

User Manual

Flextight X5 / X1

English – v/1.5



HASSELBLAD

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The Flextight X1 and the Flextight X5 satisfy the demand for image quality and speed requirements from professional photographers and production environments alike.

Developed around Hasselblad's patented virtual drum design and flexible magnetic holder and incorporating a 3x8000 optic CCD sensor and a Linos (Rodenstock) lens, both scanners are fast, easy-to-use and offer unparalleled image quality. They also feature a new time-saving facility – an 'Auto Scan' button, which with one press automatically delivers a superb, high resolution scan.

The Flextight X1 scans 35mm originals at a maximum non-interpolated optical resolution of 6300 dpi at a maximum speed of 60MB per minute while the Flextight X5 scans 35mm originals at up to 8000 dpi and at 300MB per minute, making it the world's fastest, high-end scanner. The Flextight X5 also has an A4 reflective scanning option, can take a batch or a slide feeder and incorporates Hasselblad's active cooling capability, where an electronic device is placed directly on the CCD to cool it down and prevent an increase in electrical noise.

As with all Hasselblad scanners, the Flextight X1 and Flextight X5 offer outstanding sharpness and image quality and are designed to bring out the finest details and the full tonal range from the professional photographer's negatives or transparencies. Both Flextight models offer a maximum non-interpolated, optical resolution of 3200 dpi in true 8 or 16 bit colour from 60mm originals and 2040 dpi from 4" x 5" originals, both positive and negative. The two scanners also provide automatic frame detection, batch scanning, automatic focus and calibration, hardware (Flextight X5 only) and software-based Auto Dust

Removal and both utilize Hasselblad's unique FlexColor software and 3F – Flexible File Format. These features produce a digital data management system to provide users with a fully integrated workflow solution that spans from image capture to output. Both scanners are PC and Mac compatible using a FireWire interface.

The Flextight scanners also include a full selection of holders for mounting all of the most common original formats without requiring gel, tape or glass plates and include a full selection of the most common negative film set-up profiles. Support for special formats, such as panoramas, can also be customised and supplied by Hasselblad. The scanners use glass-free original holders that 'flex' the original during the scanning process to form a completely straight line that places nothing between the original and the electronic image sensor. This ensures that the quality remains at its highest level without glass distortions and other unwanted artifacts.

For the optimum in investment security, a Flextight X1 can be modified and upgraded to a Flextight X5 model at a later date for approximately the difference in price between the two scanners. Either way you can rest assured you have made the right choice.

***The supreme Hasselblad potential is there,
it's up to you to exploit it!***

Warnings and restrictions

- Read all of the included documentation before attempting to install and use the scanner.
- Do not touch the originals and/or the original holder while scanning.
- Do not start scanning or previewing until an original holder with an original has been mounted.
- The original holder is only to be mounted or removed when the drum is in the load position.
- When you turn on the scanner, the drum will roll to the load position, if it is not there already. Do not touch the scanner while the drum is rotating.
- Do not place your fingers or any other object into the scanner while it is connected to power.
- Before servicing or opening the scanner, the power supply must be disconnected from the mains (unplugged). It is not sufficient simply to press the on/off button.
- Install the scanner in a location where children can not get to it. It contains small openings and moving parts that can cause injury.

System requirements

Below are the basic hardware requirements for the PC or Macintosh system to which the scanner is to be connected. For information about the processor, operating system, RAM and harddisk requirements please refer to the “Software Reference” manual, that comes with the FlexColor software.

- Screen resolution of minimum 800 x 600 pixels with true colors (24-bits).
- Mouse or other pointing device.
- FireWire interface.

