

Thank you for choosing a Recordex iMMCam AFX camera for your presentation needs. Our iMM line of products are developed specifically to enhance the interactive multimedia experience of any presentation.

Copyright

© 2011 by Recordex USA, Inc. All rights reserved. Reproduction or adaptation without prior written permission is prohibited, except as allowed under copyright laws.

Disclaimer

The information contained in this document may change without notice.

The product warranty is defined on page 16. No part of this document should be construed as constituting an additional warranty. Recordex shall not be liable for any errors or inaccuracies contained in the document. Under no circumstances is Recordex USA liable for direct or indirect damages arising out of the use of this product or documentation.

Trademarks

Recordex is a registered trademark of Recordex USA, Inc. iMMCam is a trademark of Recordex USA, Inc. Macintosh is a registered trademark of Apple Computer, Inc. Microsoft, and the Windows Operating System are trademarks of Microsoft Corporation. All other trademarks, product names or companies mentioned in this document are used for reference and clarification only and may be the registered marks or property of their respective owners.

FCC Notice (Class A)

This device complies with Subpart J of Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

Warning - This is a class A Product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE Class A (EMC) Notice

This product is intended for use in a commercial, industrial or educational setting and environment. It is not intended for residential home use.

Warning - This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to correct the interference.

RECYCLE PROPERLY

This device should not be disposed of with other household waste. It should be discarded through an authorized recycling center able to accept electrical and electronic waste.

CAUTION

WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION - RISK OF ELECTRIC SHOCK - Do not attempt to service unit. Do not remove cover. There are no user-serviceable parts inside the unit. Unit should be returned to the manufacturer for service.

Precautions When Using

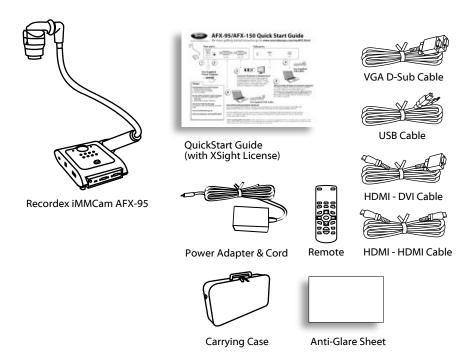
- Do not use on unstable tray, table, or cart. Use only on stable surface.
- · Do not use near water, steam, or excessive direct heat source.
- Only use the power adapter provided by the manufacturer.
- Always unplug the document camera before cleaning any part of the camera.
- Unplug the device when not in use for long periods of time and during electrical storms.

Table of Contents

PACKAGE CONTENTS4
GETTING TO KNOW YOUR IMMCam AFX-955
THE INPUT/OUTPUT PANELS6
CONTROL PANEL
REMOTE CONTROL
SPECIAL FUNCTIONS
TECHNICAL SPECIFICATIONS
DEVICE DRIVER INSTALLATION10
VIDEOGLIDE FOR MAC OSX11
XSIGHT HD VIEWER INSTALLATION12
MAKING THE CONNECTIONS13
TROUBLESHOOTING14
RECORD PRODUCT INFORMATION15
WARRANTY STATEMENT16

PACKAGE CONTENTS

Take a moment to confirm that you received all the items listed below:

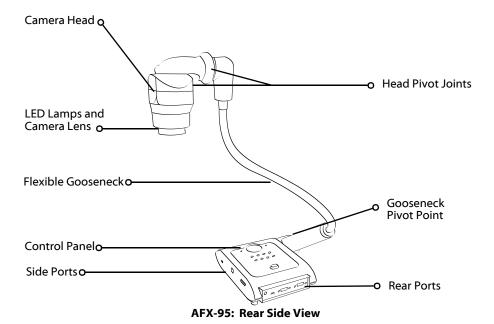




Optional Microscope Adapter (28 mm)

GETTING TO KNOW YOUR iMMCam AFX-95

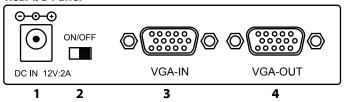
Use the illustrations below to familiarize yourself with the Recordex iMMCam AFX-95.



THE INPUT/OUTPUT PANELS

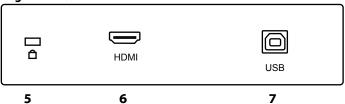
Use the illustrations below to familiarize yourself with the various ports found on the rear and side panel of the camera.

