



Pyxis 3” Firmware Upgrade

Instructions for Updating your Pyxis 3” Firmware.

Follow these steps to upgrade the PIC firmware of your Optec Pyxis 3” camera field rotator. Be sure to use static safety principles before starting your work by grounding yourself and work surface. If you are not comfortable making the swap, contact Optec technical support. We will perform the installation at no charge.

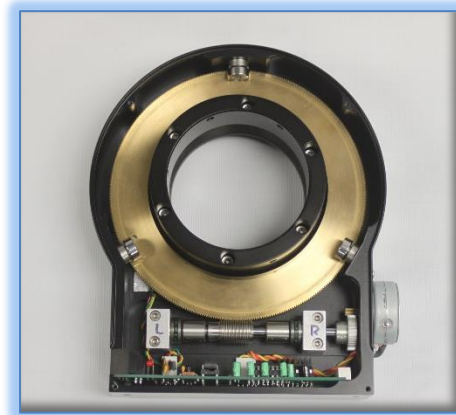
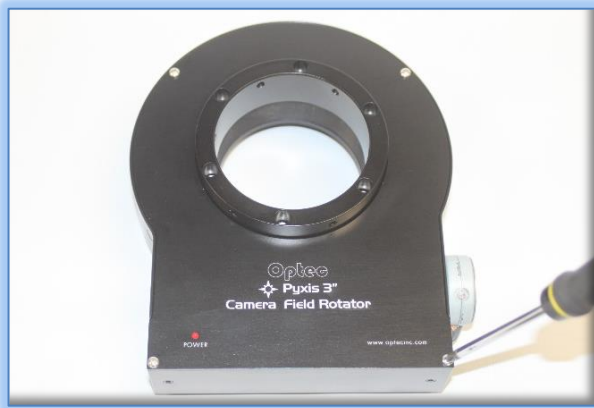
Step 1

Make sure Pyxis 3” is turned OFF and all cabling is disconnected. It is also best to perform the update with the Pyxis removed from your imaging train. Orient it camera side up and locate the circuit board cover with the red LED visible.



Step 2

Unscrew the four (4) Philips pan head screws and remove the cover plate. Be sure not to lose these screws and put them in a safe place. Notice the circuit board mount holding the board in on the lower right.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us

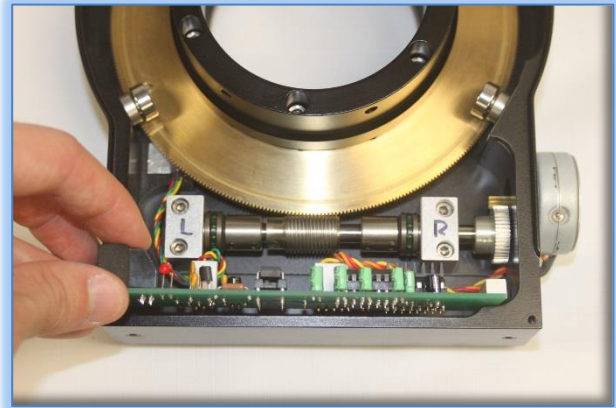
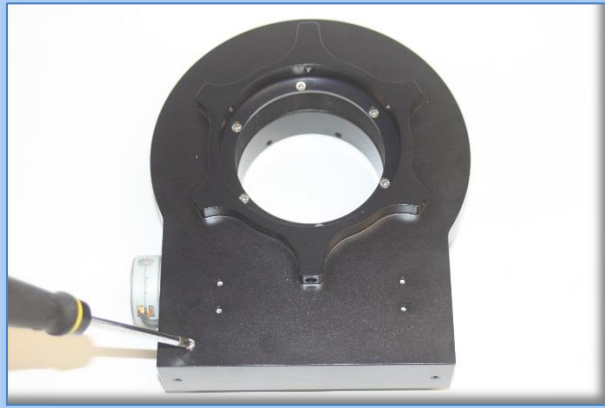


