

## Unpacking

Carefully check the packing material for the GPS antenna, antenna cable assembly, and any optional accessory. *Handle the GPS antenna carefully, as it may be damaged if dropped.*

## Connecting Power

- VERIFY that the voltage level is in the correct range (+ 8 Vdc to + 32 Vdc).
- VERIFY that the polarity is as specified on the label (– terminal connected to chassis).
- Strip the insulation 6 mm (1/4 inch) and DO NOT tin.

## Configuring

Configure using any terminal program and connecting to the CONFIG PORT or to the RS-232 port.

The CONFIG PORT (micro USB) = 115200, 8, N, 1

The RS-232 port default = 115200, 8, N, 1 (user configurable)

- Open the terminal program and properly configure the port.
- Connect the computer to the CONFIG PORT using a micro-USB cable.
- Press ENTER to get the log in prompt.
- Default username = **Administrator** and then press ENTER.
- Default password = **P4ssw\_rd** and then press ENTER.
- Type ? and press ENTER to show a list of available commands.
- Type command ? and press ENTER to show command specific help.

## Checking Firmware Version

Can check firmware version from CONFIG PORT or RS-232 port.

Must use CONFIG PORT to upload firmware.

- Log in using steps in **Configuring**.
- Type: **firmware** then press ENTER.
- Compare with firmware available from [www.arbiter.com](http://www.arbiter.com).

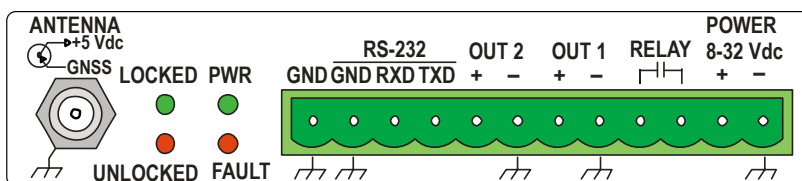


Figure 1: Connections



Figure 2: Connector

## Connecting Cables

1. Accepts 0.05 mm<sup>2</sup> to 3 mm<sup>2</sup> (12 AWG to 30 AWG) cable.
2. Strip the insulation 6 mm (1/4 inch) and DO NOT tin.

## LED Indicators

1. PWR = green, on when power is applied.
2. FAULT = red, on when fault is present.
3. LOCKED = green, on when tracking satellites.
4. UNLOCKED = red, on when not tracking satellites.

## Installing GPS Antenna

The GPS antenna included with the clock is designed to mount on the top of the control box through a 23 mm (7/8 inch) hole. Make sure that the antenna has a clear view of the sky in all directions of the compass for best GPS satellite tracking.



Figure 3: Assembled Antenna



Figure 4: Antenna Mounting Hardware

1. Place the gasket onto the antenna.
2. Pass the antenna base through the 23 mm (7/8 inch) hole in the top of the cabinet.
3. Spin the plastic base nut onto the antenna.
4. Spin the metal locking nut onto the antenna.
5. Attach the TNC cable end to the antenna and hand tighten.
6. Route the cable as needed to the clock.
7. Attach the F-type connector to the clock and hand tighten.

## Reset

The RESET button is recessed and located on the far right of end panel that contains the CONFIG PORT.

- Reboot: Soft power cycle. Does not change configuration.
  - Press, hold until all LEDs are on, release.
- Defaults: Reset configuration to factory defaults.
  - Press, hold until all LEDs flash, release.

## Additional Help

The operation manual is available to download from [www.arbiter.com](http://www.arbiter.com).