tethered session as described above.
3. Choose Window > Live View or press the Live View icon.  The Live View session starts.
4. Press RGB icon to switch between an RGB and a Black and White view.



5. Adjust Lightness and Quality as desired.



6. Set White Balance using the White Balance picker (WB is only for Live View).



7. Adjust the composition.

8. In the Live View Controls section, click on the focus arrows to focus the camera's lens.



9. Click single arrows for fine focusing and multiple arrows for medium or large focusing.

<<<	Large focus steps	Extends the lens for closer distances
<<	Medium focus steps	
<	Fine focus steps	
>>>	Large focus steps	Contracts the lens for farther distances
>>	Medium focus steps	
>	Fine focus steps	

10. Close the Live View window.



5. Ready to Shoot

Shooting a Test Shot

To shoot a test shot:

1. Choose Camera.
2. Click Capture.



3. Your image appears on your monitor.

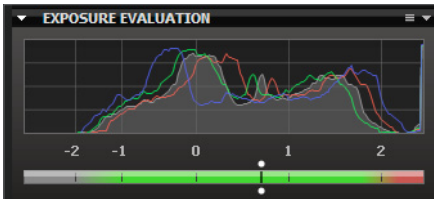
Note:

You can also trigger the camera by using an optional hand release cable.

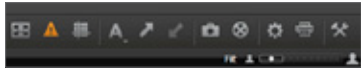
Evaluating Your Shot

To evaluate your shot:

1. Check your exposure with the histogram and picker tool.



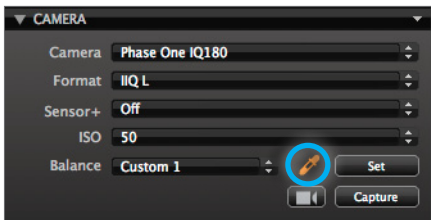
2. Check your exposure with the over-exposure and under-exposure warnings and make any necessary corrections.



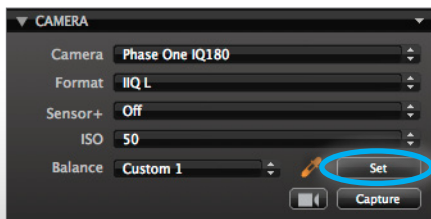
Setting White Balance

To set the white balance:

1. Take a first shot of the Tethered session.
2. Click the White Balance icon in the Camera Tool.
3. Use the White Balance picker to set White Balance from a neutral area of an image file.



4. Click **Set** when the desired White Balance setting is achieved.



6. Firmware

The back displays technical information about the hardware and embedded firmware of both the camera body and back. This is especially useful if support is needed or if you want to check if Phase One is offering a newer firmware update. Please make a note of the firmware menu contents before contacting your dealer or Phase One Support.

Checking the Camera Body Firmware Version

In order to determine if you have the latest camera firmware installed:

1. Go to Menu > Camera > About System



2. Check to see if the firmware version installed on the camera is the same as the latest version available in the Downloads section of industrial.phaseone.com website.



About the Phase One Firmware Updater Application

The Phase One Firmware Updater application is used to update your Phase One iXR camera body with new firmware. The Firmware Updater for Mac or Windows is available at the Downloads section of the industrial.phaseone.com website.

The Firmware Updater does not in itself contain any firmware — it detects the camera attached, checks online for the latest firmware and retrieves and installs the firmware packages for your device.

Installing the Firmware Updater Application

1. Download the Firmware Updater from the Downloads section of the industrial.phaseone.com website and follow the appropriate installation instructions below:

Mac

To install the Firmware Updater on a Mac:

- a) Open the zip file and copy the Firmware Updater application to your Applications folder.
- b) Double-click the icon to start the Firmware Updater Setup Wizard.

Windows

- a) Open the zip file and store the FWUpdater.msi.
- b) Double-click FWUpdater.msi to start the Firmware Updater Setup Wizard.
- c) When installation completes, click Start > Phase One > Firmware Updater.

Updating the Camera Body Firmware

Steps for updating are the same on both Mac and Windows — screenshots come from the Mac version

Before starting, ensure that:

- The camera is powered off and is disconnected from the power supply.
- USB 3.0 or FireWire cables are not connected to the back.
- Your computer has the Firmware Updater application installed and the computer is connected to the Internet.

To update the iXR firmware:

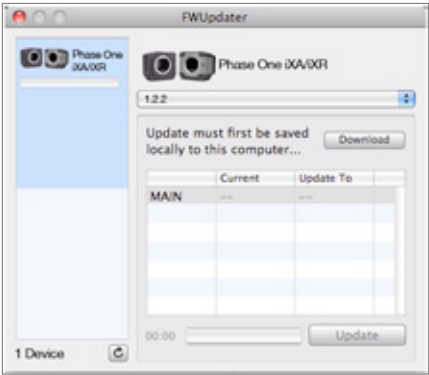
1. Connect the camera to the computer with a mini-USB cable.