#17572 – Pyxis 3” Firmware Upgrade



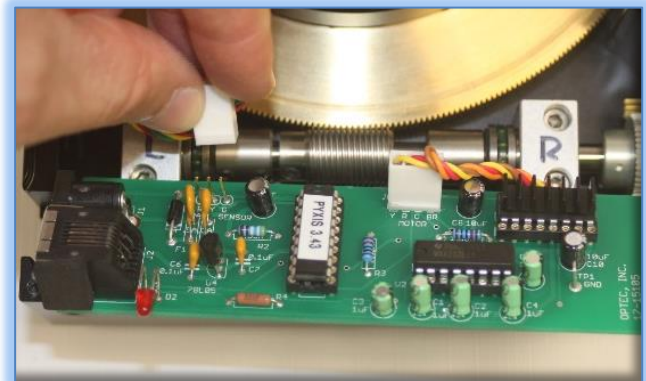
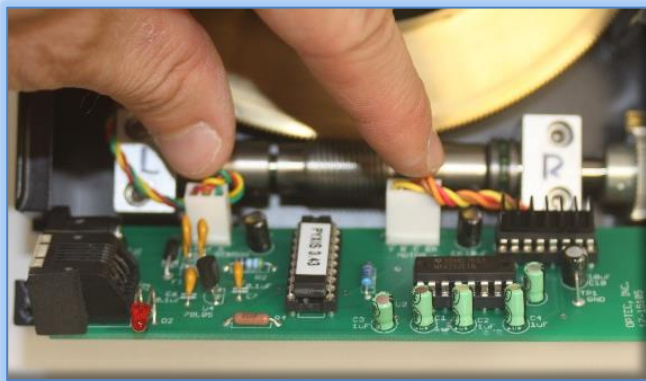
Step 3

To remove the board turn the Pyxis 3” over and loosen but don’t remove the pan head screw of the circuit board mount as show.



Step 4

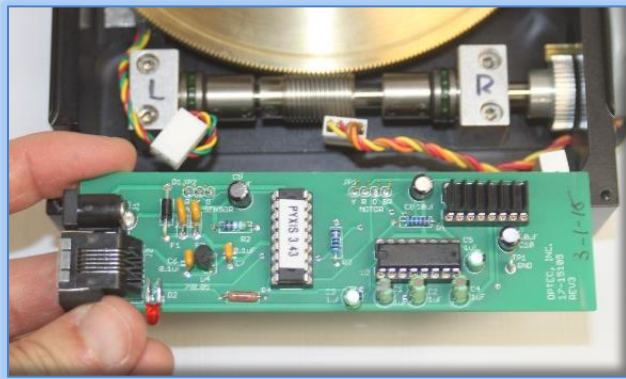
Slide the board out of the Pyxis body. You’ll notice two white moxex wiring connectors: one to the sensor and one to the motor. Remove them both from the circuit board noting the wire colors and direction. Now the board can be fully removed from the Pyxis 3”.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us

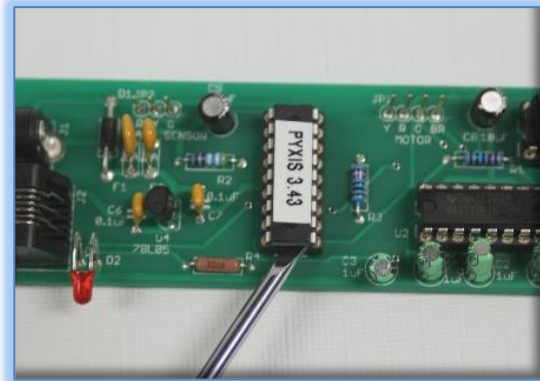
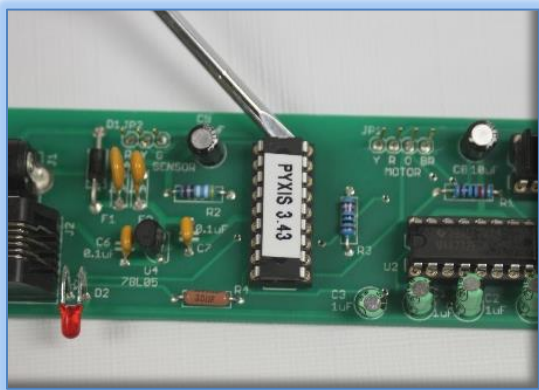


#17572 - Pyxis 3" Firmware Upgrade



Step 5

The PIC chip to be replaced is the longer 18-pin DIP (dual in-line package) labeled with the old firmware. Using a flat head screwdriver carefully pry one end of the PIC, then the other to remove it from the socket. Use caution when removing the chip, being careful not to damage the socket.



Step 6

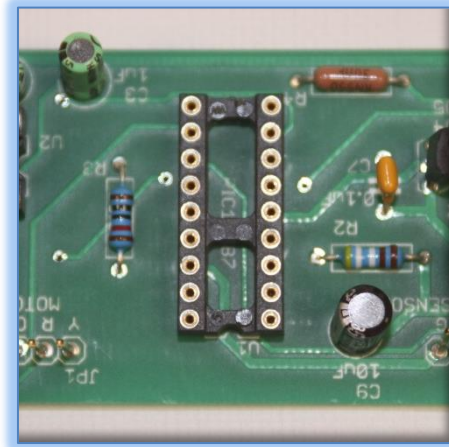
Take the replacement PIC chip with the new firmware and notice the curved notch in the picture below. This notch designated is Pin 1 on the DIP package. Also note the curved cut out section on the socket, this notch identifies pin 1 on the socket.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us

