

## What's a "FiOPS ROBO?"

The FiOPS Robo kit extends the functionality of any standard FiOPS system by adding a Robo Control Box, motorized pan/tilt head ("Robo Head") and a Joystick Remote. It also includes a 7-pin Robo Control Cable, a Magnetic Ball Head mount, and a 3-Pin XLR Y-Cable. The FiOPS Robo system allows for remote pan and tilt control of the Head over the same single fiber-optic strand used to send control and video signals to and from the Camera. The Robo Head rotates from 0° to 340° and tilts from -15° to +15°.

## How do I set it up?

- 1) Mount the Robo Head to the Magic Arm included with the standard FiOPS system. Level the Robo Head using the attached bubble level.
- 2) Mount the Camera to the Magnetic Ball Head mount and attach the mount to the steel plate on the top of the Robo Head. The Ball Head can be used to shift the relative tilt range of the Robo Head up or down.
- 3) Place the switch on the rear of the Robo Head in the "M" position. An LED indicates power. The Head is powered by four standard AA-size batteries.
- 4) Connect the standard FiOPS system per the standard system manual. At the Transmitter, connect the Robo Control Box in line between the 5-Pin XLRs of the Umbilical and the Transmitter. Use the included 3-Pin XLR Y-Cable to connect BOTH the Joystick Remote AND the standard USB Control Cable to the Receiver.
- 5) Connect the 7-Pin Robo Control Cable to the Robo Control Box and the Robo Head. An LED on the side of the Robo Control Box indicates connection with the Robo Head. After initial connection, the LED will only turn on to indicate when commands are received from the Remote.
- 6) An index on the side of the Robo Head shows the pan position. The head rotates from 0° to 340°. Beginning with the head centered at 170° will give you a range of 170° of pan to the left and to the right.

## How do I use it?

- 1) The ID Address of the Robo Head is preset. A label shows the ID Address.
- 2) Use the Joystick Remote to select control of the Robo Head by entering its ID Address and pressing [CAM]. You can also use the [PREV] and [NEXT] buttons to step through IDs sequentially. The Joystick Remote controls pan and tilt functions. Moving the joystick on the X-axis controls pan and moving it on the Y-axis controls tilt. Two pan and tilt speeds are available, with selection based on how far the joystick is moved from its center position.
- 3) Use the Tablet Controller included with the standard FiOPS system to control the camera. If desired, the Camera OSD Menu System can also be accessed with the Joystick Remote by pressing the [MENU] button and using the joystick to control [LEFT], [RIGHT], [UP], and [DOWN] functions.

## What about rain covers?

A canvas rain cover which fits over the Robo Head is enclosed. When using the rain cover, the rain cover should be placed on the Robo Head first, and then the Magnetic Ball Head mount should be placed on top of it.

## What's in the box?

A standard system consists of:

- 1) (2) Robo Control Boxes
- 2) (2) Robo Heads
- 3) (2) Joystick Remotes with Power Supplies
- 4) (2) 3-Pin XLR Y-Cables
- 5) (2) 7-Pin Robo Control Cables
- 6) (2) Magnetic Ball Head mounts
- 7) (2) Canvas Rain Covers

# Camera Control Network Configurations

---

The camera control data network is generally tolerant of many different configurations of XLR Y-cable and XLR extension cable connections. However, in some cases when many Joystick Remotes, Tablet Controllers, and/or Receivers are daisy chained using many XLR Y-cables and/or XLR extension cables, the use of an XLR Termination Jack may be necessary. If required, an XLR Termination Jack will be supplied.

## Packing the Case

---



All parts except the Control Cables fit in the bottom layer.



The foam divider and Control Cables are placed on top.



# System Diagram

