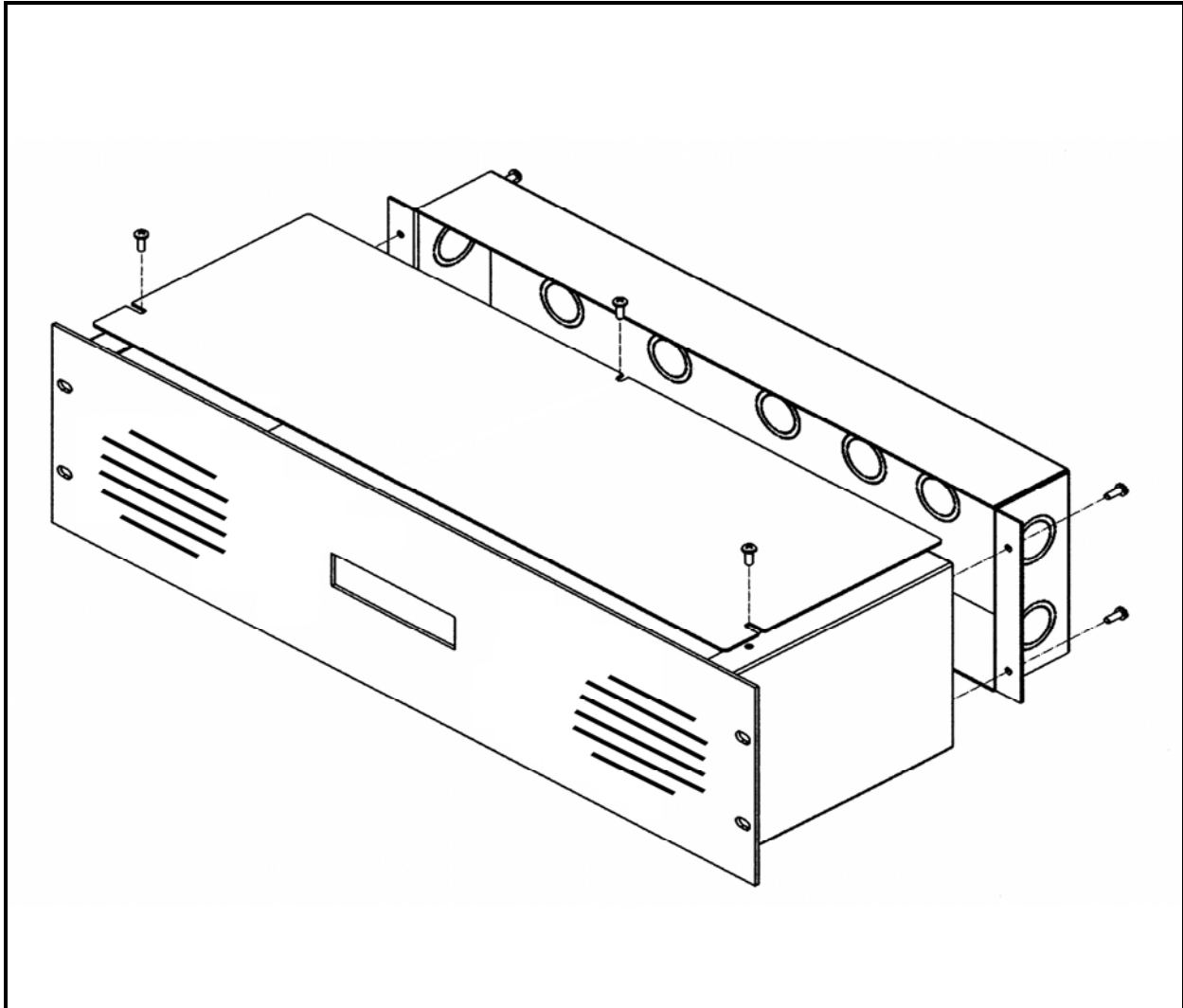


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