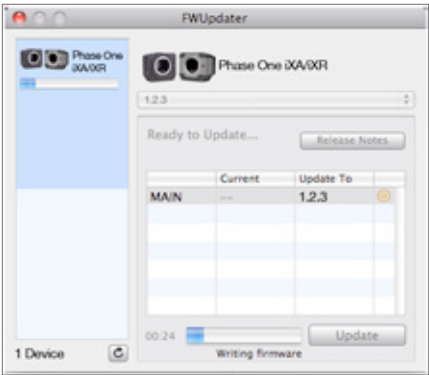
The camera LED lights up orange.


2. Start the Firmware Updater application.
3. The Firmware Updater automatically checks online for a new version of camera firmware and displays a download button if your camera requires an update.

4. If displayed, click the link to download the firmware.
The firmware is saved locally.



5. After downloading the new firmware, the download button becomes a Release Notes button.



6. Click the Release Notes button to download the release notes for the newest firmware.
7. To update the camera to the latest firmware, click Update.
The firmware is written to the camera and a cog  icon is displayed next to the MAIN component and a progress bar displays the progress of the update.

8. Upon a successful completion of the update, the MAIN component is marked with a green check mark icon.
9. If the update fails, disconnect the mini-USB cable and reconnect it again, then repeat the procedure described above.

Checking the Back Firmware Version

To check the back firmware version:

Go to Menu > About

The firmware details are displayed.



Updating the Back Firmware

It is important to keep the back's firmware up-to-date to ensure you get new features and remove any bugs or errors from previous firmware versions.

Before starting, ensure that:

- The back is not mounted on the camera.
- Back is turned on.
- USB 3.0 or FireWire cables are not connected to the back.
- The back battery is fully charged.

Note:

It is not possible to update the firmware unless the back battery is fully charged. A warning screen will appear if the battery life is too low.

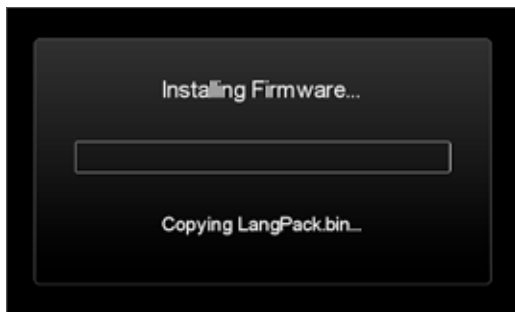
To update the back firmware:

1. Download the latest firmware update from the Downloads section of the industrial.phaseone.com website.
2. Transfer the firmware (.fwr) file to an empty formatted CompactFlash card and insert it into the back's CF card slot.
3. Go to Menu > Firmware.

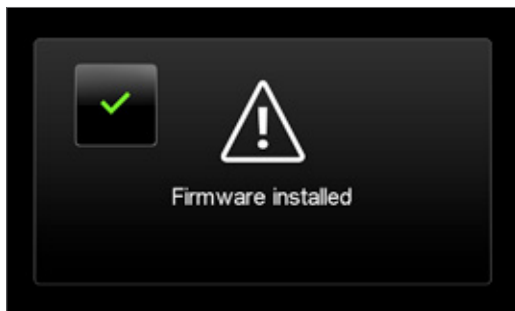


4. Select Update Firmware from the Firmware menu and the back automatically detects and implements the update from the card.

A progress bar appears on screen during installation.



5. A confirmation screen appears when the installation is complete. Upon completion, the back automatically restarts itself.



Note:

You can only have one .fwr file on the Compact Flash card.

Restoring the Back Firmware

In the event you need to restore the back's firmware to the factory version. (Camera settings are not affected):

1. Go to Menu > Firmware



2. Select Restore Firmware.

The original firmware is installed.



7. Status and Troubleshooting

The LED indicator on the camera body indicates the status of the camera.

LED Indicator State	Status	Action/Comments
Orange steady	Camera is in boot mode	Connect camera to computer running firmware software
Orange blinking	Firmware is being upgraded	Allow firmware upgrade to finish and do not unplug mini-USB cable until it is completed
Green blinking	Camera is powered but unable to shoot Possible reasons: <ul style="list-style-type: none">• Back is not attached to camera• Back is not turned on• FireWire or USB cable has been disconnected from back• CompactFlash card is full or missing• During Live View• During exposure	Ensure that: <ul style="list-style-type: none">• Back is attached to camera and turned on• Cables are connected• Back is ready to shoot• Sufficient room on formatted CompactFlash card (portable mode only)• Live View is off• Back is ready to shoot
Green steady	Ready to shoot	Commence shooting
Red steady	Hardware malfunction	Send for service
Red blinking	Software malfunction	Upgrade firmware, if upgrade does not solve issue, send for service

8. Additional Information

Mounting the Phase One Lens Adapter on the Camera

To mount the Phase Lens Adapter:

1. Match the white dot on the camera up with the white dot on the Lens Adapter.

Turn the lens slowly clockwise. NEVER use force to mount the ring.



2. Fit a Carl Zeiss V-series lens on the camera.



NOTE:

If you are mounting a leaf shutter lens, ensure that the shutter is in the cocked position before mounting the lens.



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Visit the website for additional information

Industrial.phaseone.com

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