

Steppir Remote Driver Instructions

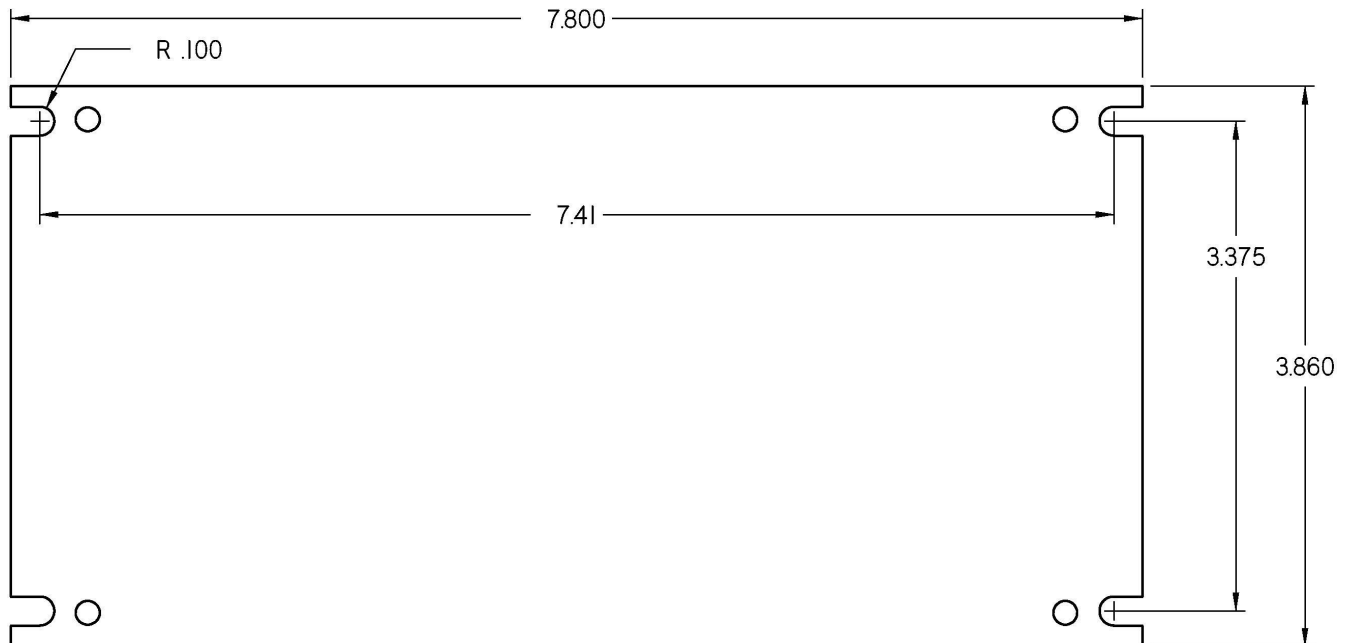
The Remote Driver Option is Designed to mount at the base of your tower in a electrical enclosure that you provide. The remote driver has several advantages first it allows the controller to be mounted over a 1000 feet from the controller, it allows you to use low cost CAT-5 cable between the controller and antenna driver and it uses the ALP driver which has more protection on the Driver chips than the standard driver board.

The requirements are:

1. A AC line source 100 to 240VAC. Or your own source of 24 Volt DC.
2. A good earth ground.
3. A Electrical enclosure to house the driver board and power supply.

Installing

The Driver board comes mounted on a mounting plate that can be screwed to a panel. Mount plate in a location that will allow the cables to be easily connected. If the panel is mounted to a non conductive surface earth ground should be attached to it.



We provide a short CAT-5 Cross Over jumper cable for testing. We provide a panel feed through so you can use this cable with a standard straight through CAT-5 cable for your cable run (a standard cable will not work without also using the provided Cross Over cable). If you wire your own cable you must follow the wiring digram in this document.

To test plug the provided CAT-5 cable into the RJ45 jack in the back of the controller and the driver board.

Verify that both switches on the driver board are off.

Connect the power to both the SDA100 and the Remote driver boards.

The green LED should lite on the driver Board.

Power on the controller using the front panel switch.

Enter the setup menu and select the options menu (see SDA100 Manual).

Verify that the remote driver is enabled.

If the SDA100 controller displays “Check Driver Configuration” this indicates the controller does not see the remote driver connected. If the driver is detected there will a 2 digit code (driver version) in the upper left of the display when the SDA100 power is first switched on.

The Commutations between the SDA100 and driver Board require a stable ground to work reliably.

If the “Check Driver Configuration” message is seen while the antenna is tuning or intermittently verify ground at the tower is at the same potential as the ground at the station, no large AC voltages present on the earth ground connection.

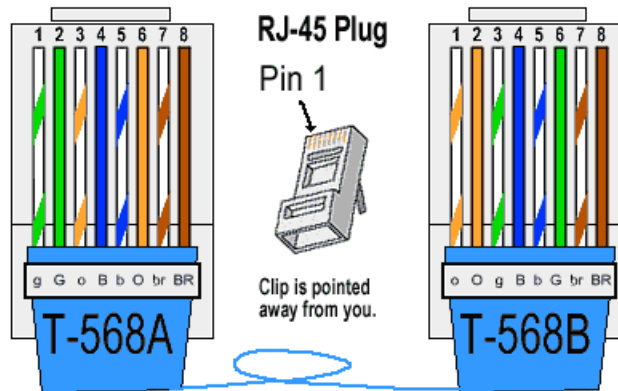
If you have a DB series antenna verify the Relay option board is installed on the remote driver board. With the DB 36 this will only be present if the 80M option was ordered.

The wiring between the antenna and the Remote Driver is our standard control cable controller so refer to the antenna manual for antenna cabling wiring.

Steppir Remote Driver cable

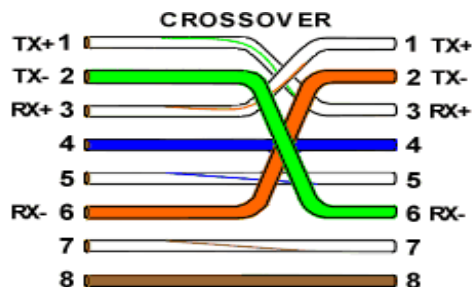
We use RS422/RS485 Full duplex commutations between the driver and controller boards. The pinout is the same as a standard cat-5 crossover cable for 10baseT.

RJ-45 Crossover Ethernet Cable



To wire a Crossover Ethernet cable, wire one end using the T-568A standard and the other end using the T-568B standard. Another way of remembering the color coding is to simply switch the Green set of wires in place with the Orange set of wires. Specifically, switch the solid Green (G) with the solid Orange, and switch the green/white with the orange/white.

Basic Connections:



We use pins 4 and 5 for ground. Be careful about system ground, you do not want these wires becoming the only DC ground path in the event of trouble.

We use pins 7 and 8 for the 24-33 vdc supply. This should only be used for testing on very short cables. The remote driver requires a separate DC supply.