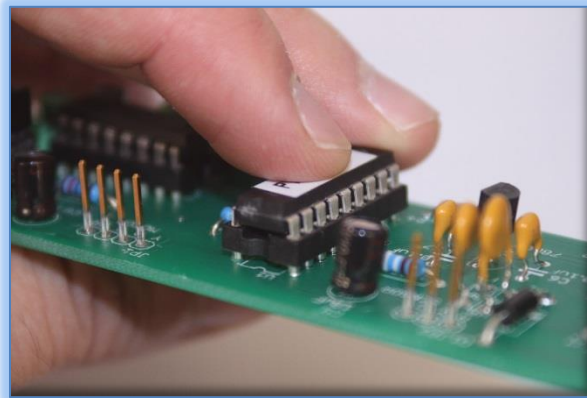


#17572 – Pyxis 3” Firmware Upgrade



Step 7

Align both curved cut out sections, both with the chip and the socket. Making sure the pins are aligned with the socket holes (this may require the pins being bent inward slightly), push the chip into place until the pins are properly seated.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us

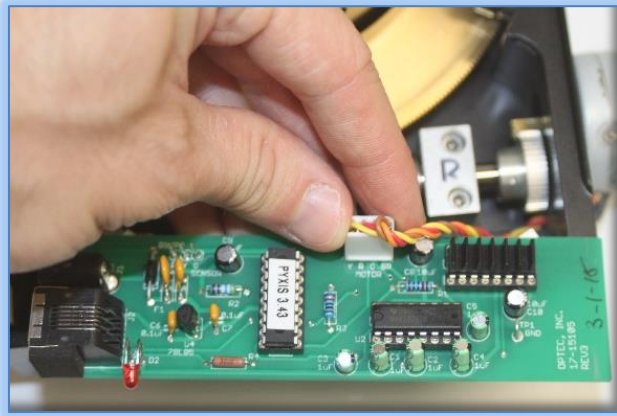


#17572 - Pyxis 3" Firmware Upgrade



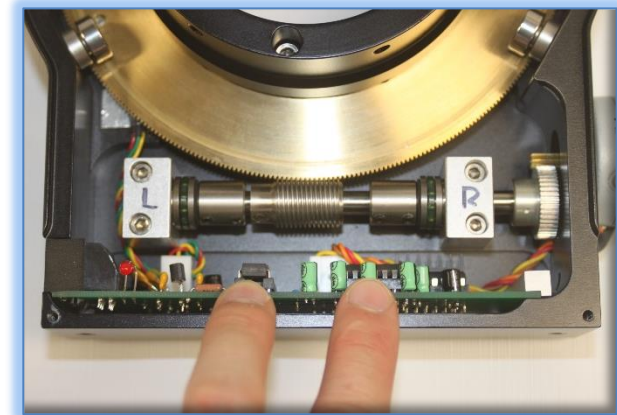
Step 8

Reconnect the wiring connectors to the pin headers on the board labeled Motor and Sensor. Make sure they are plugged into the correct pin header and oriented correctly. You will notice the wire colors are labeled to guide you.



Step 9

Reinstall the circuit board back into the Pyxis 3". Be sure to place the board in-between the board mount and the Pyxis 3" body on the right side. On the left make sure the cabling connectors are in the slot. Tighten the pan head screw snugly on the backside while holding the board in place. Make sure the wires are clear and tucked away from any gears so as to not damage them.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us

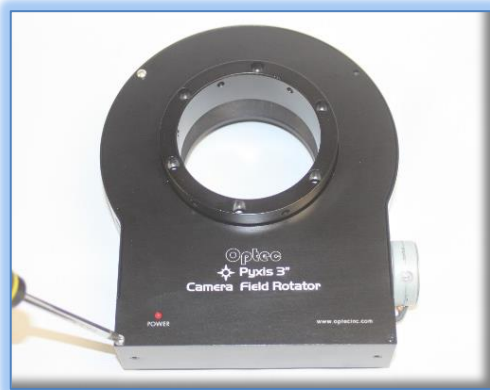


#17572 - Pyxis 3" Firmware Upgrade



Step 10

Re-install the circuit board cover being certain the LED lines up properly with the hole in the cover. Place the four (4) pan head cover screws back in and tighten securely. You may then connect the cabling, power it up, and connect to the Optec Pyxis Rotator Control program. In the Setup tab under Advanced Settings will be displayed the new firmware version.



Contact [Optec Support](#) with any problems or questions regarding upgrading your Pyxis 3" firmware.



199 Smith Street · Lowell, Michigan 49331 · U.S.A.
Telephone: 616-897-9351 · Fax: (616) 897-8229 · Toll Free: 888-488-0381
sales@optecinc.com · <http://www.optecinc.com> · www.optec.us