Rear I/O Panel



#	Label	Description
1	DC12V:2A	Power Supply Port (DC 12V)
2	ON/OFF	Power Switch
3	VGA-IN	D-Sub RGB Port (VGA Input) - Used for VGA Passthrough
4	VGA-OUT	D-Sub RGB Port (VGA Output) - Connect to Projector/Display

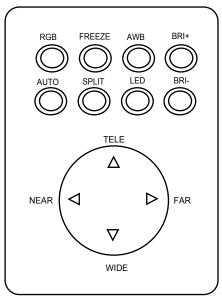
Right Side I/O Panel



#	Label	Description
5	LOCK	Kensington Lock
6	HDMI	HDMI Port (OUTPUT to Display) - Connect to HDMI or DVI port.
7	USB	USB 2.0 Port (OUTPUT to Computer), 12 X Optical Zoom, SXGA Resolution.

CONTROL PANEL

Refer to the illustration below and the summary table for a description of the control panel function buttons.

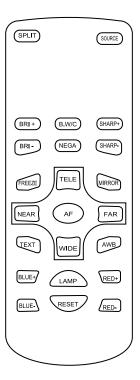


Label	Description
TELE	Zoom in
WIDE	Zoom out
NEAR	Manual focus (nudge near)
FAR	Manual focus (nudge far)
RGB	Switch to VGA Passthrough (RGB-IN passed through to RGB-OUT)
FREEZE	Toggle on/off image freeze mode (press again for normal view)
AWB	Auto white balance
BRI+	Increase image brightness
BRI-	Reduce image brightness
AUTO	Automatically optimize image focus, brightness, and white balance
SPLIT	Divide display: ½ screen is frozen, ½ screen is live image
LED	Toggle on/off the LED lamps
LIGHTS	Description
RGB	Lit when VGA Passthrough is active
POWER	Lit when camera is powered on

REMOTE CONTROL

Refer to the illustration below and the summary table for a description of the remote control function buttons.

Label	Description
NOTE: most buttons are defined in the table on page 8. This table defines function buttons that only appear on the remote control.	
SOURCE	Press for VGA Pass-through (switch between sources)
B.W/C	Switch between black and white or color viewing
MIRROR	Displays mirror image of current presenter view
SHARP+	Increase edge sharpness
SHARP-A3	Decrease edge sharpness
TEXT	Increase text sharpness (toggle text/graphic mode)
AWB	Auto white balance the image
RESET	Reset image settings
BLUE+	Increase blue color level (manual white balance, remote control function only)
BLUE-	Decrease blue color level (manual white balance, remote control function only)
RED+	Increase red color level (manual white balance, remote control function only)
RED-	Decrease red color level (manual white balance, remote control function only)



SPECIAL FUNCTIONS

Changing VGA/HDMI Output Resolution. The default output resolution of the camera is SXGA (1280x1024 @60Hz). The output resolution can be changed to XGA (1024x768 @60Hz), SXGA (1280x1024 @60Hz, and WXGA (1280x800 @60Hz). To do this press the AUTO button on base control panel and hold it down for three seconds. Doing so will cycle the camera through the output resolutions. The camera display will go blank for a couple seconds when the resolution is switched. NOTE: Not all display devices will support all of the output resolutions.

Passive VGA Pass-through

Passive pass-through allows you to pass a VGA signal through the camera to a projector or monitor even when the camera is in power off state. To do this follow these steps:

- 1) Configure camera for VGA Passthrough by connecting a VGA Source (I.e computer/laptop) to the camera's VGA-IN port.
- 2) Connect the camera to a display (projector/monitor) using a VGA or HDMI cable and the camera's VGA-OUT or HDMI port.
- 3) Power on the camera.
- 4) Press the RGB button on the camera, or the SOURCE button on the remote to put camera in VGA pass-through mode.
- 5) Power off camera and the VGA image will still continue to be passed-through the camera to the projector/display.