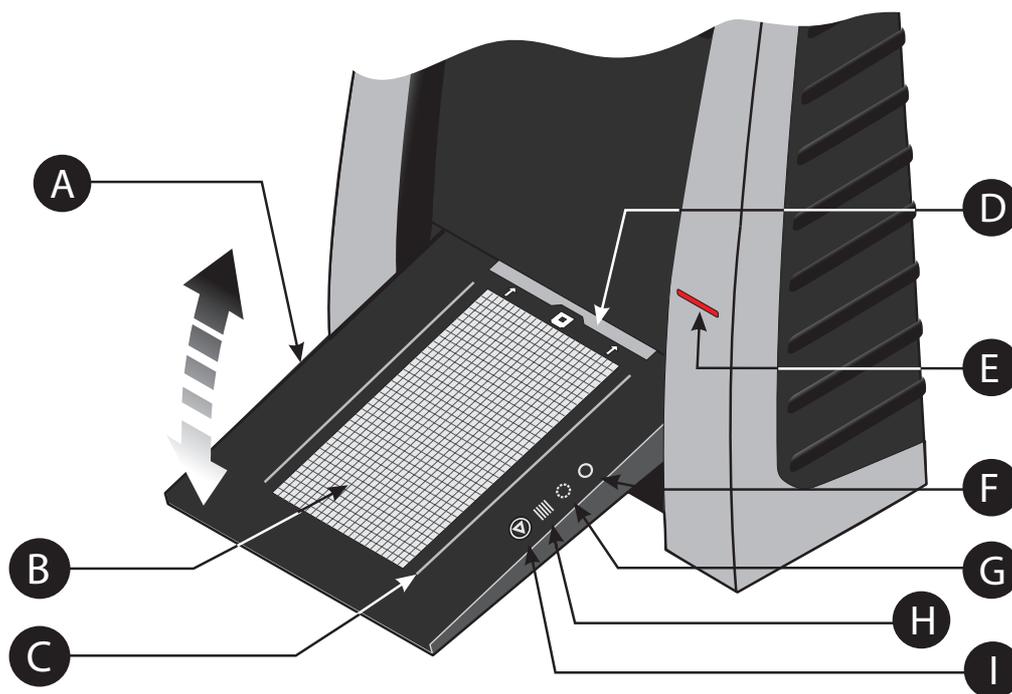
Preventive maintenance

All Flextight scanners should be serviced every 25,000 scans or every 12 months, whichever comes first. If a Feeder is mounted, the recommended number of scans is 15,000 provided that the feeder is mounted for all scans. Please note that previews are also counted as scans.

Newer Flextight scanners have a counter installed so that the number of scans can be monitored from FlexColor. Please refer to the FlexColor manual to learn more about monitoring the number of scans.

Failures or faults originating from lack of service and/or daily maintenance are not covered by the factory warranty.

Parts and components – front panel



A Feed table

This must be in the lower position for normal scanning. When scanner is not in use you can return it to closed position to protect it from dust etc. Adjust to horizontal position when using the 35 mm slide mount holder.

B Light table

For viewing originals. The grid helps you to align your transparent originals.

C Transparency holder guide

Two rails that guide all the transparency holders and keep them in a straight orientation.

D Original holder clasp

All original holders slide into a slot here and are held in place by a magnetic clasp.

E Power switch

Button to turn the unit on/off.

F Power indicator (Green)

Remains lit when ready to scan. Flashes when first installed to indicate that firmware must be loaded (it will be loaded automatically when you run FlexColor).

G Motor drive indicator (Yellow)

Lights when the scanner is repositioning the optics to scan in a new format or when drum is repositioning.

