ST-4 Autoguiding Adapter
8427

Instruction Manual

iOptron's ST-4 Autoguiding Adapter (ST-4 Adapter) is an accessory used together with an iOptron's equatorial mount for autoguide application. It supports iOptron products including #8419 SmartStar® PR GEM, #8400 GoToNova dual axis motor kits, and other SmartStar® mount setting as an EQ mount. It also supports GOTOSTAR dual axis motor kits. This device provides a bridge between an ST-4 compatible autoguiding equipment and an iOptron's mount.

Hardware included:

- ST-4 Adapter
- 6P4C coiled cable

Firmware：

GoToNova 8401 hand controller with firmware version Ver090630 and beyond.

Connection:

Figure 1. ST-4 adapter and cable

ST-4 Adapter has two ports, as indicated in Figure 1: iOptron Port and Guide Port. Connect one end of supplied 6P4C coiled cable to the iOptron Port of the adapter. Plug the other end into an available HBX port (Port A or Port B socket on the mount.) Connect Guide Port to ST-4 compatible autoguiding equipment using a 6P6C RJ-12 cable (not included).

Note: Do not plug ST-4 autoguiding cable (which also has a 6 pin RJ plug cable) into GoToNova hand control port, neither the HBX on an iOptron mount. This could damage hand controller, mount control board or ST-4 autoguiding equipment.

Operation:

Press MENU, select Auto Guide, press ENTER. If an ST-4 Adapter is connected, "Auto Guide Port" will show on 8401 screen (Figure 2).

Now the motors can be controlled by a guiding signal from an ST-4 compatible autoguiding equipment through Guide Port. Use the number key to select guide rate.

Figure 2. ST-4 adapter is connected

Select Guider Direction

The Guide Port ST-4 adapter equipped is capable to handle an ST-4 autoguiding camera with a straight or a reverse wired guiding cable. The default setting is straight. However, if your guiding cable is reversed (the guiding would not be possible), you can simply open the ST-4 adapter cover and move the jumper from normal to reverse position, as shown in Figure 3.
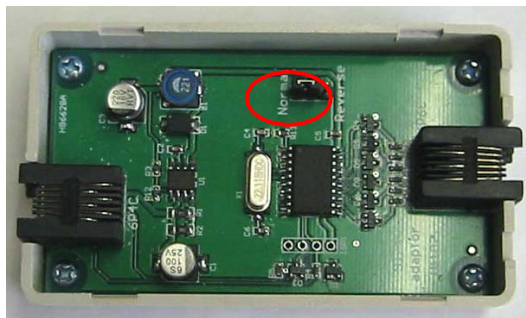

Figure 3. Inside of an ST-4 adapter

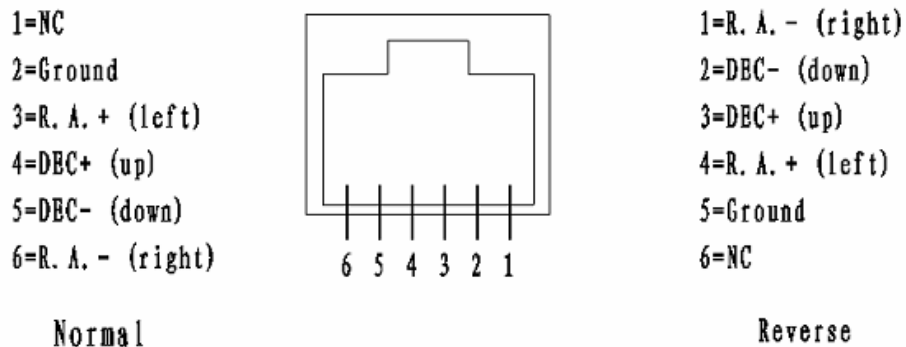Figure 4 shows different wiring direction.

Normal		Reverse
1=NC		1=R. A. - (right)
2=Ground		2=DEC- (down)
3=R. A. + (left)		3=DEC+ (up)
4=DEC+ (up)		4=R. A. + (left)
5=DEC- (down)		5=Ground
6=R. A. - (right)	6 5 4 3 2 1	6=NC

Figure 4. ST-4 wiring