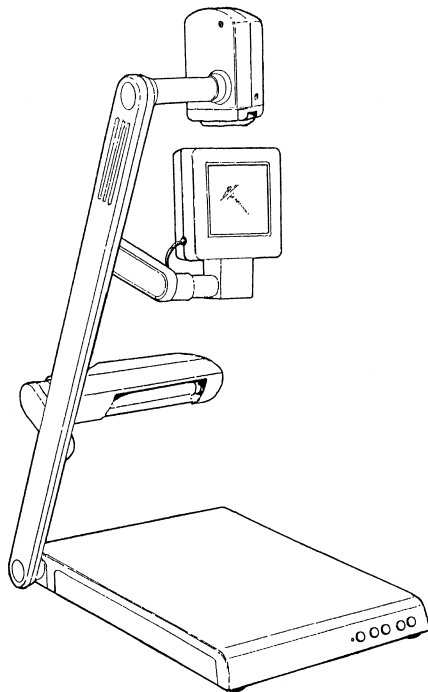


DocumentPro X-15

*Digital Video Presentation Camera
With XGA Output
Instruction Manual*



NAVITAR[®]
The World Leader in Image Quality

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Safety Precautions

To prevent damage to the equipment and operating personnel, please observe the following precautions:

Make sure that the voltage source contains a satisfactory path to ground.

Do not operate the unit where fluids can come into contact with the electrical components.

When changing the bulb:

- Disconnect the electrical supply.
- Allow the unit to cool.
- Use a 4 watt fluorescent lamp, which you can purchase from your authorized Navitar dealer.

There are no user serviceable components (other than changing the lamp). Opening the unit will expose dangerous voltage levels and sensitive electronic components. A qualified technician should perform all repairs.

To prevent the unit from damaging condensation and thermal shock, certain procedures must be followed:

- In cold weather, always put the unit in a moisture proof container or enclosure before transporting.
- Either keep the unit warm during transportation, or allow sufficient time for it to warm up at the destination. Keep the unit in the original moisture proof package while it warms up. (The goal is to prevent warm, moist air from striking the cold electronic and optical components, which will cause damaging condensation.)
- Unplug this unit from the wall outlet when it is not being used for a long period of time. To disconnect the cord, pull it out by grasping the plug. Never pull it out by the cord itself.
- The fluorescent lamps can get hot during operation. Do not touch the lamp during operation or when collapsing the arm.
- Clean the lens and LCD monitor screen with an air spray or soft dry cloth.
- Clean the cabinet with a soft cloth, lightly moistened with a mild detergent solution. Never use any type of solvent such as alcohol or benzene, which will damage the finish.

Features and Benefits

Progressive Scan Performance:

The Navitar DocumentPro X-15 lets you easily capture and present typed documents with its 600 TV line resolution progressive scan camera with 15 frames/sec refresh rate. It is possible to display full page documents with characters as small as 9-point type, as well as other small items, 2-D and 3-D objects.

XGA Digital Output, Analog Composite Video and S-Video Outputs:

With this feature the user can connect to a high-resolution data/video projector via XGA while simultaneously outputting to a TV monitor. The XGA input connection enables a laptop computer to be plugged into the base of the unit. A push button control allows the user to switch from presenting computer information to the DocumentPro image.

10X Zoom Lens:

The built-in 10X zoom lens offers a wide range of magnification. It is easy to operate with push button controls, and motorized zoom and focus.

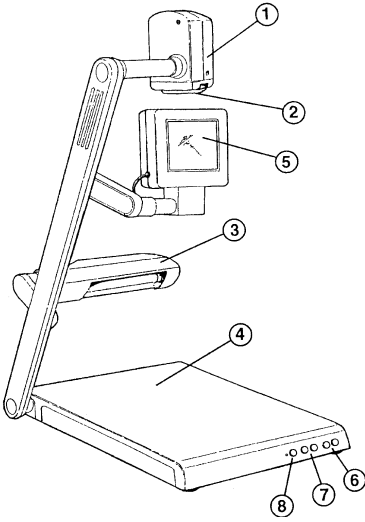
Compact and Lightweight:

Its small, lightweight design makes the DocumentPro extremely portable. After use, the streamlined unit folds down flat for easy and compact storage.