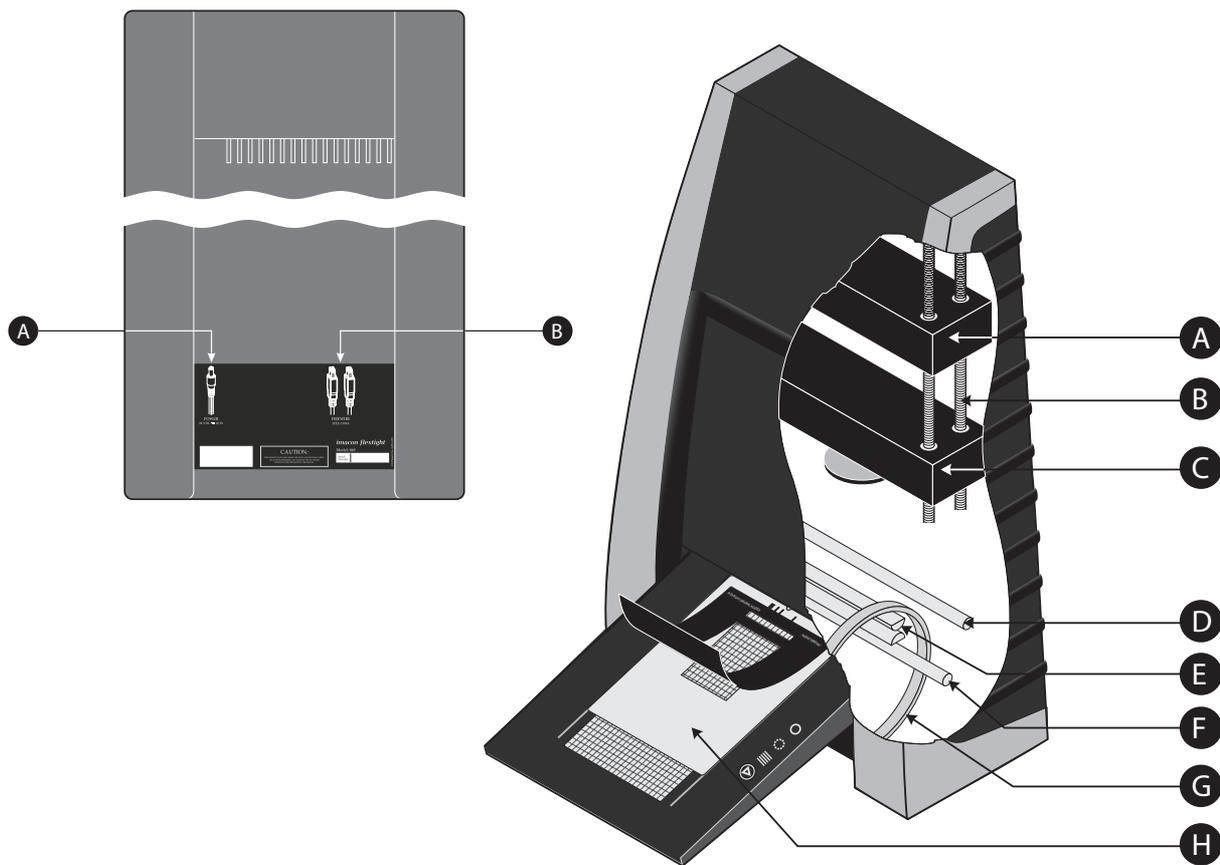
H Scan indicator (Red)

Lights when scanning. Do not touch the scanner while this indicator is lit. If the light is flashing when not scanning, then an error has occurred - please contact your Flextight dealer for assistance.

I Start/stop scan button

With this button you can initiate a 3F scan. Parameters are set according to your 3F scan setup. The button will also stop any normal scan process.

Parts and components – cutaway view



A Power cable socket

Connect the power cable into this socket.

B FireWire interface sockets

Socket for FireWire cable (max. 6 m) for computer connection. The second socket allows connection to another device (hard disk, printer etc.) in the FireWire chain.

C CCD housing

Movable platform holding the CCD sensor.

D Spindle

For positioning of the CCD housing and optics housing for the appropriate resolution and original size.

E Optics housing

Movable platform holding the optics that focuses the image of the original on the CCD-sensor.

F Upper light source

Illuminates reflective originals. FlexTigh X5 only.

G Prism-module

Focuses the light from various angles and thereby removes or heavily reduces dust and scratches in the scanned image. FlexTigh X5 only.

H Lower light source

Illuminates transparent originals.

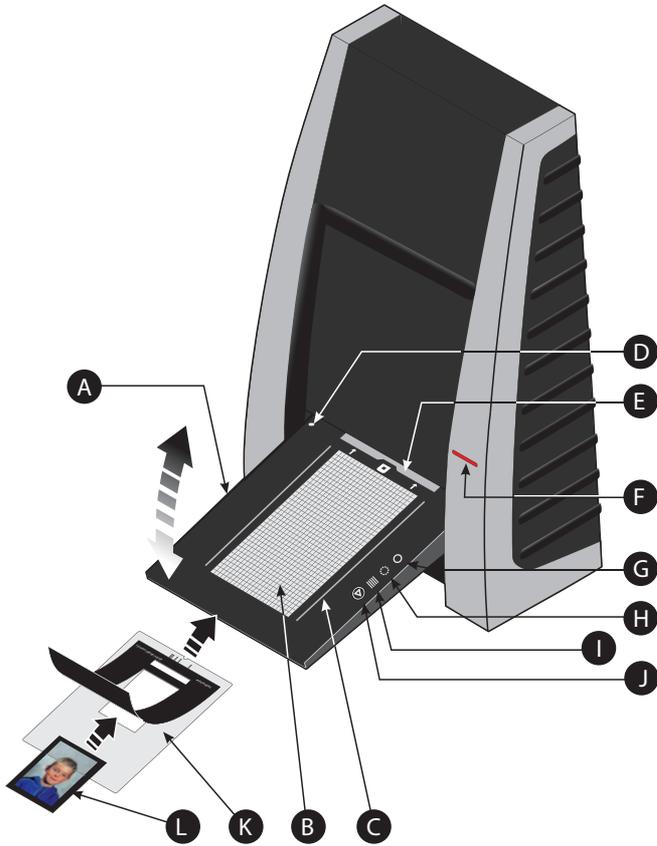
I Drum

Rotates the original into the scanner and transports it past the optical scan line.

