V.2.8 SL-RAT®

Sewer Line Rapid Assessment Tool (SL-RAT®)
Metric Quick Start Guide

(Refer to Owner's Manual for detailed instructions)

Important Notes

1. You MUST download measurements when RX unit reaches storage capacity at 500 measurements (see SL-DOG Quick Start Guide).
2. If TX states "RX/TX Synch Required," sync devices (STEP 1) by turning both TX and RX off and on.
3. Do not knowingly skip manholes.
4. Start TX before RX. "Yell" before you "Listen."
5. View uploaded measurements at www.sl-dog.com

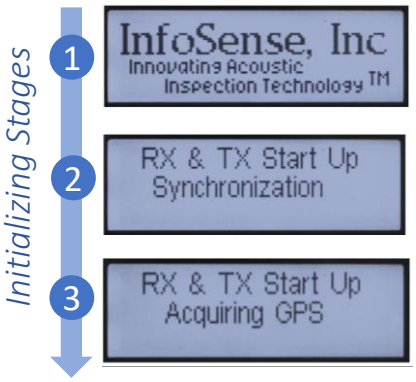
Identifying TX & RX Units

TX (Transmitter)

RX (Receiver)

STEP 1 Sync Devices and Acquire GPS

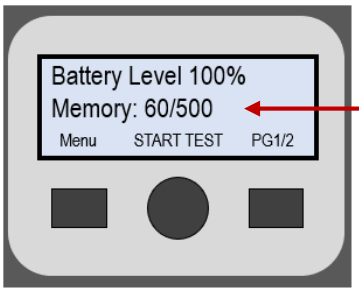
Turn on TX & RX Units



Turn on TX and RX units to automatically start initialization. This should ideally be done outdoors with a clear view of the sky. Initialization is complete once units sync and acquire GPS coordinates.

Once initializing is complete, you should see the following start up screens:

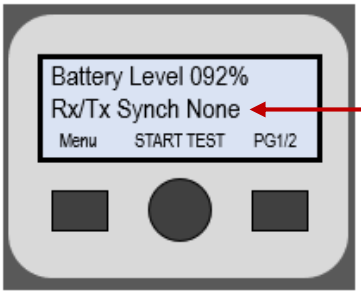
RX Start Up Screen:



MEMORY Indicates how many acoustic measurements are stored on the device. The RX will require that records be uploaded to a computer when it reaches storage capacity at 500 measurements.

We highly recommend routinely uploading measurements as part of the acoustic inspection process to avoid reaching memory capacity. Once uploaded, the counter will restart at zero. Please reference SL-DOG Quick Start Guide for uploading instructions.

TX Start Up Screen:



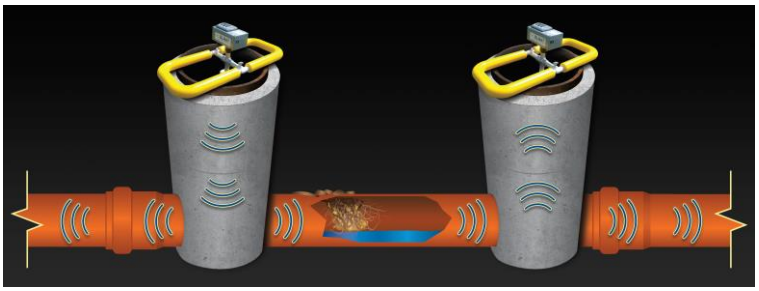
RX/TX Synch indicates synch status of RX and TX devices. Please note, the TX and RX automatically synch every time they are turned on. The TX will require synch if it reaches 200 records.

RX/TX Synch None: All measurements have been synched
RX/TX Synch Ready: 1-150 measurements waiting to synch
RX/TX Synch Warning: 150-199 measurements waiting to synch
RX/TX Synch Required: Data must be synced to continue operation. Devices have reached capacity at 200 unsynchronized measurements (See Step 1).

STEP 2 Place RX and TX over manholes

Remove consecutive manhole lids (connecting one pipe segment). Do not skip manholes. Place the RX unit over the manhole at one end, and the TX unit over the other end.

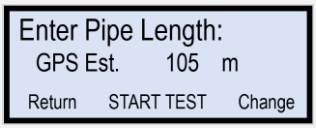
TX "Yells" RX "Listens"



STEP 3 Prepare RX unit for testing

A

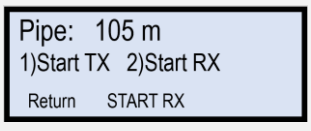
A: Press START TEST on RX unit to begin set up.



C B

B: Adjust pipe length by pressing CHANGE. GPS provides estimated length.

C: Once pipe length is correctly displayed, press START TEST to continue.

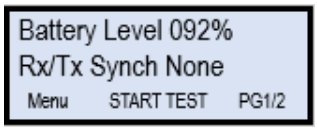


F (See Step 4)

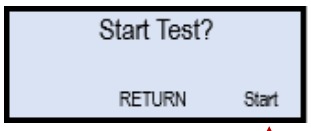
This screen indicates RX unit is ready for TX. **Indicate to operator with TX to begin test.**

It is important to start the TX before the RX! YELL BEFORE YOU LISTEN!

STEP 4 Start TX unit then start RX unit



D



E

D: Press START TEST on TX unit.

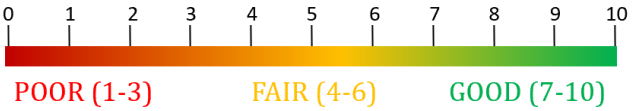
E: Press START again to begin test. TX will begin series of tones. **Signal to operator with the RX unit to begin test on RX.**

F: On the RX, push START RX to begin listening.

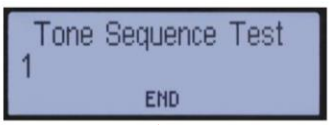
STEP 5 Complete Test

The TX will go through a series of tones 6 to 12 times. The test is complete once the RX provides an acoustic blockage assessment score (GOOD, FAIR, POOR, BLOCK).

Acoustic Assessment Score Scale



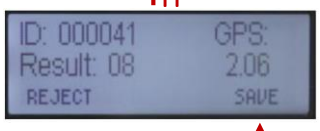
Transmitter (TX): Receiver (RX):



G

H

H



I

1 2 3 Testing Stages

G: The TX should automatically stop producing tones once RX displays score (Testing Stage 2). If it does not, manually stop test by pressing END.

H: Push RETURN on TX to return to main menu, and Push RETURN on RX to view detailed results screen (H).

I: Record measurement ID and result. Press SAVE on RX unless measurement was invalid.