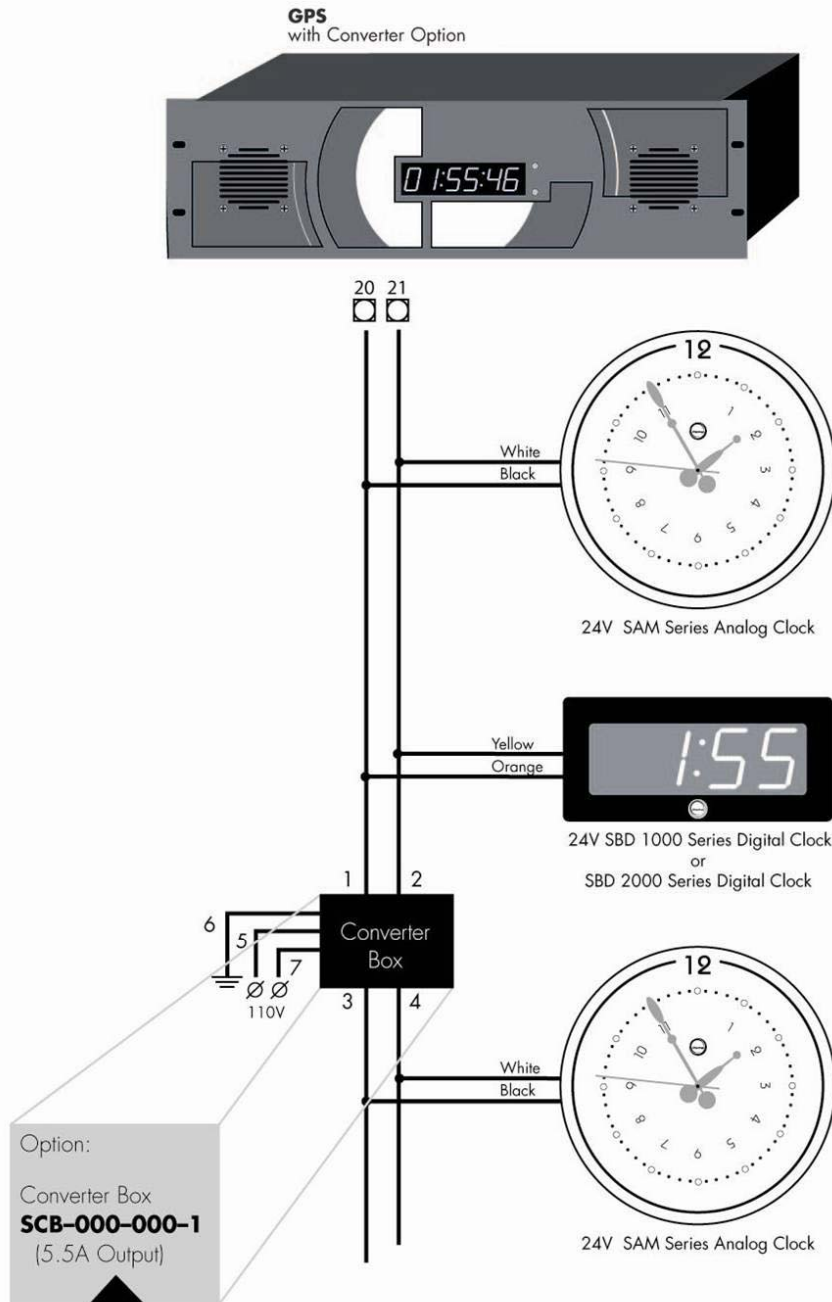
Mounting Diagram