TECHNICAL SPECIFICATIONS

Feature/Specification	Model: AFX-95 // Portable Gooseneck
Image Sensor	1/4" CMOS
Pixels	1.3 Mega Pixel
Zoom	12x Optical, 8x Digital (96x Total)
Lens	Glass
Frame Rate	25 fps (max)
Focus	Auto Focus
lmage Effect	Mirror/Freeze/B&W/Negative/Split
Head Rotation	270 degrees/ 45 d. pivot
White Balance	Auto/Manual
Exposure	Auto
Flicker Level	2 levels
Horizontal Resolution	600TV
Shooting Area	9.85" x 12.6"
VGA/RGB Output	SXGA (1280x1024 @ 60Hz) WXGA (1280x800 @ 60Hz) XGA (1024 x 768 @60Hz)
Video Input Switching	VGA Passthrough Switch
RGB/VGA Pass-through	Passive & Active Pass-through (power on or off)
USB 2. 0 Output (Hi-Res)	USB Video Device (1280x1024) 12x Optical Zoom (12x total Zoom) with additional Zoom through XSight HD Viewer software.
Save Images	Unlimited capture by USB 2.0 (Video and still capture)
Software	XSight HD Viewer for Windows VidoeGlide Video Capture for MAC
Video Input	1 VGA Passthrough
Audio Input	N/A
Video Output	1 x VGA Out (XGA, SXGA, WXGA) 1 x HDMI/DVI Out (XGA, SXGA, WXGA) 1 x USB 2.0 (SXGA, XGA, VGA)
Audio Output	N/A
Power (brick)	DC 12V/2A (100-240v 50/60 Hz)
Light Source	LED Lamp (adjustable: on/off)
IR Remote	Yes
Carrying Case	Yes
Microscope Adapter	Optional
Physical Dimensions Weight	Folded: 15.25 x 8 x 2.5 (in) Open: 7.25 x 7.7x 24 (in) Weight: 4.5 lbsShipping Weight: 10 lbs

DEVICE DRIVER INSTALLATION

Your iMMCam AFX-95 document camera can be used as a visualizer without installing any device drivers or additional software. However, if you wish to capture video or image stills from your iMMCam then you will need to install USB capture software.

Hi-Resolution USB Port (Labeled: USB) (Location: Side panel)

This port is designed for hi-resolution image capture. It will support up to 1280x1024 image capturedth.		
TYPICAL USE	Capturing hi-resolution image stills and video using XSight HD Viewer (Windows) or VideoGlide (MAC)	
MAX ZOOM	Up to 12x Zoom plus 8X XSight Zoom = 96X total	
DRIVER	No driver pre-installation required for Windows or Mac OS X. Simply connect camera with supplied USB cable and the OS will automatically install the proper device driver and the device will be installed as a USB Video Device.	
INSTALLATION	No special driver installation required. Simply plug in device, connect the USB cable to your computer and allow the operating system to detect the hardware and install the appropriate driver. This device will appear as a USB Video Device under Windows and Mac OS X.	

VIDEOGLIDE FOR MAC OSX

If you are running MAC OSX you will use VideoGlide to capture still images and video with your AFX.

To Install VideoGlide go to www.recordexusa.com/myAFX.html to register your camera and download the software. Then install the software on your computer.

Next to connect your AFX to your computer by following these steps:

- 1. Plug in your AFX
- 2. Make sure it is powered on.
- 3. Connect the AFX to your MAC using the supplied USB cable. Use any open USB 2.0 port on your computer.
- 4. The MAC OS will auto-detect the camera.





XSIGHT HD VIEWER INSTALLATION

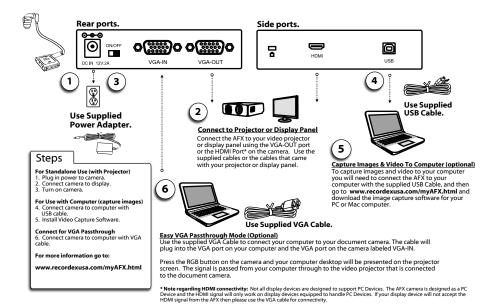
If you are running Windows you will use XSight HD Viewer to capture still images and video with your AFX.

Go to www.recordexusa.com/myAFX.html for instructions on downloading and installing XSight HD Viewer. Also you will find several videos showing how to use the software.



MAKING THE CONNECTIONS

The diagram below demonstrates the input and output connections the AFX supports.



* Note regarding HDMI connectivity: Not all display devices are designed to support PC Devices. The AFX camera is designed as a PC Device and the HDMI signal will only work on display devices equipped to handle PC Devices. If your display device will not accept the HDMI signal from the AFX then please use the VGA cable for connectivity.

