



RadioRead®

Model 510 Installation Instructions

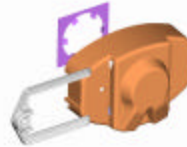
Definitions



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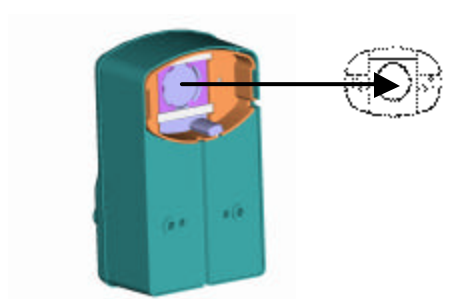
- | |
|---|
| <p>1 – Sensus TouchPad
2 – TouchPad Cover
3 – TouchPad Cover, Tinnerman Type Fastener, TouchPad Locking Clip
4 – Model 510 Radio (Front View)
5 – Model 510 Radio (Rear View with knockout)
6 – Model 510 Radio and TouchCoupler Spacer with TouchPad Cover</p> |
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Table of Contents

<i>Single Port – TouchCoupler Installation</i>	4
<i>Dual Port – TouchCoupler Installation</i>	5
<i>Single and Dual Port – Wired Installation</i>	6
<i>Activate Radio</i>	7
<i>Appendix A:</i>	9
<i>Appendix B: Regulatory Information</i>	12

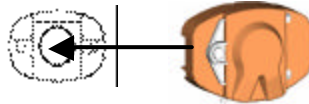
Single Port – TouchCoupler Installation

- 1) While Model 510 Radio and TouchCoupler Spacer with TouchPad Cover all still assembled, align the TouchPad Cover over the Sensus TouchPad that is secured to the wall and press on whole assembly.
- 2) For additional support, open Model 510 Radio door and screw two screws using the holes located above the battery compartment.
- 3) Once secured, activate unit (see activation section).

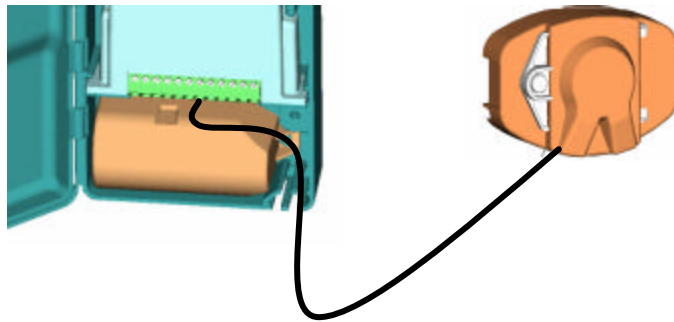


Dual Port – TouchCoupler Installation

1. First choose which Sensus TouchPad will be covered remotely. Place the remote the TouchPad Cover over the Sensus TouchPad.



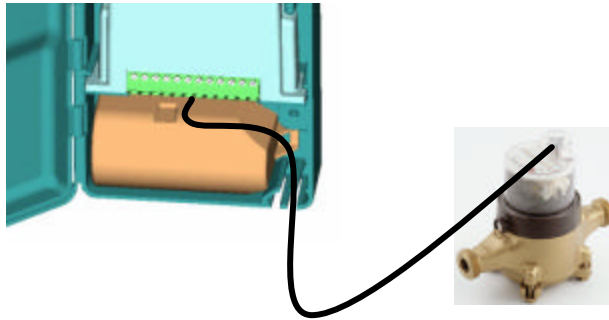
2. While Model 510 Radio and TouchCoupler Spacer with TouchPad Cover all still assembled, align the TouchPad Cover over the Sensus TouchPad that is secured to the wall and press on whole assembly.
3. For additional support, open Model 510 Radio door and screw two screws using the holes located above the battery compartment.
4. With the door still open, run the wire from the remote TouchPad Cover through the bottom of the Model 510 Radio and attach to appropriate terminal screws.



5. Once all connections are complete, activate unit (see activation section).

Single and Dual Port – Wired Installation

1. Open Model 510 Radio door.
2. Secure Model 510 Radio to a wall utilizing the screw holes above the battery compartment.
3. Run the register wires through the bottom of the Model 510 Radio and connect to the appropriate terminals.