Other Features:

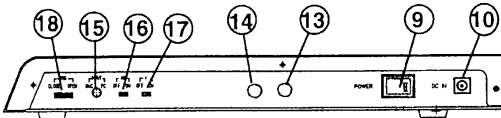
- Open table area provides flexibility when placing and moving documents or objects on the stand.
- Built-in auxiliary light illuminates and enhances detail.
- Camera head tilts 90 degrees and the close-up lens flips down for use of the unit as a videoconference or room camera.
- Built-in 2.9" preview monitor.
- Built-in push button image frame memory.

Front View

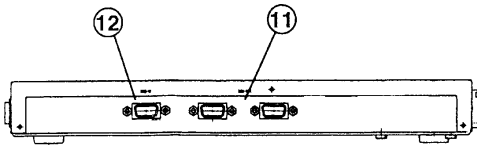


1. Camera
2. Lens
3. Arm light
4. Stage
5. LCD monitor
6. Zoom controls
7. Focus controls
8. Image memory switch
9. Power switch
10. DC inlet
11. RGB output connectors
12. RGB input connectors
13. S-Video output terminal
14. Video output terminal
15. Image switcher
16. Aperture switch
17. Gamma switch
18. Iris control

Right Side View



Rear Panel



Controls

1. **Camera:** The camera can be tilted upwards as much as 90 degrees so it can be used as a room camera.
2. **Lens:** In addition to the standard lens, a close-up lens is attached to the bottom of the camera. To detach, pull the knob of the close-up lens.
3. **Arm light:** When the power is on, the arm light automatically turns on.
4. **Stage:** Place an object or document on this for viewing.
5. **LCD monitor:** The position or orientation of a document or object can be adjusted while viewing an identical display on an external LCD monitor.
6. **Zoom control:** For zooming in or out on a document or object while viewing the image on a monitor or screen.
7. **Focus control:** For focusing in or out on a document or object.
8. **Image memory switch:** This can be used to capture a frame and freeze view it.
9. **Power switch:** On/off.
10. **DC inlet:** Connects the product to a power supply with the AC adapter.
11. **RGB output connectors:** Connect the RGB cables. Be sure to securely tighten the lock screws on the cables.
12. **RGB input connector:** A personal computer image can be displayed on the monitor by attaching your computer here.
13. **S-Video output terminal:** You can use this if your monitor has an S-video input terminal to produce a higher quality image.

Controls

14. **Video output terminal:** For composite video output.
15. **Image switcher:** Press button to display either the DocumentPro image or a computer image.
16. **Aperture switch:** Turn this switch on to obtain a clear view of outlines of characters or table lines.
17. **Gamma switch:** Turn this switch on/off to improve image quality depending on the output device of the original image or document type.
18. **Iris control:** Adjusts the brightness of the image.

Operation

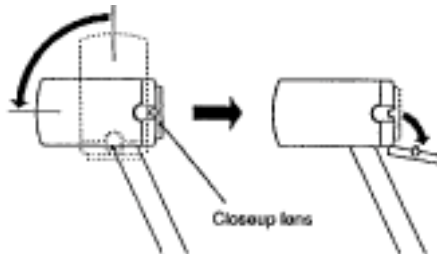
When the power is on, the unit automatically turns on the arm light and LCD monitor. Both the arm light and LCD monitor remain lit until the unit is turned off.

Zoom the Image on the Screen

Press the “wide” button to zoom out and view a full page.
Press the “tele” button to zoom in.

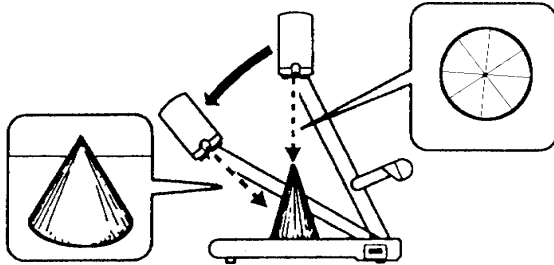
Changing the Camera Direction

This unit allows you to flip up the camera 90 degrees. If you remove the close-up lens, the camera can be used at infinity or as a room camera. You can shoot materials attached to walls or even yourself.