TROUBLESHOOTING

Problem/Observation	Solution
No image is displayed or image is totally black or totally white.	 Check that the unit is plugged in and powered on. Press the LED button to cycle through the lighting options to confirm the unit is on. Check that the VGA cable is tightly connected to the document camera and the projector. The camera is zoomed too far in and is displaying only a blank portion of the document or object. Zoom out or move object.
USB capture is not working	 Make sure the USB cable is plugged into the camera and the computer. Use a rear USB Port on your computer. Some front USB ports do not have adequate bandwidth and power to allow for quality image capture. Try using the capture software provided with the camera to rule out any issues with third party software. Unplug USB cable, restart your computer and camera. Make connection after computer has been logged into Windows. (resets USB ports)
Image is out of focus	 Press the AutoFocus button. Press the reset button Try zooming in or out a little (press Tele / Wide) Use the near/far button on the remote to manually tweak the focus. Refer to the "Quick Setup Guide" for optimum camera head placement. 15-18" above document
Image is dark or washed out	 Press the Auto White Balance button (AWB) Try changing the lighting Manually change the brightness (BRI+/BRI-) Power off camera and try again.
Image is stuck	 Press the Freeze button to resume normal viewing Power off the unit. Power on and try again.
VGA pass-through is not working	 If using a laptop/notebook make sure to switch the display settings of the notebook to use an external monitor. Make sure computer has not gone into sleep mode.
Video projector is unable to project image from camera.	 Make sure VGA connection is tight. Try changing the output resolution by pressing and holding the AUTO button for 3 seconds.

RECORD PRODUCT INFORMATION

We strongly recommend you fill out the information below:

MODEL NUMBER:	
SERIAL NUMBER:	
SOFTWARE KEY:	
JOI TWAILE RET.	
PURCHASED FROM:	
PURCHASE DATE:	(staple copy of invoice to this manual)

SUPPORT CONTACTS

PHONE: 718-392-5380 Ext. 2

EMAIL: support@recordexusa.com

WARRANTY STATEMENT

LIMITED 5-YEAR WARRANTY RECORDEX USA AFX Document Camera ("Product")

What is my warranty? Recordex warrants to the original purchaser only that the Product will be free from defects in material and workmanship under normal use for a period of five (5) years from the date of original purchase.

How long does this warranty last? Five (5) years from the date of the original purchase.

Who is responsible for Shipping? You are responsible for shipping the Product to our Warranty Service Depot. Recordex will pay for return shipment of the repaired Product under warranty. Return shipment will be by ground service to the 48 contiguous US states. You are responsible for shipping to Alaska, Hawaii and any address outside of the United States. If the Product is repaired out of warranty then you are responsible for shipping both ways. Recordex is not responsible for any shipping damage that may occur in transit to the service depot.

Is There A Special Warranty for Educators?

Yes, Product used in a classroom or education setting is eligible for our Replacement Warranty Service. Make sure our customer service representative knows that the Product is in and educational setting and we will replace the product should a defect arise. Product will be replaced with new or refurbished product at Recordex's discretion. This process eliminates the wait time associated with sending in the Product for repair. This warranty is often referred to as a 'hot swap' warranty.

What must I do to obtain warranty service? To obtain warranty service please contact Recordex's Customer Service Center at 1-718-392-5380 x2 or contact your authorized Recordex Dealer for assistance in filing a warranty claim. You will receive instructions on how to properly return your product for authorized warranty repair. In order to receive warranty service you must be able to provide an original receipt or invoice for the purchase of your Product

What are the limitations? Recordex's warranty shall not apply: (i) to any Product subjected to accident, misuse, neglect, alteration, acts of God, improper handling, improper transport, improper storage, improper use or application, improper installation, industrial or commercial use, improper testing or unauthorized repair; or (ii) to cosmetic problems or defects that result from normal wear and tear under ordinary use, and do not affect the performance or use of the product. If the Product develops a covered defect within the warranty period, Recordex will, at its option, either repair or replace the Product at no charge, provided that the Product is returned during the warranty period and this is your exclusive remedy and the entire liability of Recordex under this warranty. No warranty is made or implied as to the effectiveness or suitability of this product for your purposes.

THE ABOVE STATED WARRANTY IS EXCLUSIVE AND REPLACES ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. RECORDEX WILL NOT BE HELD LIABLE FOR ANY OTHER DAMAGES OR LOSS INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES AND LOSS OF PROFITS OR REVENUES FROM WHATEVER CAUSE, INCLUDING BREACH OF WARRANTY OR NEGLIGENCE.

