

V+F Lens Control Manual

v1.1



Preston Cinema Systems 1659 Eleventh Street Santa Monica, CA 90404

tel 310-453-1853 fax 310-453-5672 www.prestoncinema.com

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1. Description.

The V+F Lens Control is available as a single channel wireless/cable control (*p/n 4050*) or a cable only version (*p/n 4051*). Both are used with DM-1 or DM-2 digital motors. The cable only version is intended to control the iris function of cinema style lenses mounted on video cameras. In this mode, the iris is controlled through:

- the cameras' remote set-up box (Sony RMB-150 or equivalent)
- through the cable connected Remote iris Box (*p/n 4020*)
- through the on-board control knob.

The wireless version adds the possibility of control through any of three wireless hand units:

- Focus-Iris Hand Unit (p/n 4024)
- Hand Unit 3 (p/n 4060)
- Radio Micro Force unit (p/n 4015 or 4016)

Wireless channels are indicated on the digital display. A three position switch adjusts the motor torque level, and a second switch determines the direction of motor rotation. The small size of the control makes it especially suitable for hand held use.

The FI+Z Hand Unit (*p/n 4000* with Microwave Transmitter *p/n 4910*), the Focus-Iris Hand Unit (*p/n 4024*) or the Radio Micro Force (*p/n 4015* or *4016*) can all be used for wireless operation with version *p/n 4050*. The mode switch selects whether the unit responds to Focus, Iris, or Zoom commands. Camera Run/VTR signals are available for controlling all film and video cameras.

The unit operates over a voltage range of 11 - 30 VDC. For video cameras, all power and control signals are provided through the 12-pin Hirose on the camera. Film cameras having accessory receptacles capable of 1.5A @ 24V (Arri 435, Panavision) can also be used to provide both power and camera run functions. Otherwise separate receptacles are provided for external power and Camera Run/VTR.

2. Operation



p/n 4050 Wireless Version



p/n 4051 Cable Only Version



VLC Receptacles



Mounting Bracket p/n 4342

A. Camera Connections and Mounting

- Secure the V+F Lens Control to the Matte Box Support Rods using the Mounting Bracket. The jaw opening is adjusted to accommodate different rod sizes by turning the free half of the bracket as shown in the picture above.
- The V+F unit can be powered directly from the camera, or through a separate power cable. The cables for connection to the camera are p/n 4620 ~ 4630, and the power cables are p/n 4640, and 4641. See the complete list of cables in Section 4 of this document.
- Connect the digital motor (DM-1 or DM-2) with the motor cable (p/n 4410 ~ 4412).
- Use a Swing Arm Motor Bracket (p/n 4301 ~ 4303, 4333) to attach the motor to the Matte Box Support Rods. Engage the motor to the lens.



VLC and Digital Motor with brackets

- B. Set-up Procedure-Video Camera Calibration
 - i. Power the camera.
 - ii. Wireless Version only: Set the mode to Video by pressing the mode button until the "Video Iris" LED is lit. Press the "Cal" button. The Digital Motor will find the end stops of the lens. The f2.8 LED should be blinking. Using the knob on the VLC to move the iris to f2.8 and press the "Cal" button again. Now the F16 LED will blink.
 - iii. Cable Only Version. There is no mode switch on this unit. Initiate calibration by pressing the "Cal" button. After the motor finds the end stops of the lens, the F2.8 LED will blink. Use the knob to set the lens to F2.8 and press the "Cal" button again. Now the F16 LED will blink. Adjust the lens to F16 and press the "Cal" button. Turn the knob until the iris is at F16 and press the Cal button. The lens is now calibrated to the video camera and the engraved F-stop marks on the knob should match those of the lens.
- C. Set-Up Procedure for wireless operation. The V+F (p/n 4050) can be controlled through its microwave link by the following hand controls:
 - a. Hand Unit 3
 - b. The Focus-Iris Hand Unit
 - c. The Radio Micro Force module with a Micro Force control.

Communication between the Hand Unit and the V+F will be established when both units are set to the same channel. The wireless channel is by using the channel button located to the right of the LED channel display.

- D. Control of the motor can be switched from an external source (wireless Hand Unit or RMB150 type device) to the knob by pressing the "Local" button. The red LED will be lit when the unit is under local control.
- E. The V+F may also be controlled via a cable connection through the Remote Iris Box (p/n 4020). To use this device with the V+F, place the unit into the "Local" mode and connect the Iris Box to the V+F "Remote" receptacle with cable 4642



Remote Iris Box p/n 4020

3. Specifications

Size 107mm x 66mm x 45mm (4.2" x 2.6" x 1.75")

Weight: 350g

Power Requirements: 11 - 30 VDC 0.2A quiescent at 12VDC.

4. Cables and Accessories

4342	Mounting Bracket (spare) for 15 – 19mm rods
4620	Camera Cable Arriflex 12V 11-pin Fischer
4621	Camera Cable Arriflex 24V 3-pin Fischer
4622	Camera Cable Panavision Film
4623	Camera Cable Panavision Genesis
4624	Camera Cable Aaton
4630	Camera Cable Sony
4640	Aux Power Cable 12V 4-pin XLR
4641	Aux Power Cable 24V 3-pin XLR
4642	Remote Iris Cable Box 8'