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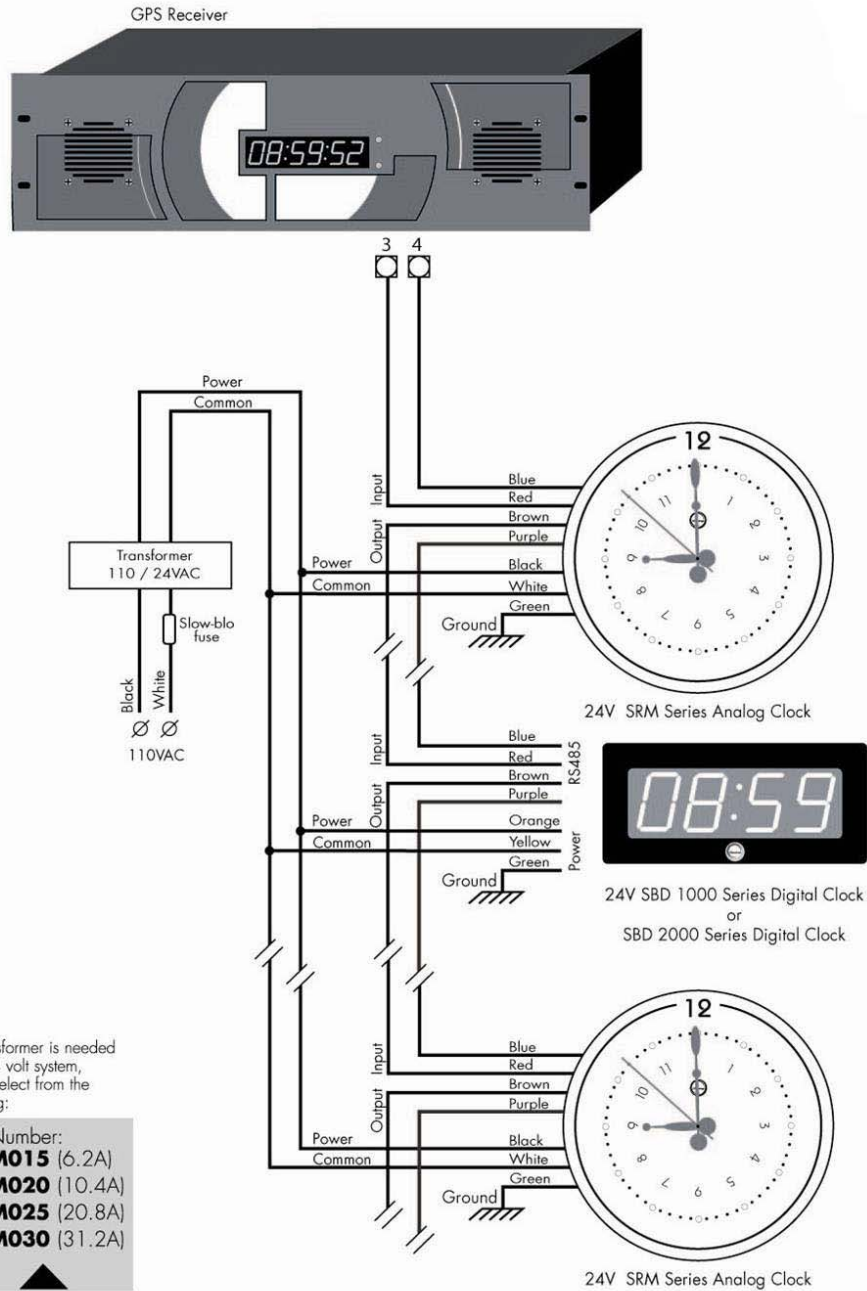
GPS MASTER CLOCK 2 WIRE DIGITAL COMMUNICATION





