

How To Simplify The Use Of The Smart SRO-100 Rb Product

In Your System Design

Below are some basic guidelines on how SpectraTime is expecting customers to use and interface the SRO-100 to simplify your system design.

- 1) Power ON the SRO-100 and let it stabilize as long as possible. For very good performance, leave it alone for 1 day without interruptions, such as power OFF and Reset.
- 2) Check out the SRO-100 operation. To see if it is working perfectly, use the command ST or BT5, providing the Status every second through the serial port. Pin 4 (RbLock) can also be used.
- 3) Check out or Set the tracking parameters. The most important is the tracking loop time constant as follows:
To track a maser: set TC001000
To track a GPS: set TC002000 to TC006000
Automatic: TC000000
- 4) Connect the PPSREF, typically a GPS reference, to pin 8 and check out its quality with the command BT1. For a good tracking, its value should not change within 1 minute typically.
- 5) Start a tracking with the command TR1.
- 6) To check out the tracking, use the command BT3.
- 7) If the PPSREF disappears, the SRO-100 will go in holdover mode. Do nothing, nor sending the command TR0.
- 8) If the SRO-100 is tracking a GPS and you know that there is a problem with the GPS reference, then disconnect physically the PPSREF from the GPS and do nothing on the SRO-100, especially not sending the command TR0.
- 9) If the SRO-100 was in holdover mode for more than 24 hours, you may restart a tracking command by sending the command TR0, then wait 2 seconds, and then send the command TR1.

For any questions and/or fast support, please contact us at fastsupport@spectratime.com.