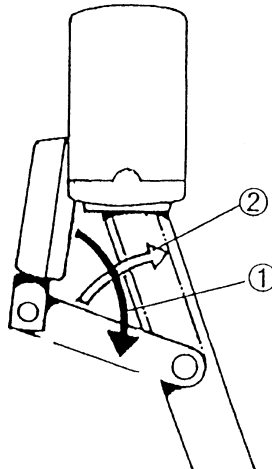
Shooting a Three-dimensional Object

The camera arm is moveable so that 3-D objects can be viewed from different angles.



Storage of the LCD Monitor

Fold the LCD monitor forward (see arrow ①) along the monitor arm. Next, fold the monitor arm upward (see arrow ②) along the main arm. Do not fold the LCD monitor or monitor arm reverse side. This could damage the joint of the LCD monitor.



Camera and Video

Camera Element	1/3-inch CCD
Resolution	600 TV lines
Number of Pixels	1034(H) x 779(V) / 850,000 pixels
Video Frame Refresh Rate	15 frames / second in real time
TV System	XGA/NTSC or XGA/PAL
Lens	10X (power zoom, 5.8 ~ 58 mm, F 1.8 ~ 2.7)
Focus	Power focus
Iris	Push button control
White Balance	Full auto
Shutter	1 / 60 or 1 / 100
Camera Flip Up	Yes, 90° - can be used as a room camera
Image Input	XGA - computer in
Image Output	XGA (2), one to video projector and one to computer monitor; Composite-Video and S-Video

Monitor

Screen Size	2.9 inches
Display System	Transmit-type TN liquid crystal
Number of Pixels	480 x 146 (NTSC) , 480 x 130 (PAL)
Light Source	Fluorescent lamp

Other

Image Memory	Yes, 1 frame - push to freeze image, push to view live image
Output Switcher	2-function (push button), laptop computer or DocumentPro
Pickup Area	8 1/4 x 11 3/4" (A-4 size)
Lighting	Fluorescent light, 9 W
Controls	Power on/off, camera head rotation, focus, iris, zoom, field frame memory, aperture switching, text or picture mode
Power Input	100 ~ 240 v, 50 / 60 Hz
Power Consumption	30 W
Dimensions	Useable: 335 (W) x 324 (D) x 525 (H) mm 13.2 (W) x 12.8 (D) x 20.7 (H) in Folded: 335 (W) x 553 (D) x 90 (H) mm 13.2 (W) x 21.8 (D) x 3.5 (H) in
Ambient Operating Temperature	5 ~ 35°C
Weight	4.8 kg 10.6 lbs.
Standard Accessories	AC power adapter and cable, RGB cable (AC 100 v ~ 240 v, 50 / 60 Hz)
Safety Approval	CE, UL
Available Models	
1-14111	DocumentPro X-15 XGA/NTSC
1-14235	DocumentPro X-15 XGA/PAL
8-14418	Replacement bulb

The design and specifications are subject to change without notice.

5 Year Parts / 5 Year Labor

This product is warranted to be free from defects in material and workmanship for a period of five years from the date of invoice to the original purchaser.

If during the warranty period the product is found to be defective, it will be repaired or replaced at the facilities of Navitar. However, Navitar reserves the right to refund the purchase price if the replacement or repair is not commercially practical or timely. Parts not manufactured by Navitar carry only the warranty of their manufacturer. Lamps and fuses carry no warranty.

This warranty does not cover damage caused in transit; damage caused by misuse, neglect or carelessness; or damage resulting from either improper servicing or modification by someone other than Navitar. Further, this warranty does not cover any routine maintenance work that is reasonably expected to be performed by the purchaser.

No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage or other conditions beyond the control of Navitar.

For service, repair or return procedures under this warranty, contact your distributor, your local Navitar field officer or Navitar direct at (716) 359-4000 or (800) 828-6778 in the United States.

Except as stated herein, Navitar makes no other warranties, expressed or implied by law, whether of merchantability, fitness for a particular purpose or otherwise. Further, Navitar shall not, under any circumstances, be liable for incidental, consequential or other damages.

This warranty applies only to those original purchasers (non-dealers) returning the product warranty card within 30 days of purchase date. For purchasers who do not return the warranty card within 30 days, or for items sold to dealers for their own use or rental use, our standard 90 day parts and 1 year labor warranty will apply.

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