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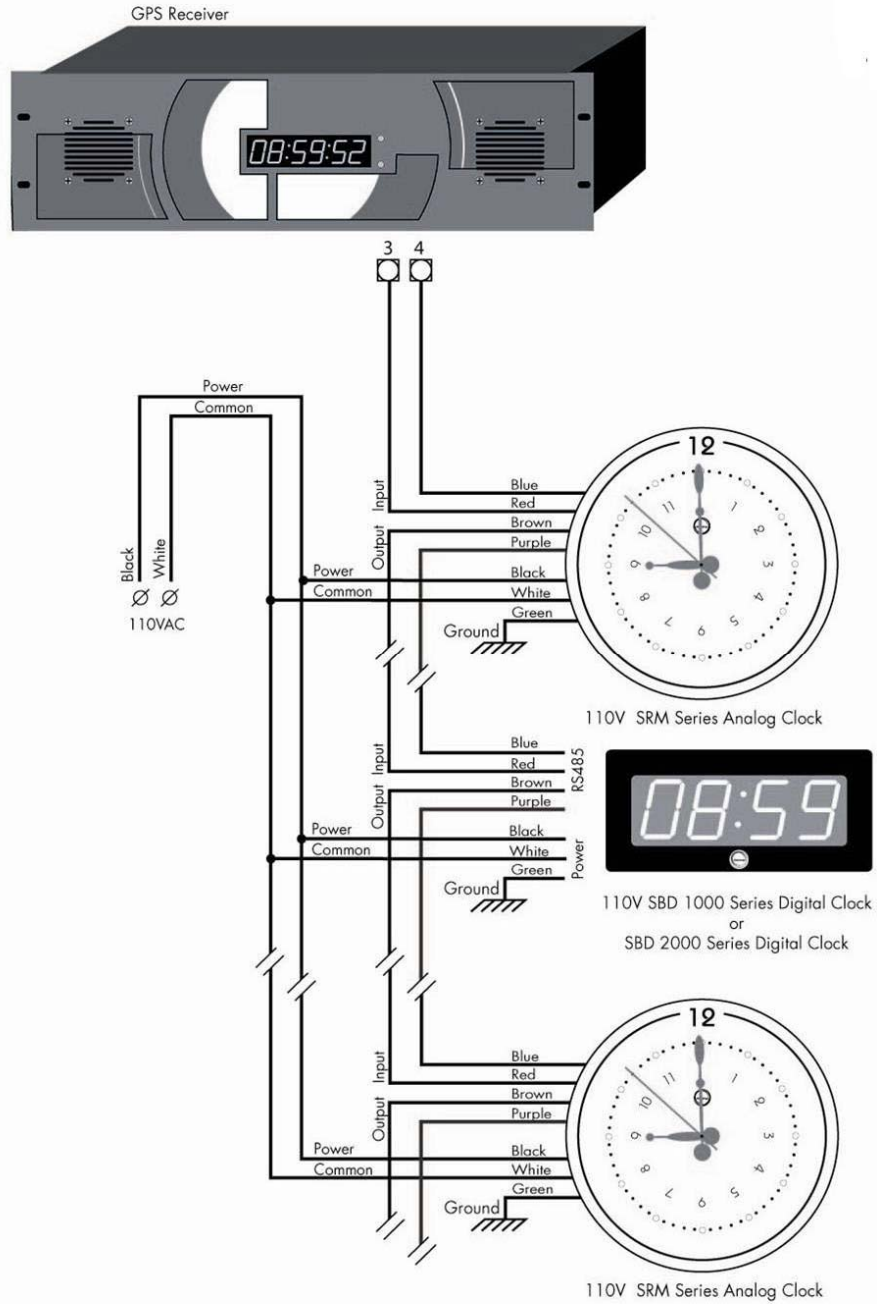
GPS RECEIVER MASTER CLOCK RS485 24 VOLT





