Unpacking

Carefully check the packing material for these accessories: GNSS antenna, standard antenna cable assembly, and mounting screws for rack ear removal. *Handle the GNSS antenna carefully, as it may be damaged if dropped.*

Configuring Output Jumpers

Listed below are the various internal jumpers which control the input and output signal types. Some output signals require two jumpers to be set.

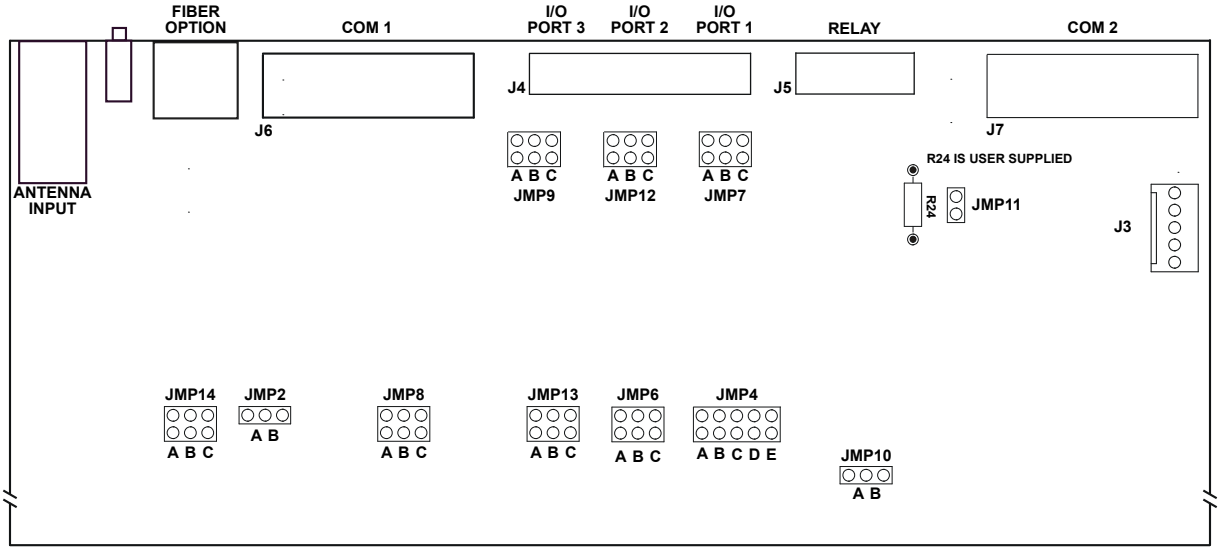

Figure 1: Jumper Locations

	I/O PORT 1		I/O PORT 2		I/O PORT 3		FIBER	RS-485	RELAY
Drive Type		**JMP7**	**JMP12**			**JMP9**			
CMOS		A*	A			A*			
OPEN DRAIN		B				B			
EVENT IN		C	C			C			
Signal Select	**JMP6**		**JMP12**	**JMP13**	**JMP8**		**JMP14**	**JMP2**	**JMP10**
IRIG-B Modulated			B*						
IRIG-B Unmodulated	C*			C	C		C*	B	
1 PPS	A			A	A*		A		
Programmable Pulse	B			B	B		B		B
Data Out								A*	
Status									A*

* Default Setting

Table 1: Main Board Output Signal Selection

Installing GNSS Antenna

The GNSS antenna included with the clock is designed to be threaded onto a piece of 3/4 inch pipe nipple. Make sure that the antenna has a clear view of the sky in all directions of the compass for best GNSS satellite tracking.

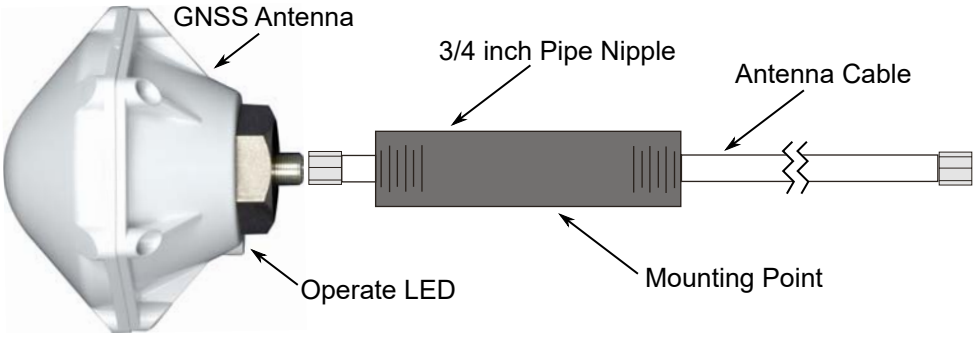

Figure 2: Antenna Mounting Assembly

1. Pass the antenna cable through the pipe nipple and attach the cable to the antenna. *Tighten by hand, spinning the cable connector. DO NOT spin the antenna onto the cable or DAMAGE may occur*.
2. Thread the pipe nipple into the base of the antenna and snug by hand.
3. Mount the pipe nipple to a fixture, such as our Antenna Mounting Kit.
4. Install GNSS Surge Protector or In-Line Preamplifier if needed. Reference their respective instructions.
5. Connect the antenna cable to the clock.

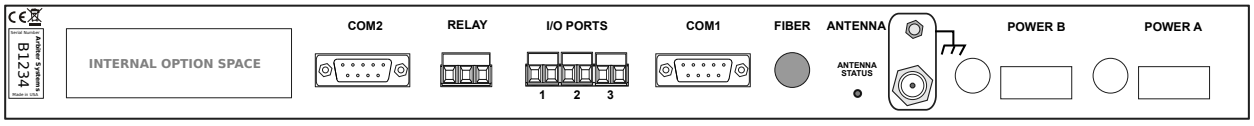

Figure 3: Rear Panel

Connecting Signal Cables

1. Pluggable terminal block: Strip the insulation 1/4 inch and DO NOT tin.
2. RS-232 COM1 and COM2: Null-modem cable with female DB-9 connectors required.
3. RS-485 COM1 pin 8 and pin 9 (Tx-A and Tx-B respectively): Custom cable as needed.
4. Options: Refer to manual

COM1 DB-9 Pin	Function
2	Receive (Rx)
3	Transmit (Tx)
4	Programmable Pulse
5	Ground (GND)
6	EVENT IN
8	RS-422/485, Tx-A
9	RS-422/485, Tx-B

COM2 DB-9 Pin	Function
2	Receive (Rx)
3	Transmit (Tx)
5	Ground (GND)

Table 2: RS-232 Pin-out

Connecting Power Cables

- VERIFY that the voltage level is in the correct range.
- VERIFY that the polarity is as specified on the label.
- Strip the insulation 1/4 inch and DO NOT tin.
- A fuse is located to the left of each installed power inlet connector.

Configuring with Front Panel

- Press SETUP to cycle through the menu structure.
- Press ENTER to select the menu.
- Press UP or DOWN to change the selection.
- Press ENTER to confirm selection.
- Press any of the top row keys to leave the configuration menu.

Configuring with Utility Software

Utility Software is available from www.arbiter.com

Additional Help

The operation manual is available as a free download from www.arbiter.com or to purchase.