

# Product Guideline SRO-100

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

On your system :

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 TRO.
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 TRO.
9. If the SRO-100 was in holdover mode for more than 24 hours, you may restart a tracking command by sending the command TRO, then wait 2 seconds, and then send the command TR1.