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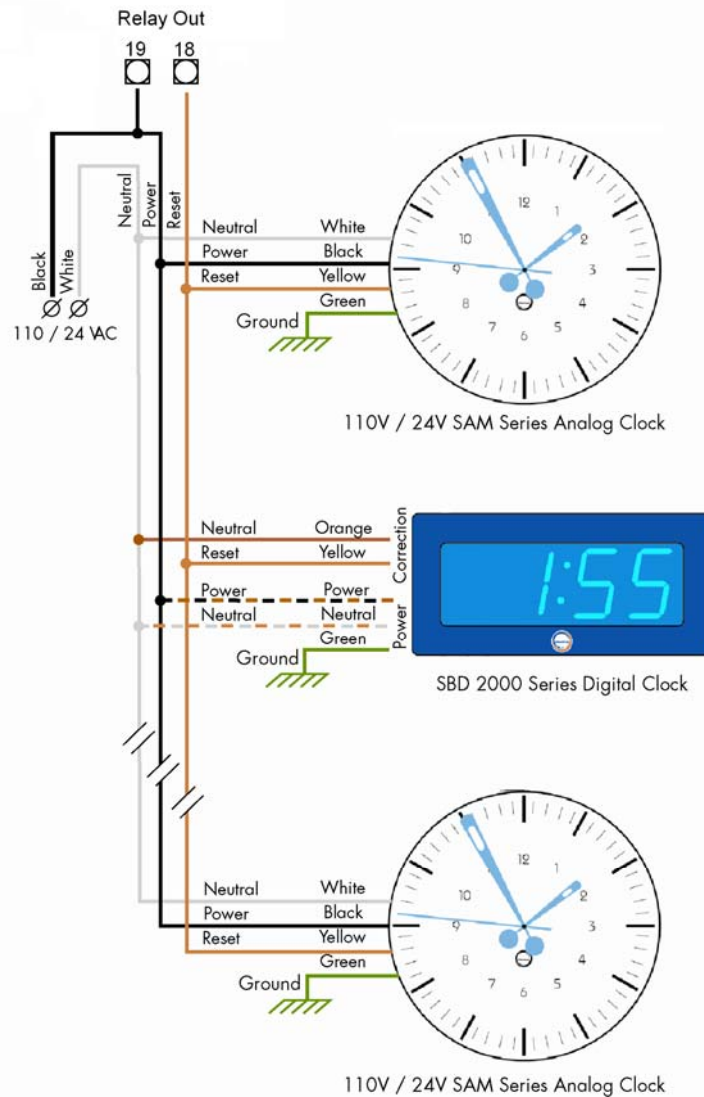
GPS RECEIVER MASTER CLOCK RS485 110 VOLT





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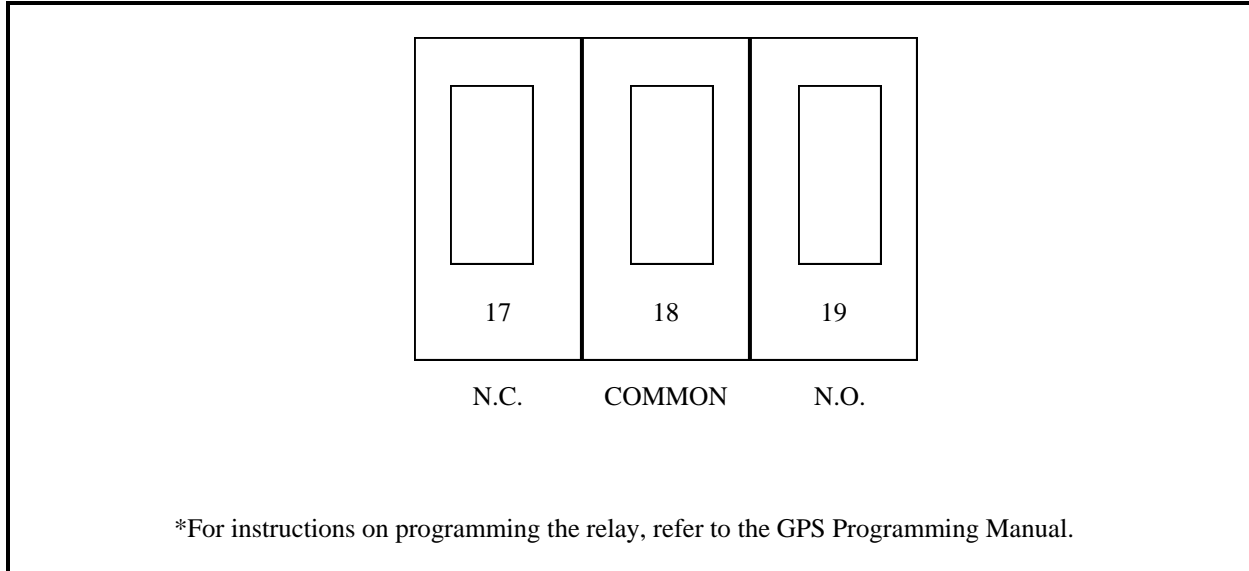
GPS RECEIVER MASTER CLOCK 3 WIRE SYNCHRONOUS OUT PUT 110V/24V 58th MINUTE CORRECTION , 59th MINUTE CORRECTION, National Time& Rauland .