J Original holder

In this case, a transparency holder is shown in the mounted position and with the retaining flap held open.

Operating instructions



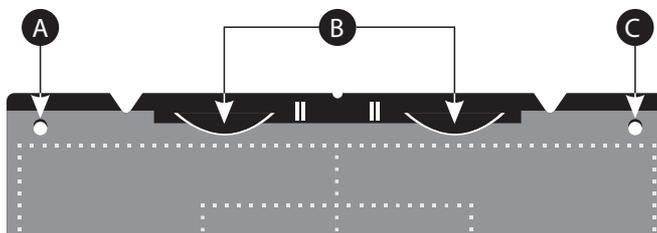
1. It is assumed that the scanner and FlexColor software have been properly installed.
2. If not already done, lower the feed table **A** to normal position.
3. Press the red power button **F** on the front of the scanner to switch it on. The green light **G** starts flashing. This means that no firmware has been downloaded yet. It will be downloaded automatically later when you first run the FlexColor program.
4. Turn on your computer and start the FlexColor program. The green light **G** will stop flashing indicating that firmware has been downloaded to the scanner.
5. Select the original holder **K** that matches your original:
 - For transparencies, choose one of the holders that has a square hole in it. The original must completely fill the hole with no edges showing. Also, no edges of the original must extend past the outer edges of the holder.
 - For reflectives, select the large A4/letter-size holder with the clear plastic layer. The feed table **A** must be in normal position.
 - For 35 mm slide frames use the optional 35 mm slide mount holder. The feed table **A** must be adjusted to horizontal position (see diagram). This is obtained by lifting the table slightly upwards while pushing it gently into the scanner.

NOTE! Each original holder has its own unique identification code (a combination of small rectangular holes at the holder's leading edge). These codes, combined with the scanner's ability to detect the feed table position, ensure that the scanner will not operate unless the feed table position matches the selected original holder.

6. Place the original holder **K** with the slotted tab facing into the scanner. For transparencies, the flexible magnetic retaining flap must face upwards. For reflectives, the clear plastic sheet must face upwards. Make sure that the original holder fits between the appropriate guides **C** or **D** on both sides of the light table.
7. Slide the holder gently into the slot **E** at the top of the feed table. It will slip about ½ cm (¼ inch) into it. Do not press too hard. It slips in very easily and is held in place by a magnetic clasp. To remove the holder, simply pull it gently backwards.
8. Lift the retaining flap of the original holder and place your original **L** as follows:
 - For transparencies, place your original with the emulsion side down. The original must completely fill the hole with no edges showing and with a minimum overlap of 2 mm along each edge. Also, no edges of the original must extend past the outer edges of the holder. Use the grid on the light table **B** to help line up the image.
 - For reflectives (Flextight X5 only), make sure that no part of the original extends past the edge of the holder. Use the dotted

lines printed on the holder to line up the image. Handle the clear plastic layer only by the edges to avoid fingerprints. Curl the plastic layer back and slip the front edge into Flextight's foil holder.

9. Lay the top layer of the holder down flat over the original.
 - For the reflective holder, note the four metal pegs (the top two are shown as **A** and **C** in the figure below); make sure that the clear plastic sheet is pressed all the way down over all four pegs. Note also the two curved tabs at the top of the holder (**B** in the figure below); the clear sheet must slip under each of these tabs, as shown.



10. Go to your computer and follow the directions given in the FlexColor software manual to take a preview, make settings, and take the final scan. Alternatively you can press the scan button on the light table. This will initiate a 3F scan according to your 3F settings.

Resolutions

True Resolutions

The table below shows the max. resolutions (in ppi) available with each of the original holders when scanning in True Resolutions mode.

Original	Max. resolution (ppi) at full scanning width.
35 mm Portrait	8000 (Flextight X5) 6300 (Flextight X1)
35 mm Landscape	5000
45 x 60 mm Portrait	4000
60 x 60 - 60 x 70 mm	3200
4" x 5" Portrait	2040
A4 Portrait	960

Table 1: True Resolutions