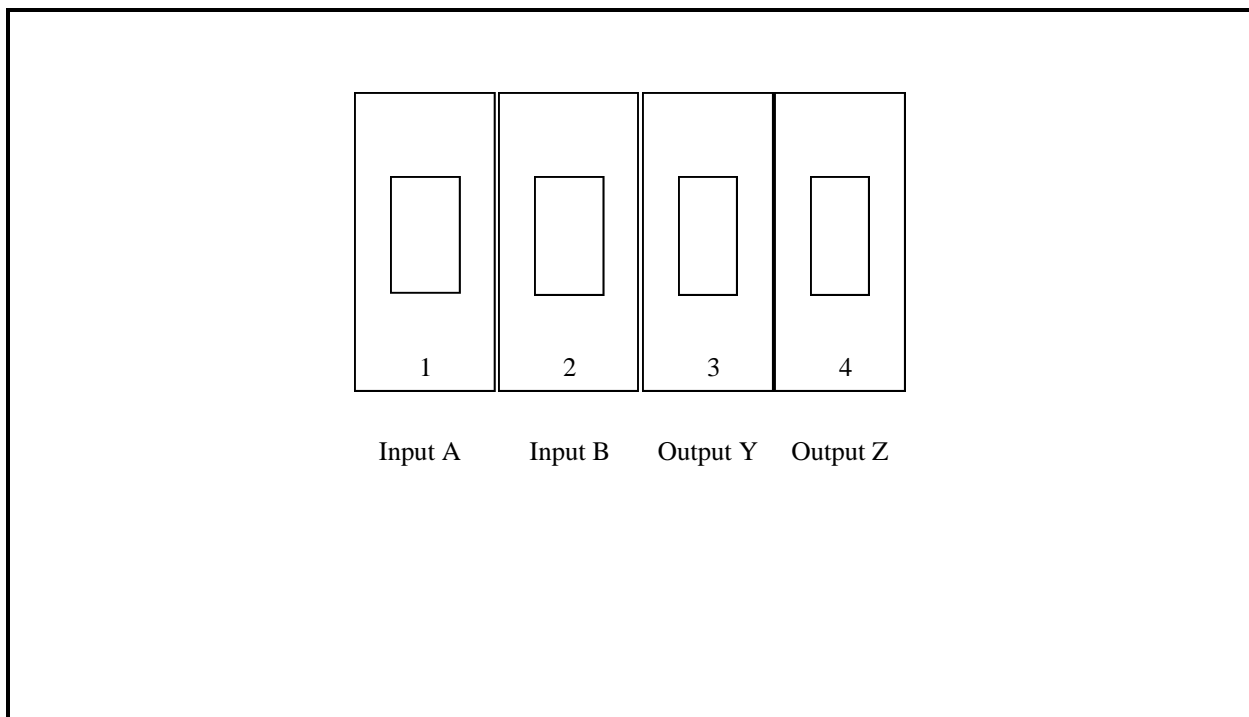


GPS Receiver Installation Manual (v2)

Programmable Relay



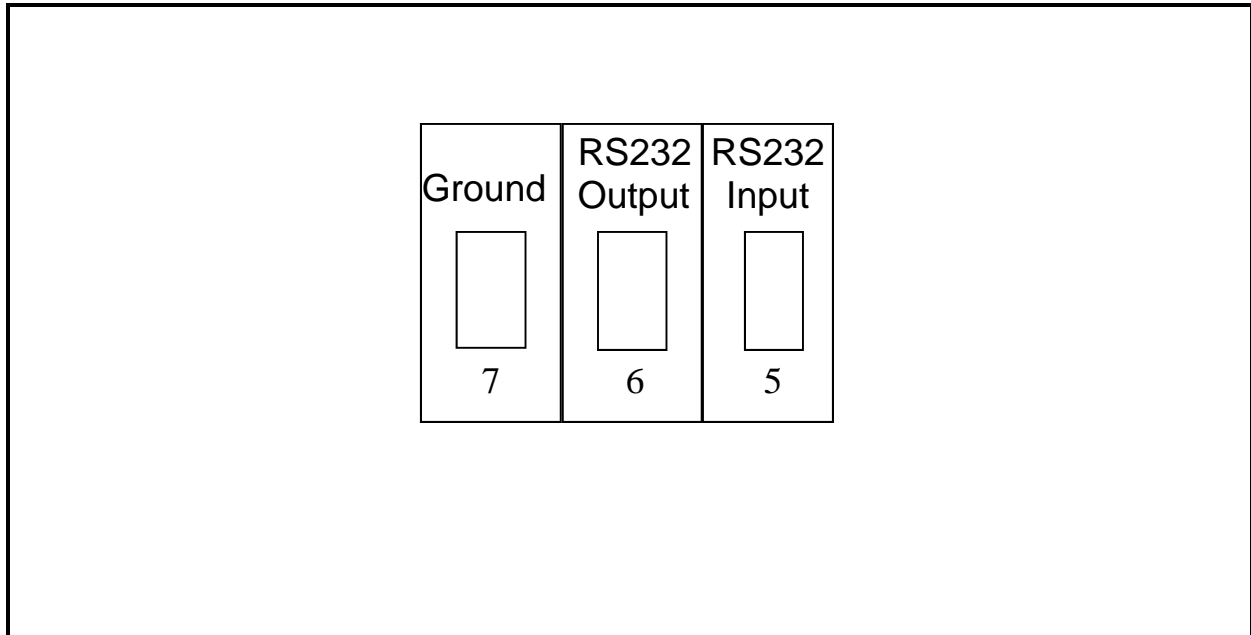
RS485 Input and Output



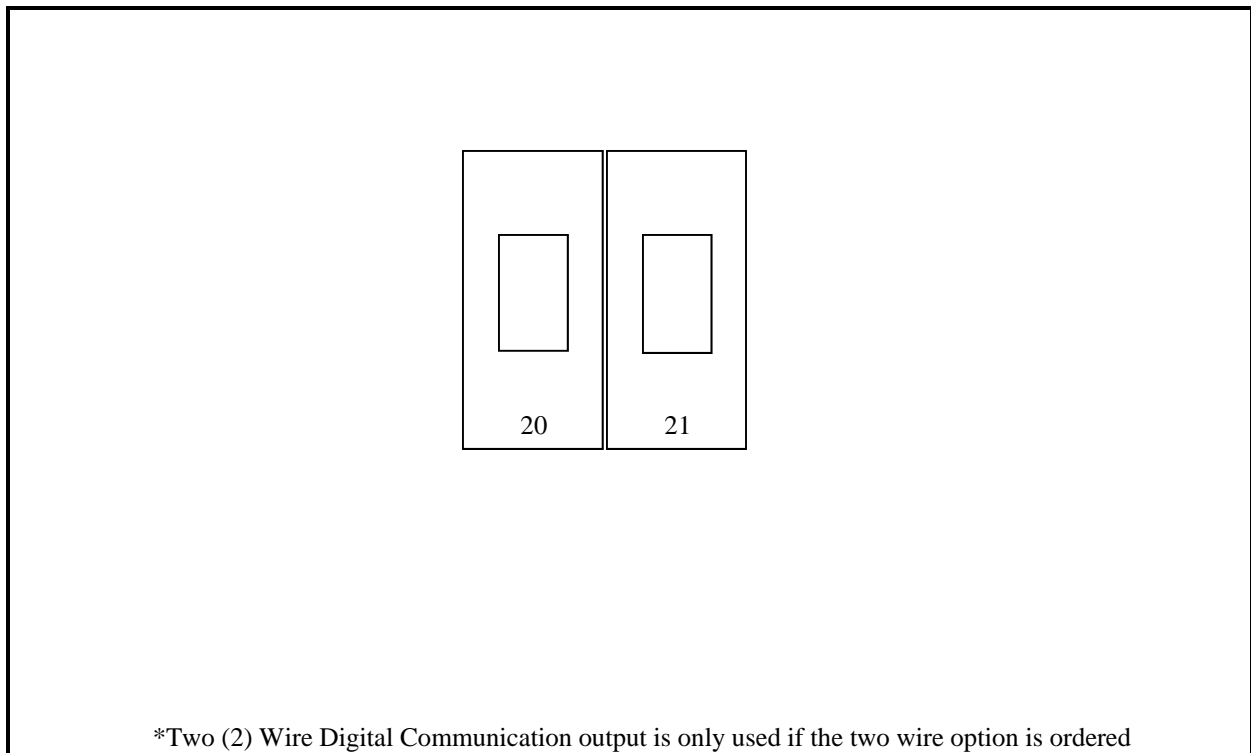


GPS Receiver Installation Manual (v2)

RS232 Input and Output



Two (2) Wire Digital Communication Output*





Frequently Asked Questions

What systems can be run using the GPS Receiver?

RS485 systems can be run through the GPS. If the Converter option is selected, 2 wire digital communication systems can be run as well.

What cable lengths are available with the GPS?

The GPS comes equipped with a 75 foot RG-59 cable. Currently, this is the only length available.

What duration can I set the relay to close?

The relay can be programmed to close anywhere from 1 - 99 seconds.

If the power is disconnected from the GPS, will I lose all of my settings?

The GPS will not lose the settings if power is disconnected from it.

Is there any way that I can view how much current is being drawn from the Converter (Converter option only)?

The GPS has an option through programming where the current can be viewed on the display. Refer to the GPS Receiver programming manual for more information.

My power source is 220 volts. Can the GPS be powered on that voltage?

Yes, the GPS can work on 110 volts/50 Hz or 220 volts/60 Hz.

Where should the dome antenna be mounted?

The dome antenna should be mounted to a threaded pipe and placed on a rooftop, preferably. The antenna should be unobstructed by any trees, concrete, etc. This will increase the probability of getting a signal.



Troubleshooting

What should I do if the master clock is not powering up?

Measure the voltage output of the power source to ensure it is 110V. If the GPS still does not power up, call Sapling Technical Support.

The GPS is not receiving a signal. What should I do?

Make sure the antenna is mounted to a threaded pipe and put in a unobstructed area so it will catch the signal quicker.

My Converter keeps shutting off due to the load. How do I know how much current the clock system is drawing?

There is an option in the GPS programming that allows the user to view how much current the clock system is drawing. Refer to the GPS programming manual for further instruction on how to find this option.

What should I do if I can't get the programmable relay to close?

Refer to the programming manual of the GPS Receiver for instructions on how to program the relay. If it still does not work, contact Sapling technical support.

The Converter shut off. How do I reset it?

If the Converter shut off due to an overload, it will attempt to reset in two (2) minutes. If the Converter turned off due to temperature, it will have to be manually reset. Unscrew the cover of the GPS Receiver and go to the Converter board. Underneath the transformer will be a push switch. Press the switch and the Converter should turn back on.