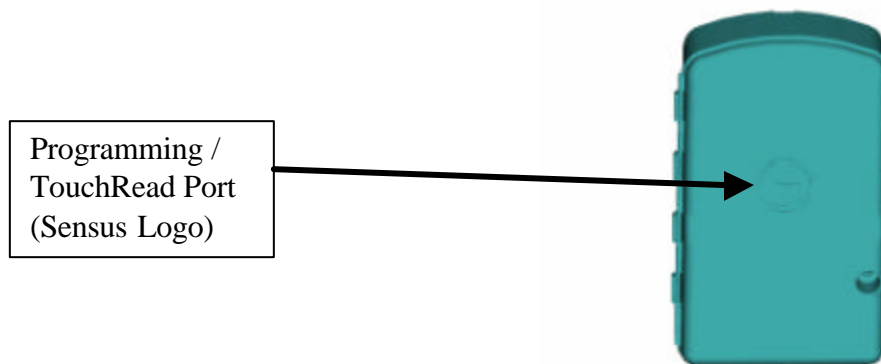


4. Once all registers are connected, activate unit (see activation section).

Activate Radio

Note: if no meters are connected to this radio, the radio will not activate.

- 1.) Once all meters are connected, the radio must be activated in order for it to perform its function. To activate, using a TouchReader or Model 4090 AutoGun, attempt a TouchRead on the Programming/TouchRead port (See picture below). Once TouchRead is activated, the radio will determine what is connected to this unit automatically. This may take up to 3-6 seconds depending on if this unit is dual port capable and what encoders are connected to it.



TouchReader

- 2.) The TouchReader will beep once indicating that the radio acknowledged the TouchRead and is now detecting what is connected.
- 3.) After waiting ~3 seconds, attempt another TouchRead, if a read error occurs, the radio is still in detect mode. Repeat this step again in 3 more seconds.
- 4.) If successful detection, it should provide either a TouchRead reading (Sensus only) or a single beep to indicate that the encoder is connected but TouchRead is not supported via the radio
- 5.) If detection is unsuccessful, the TouchRead will beep once and restart the activation similar to step 2 above.

AutoGun

(ID type set to Factory ID – see AutoGun manual for instructions)

- 2.) The AutoGun will beep and display for the ID “MXUGPTC0”. This indicates that the radio acknowledged the TouchRead is in mode “0” which is inactive. This will start the detecting process.
- 3.) After waiting ~3 seconds, attempt another TouchRead, if a read error occurs, the radio is still in detect mode. Repeat this step again in 3 more seconds.
- 4.) If successful detection, the AutoGun will display either a TouchRead reading (Sensus only) or

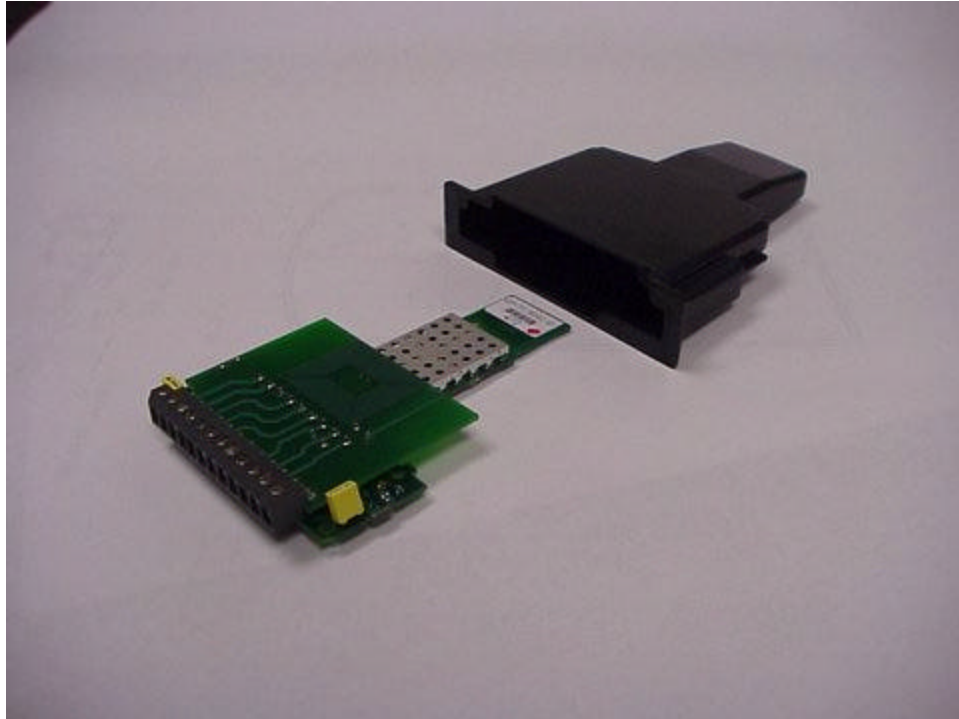
- **ID: MXUGPTC1** – which means a TouchRead was attempted on an unsupported meter (Neptune).
 - **ID: MXUGPTC2** – which means that the port was configured for a meter type that supports TouchRead (Sensus only) but there was no response from the meter.
- 5.) If unsuccessful detection, the TouchRead will start the activation process again. The ID on the AutoGun will display **MXUGPTC0** similar to the step 2 above.

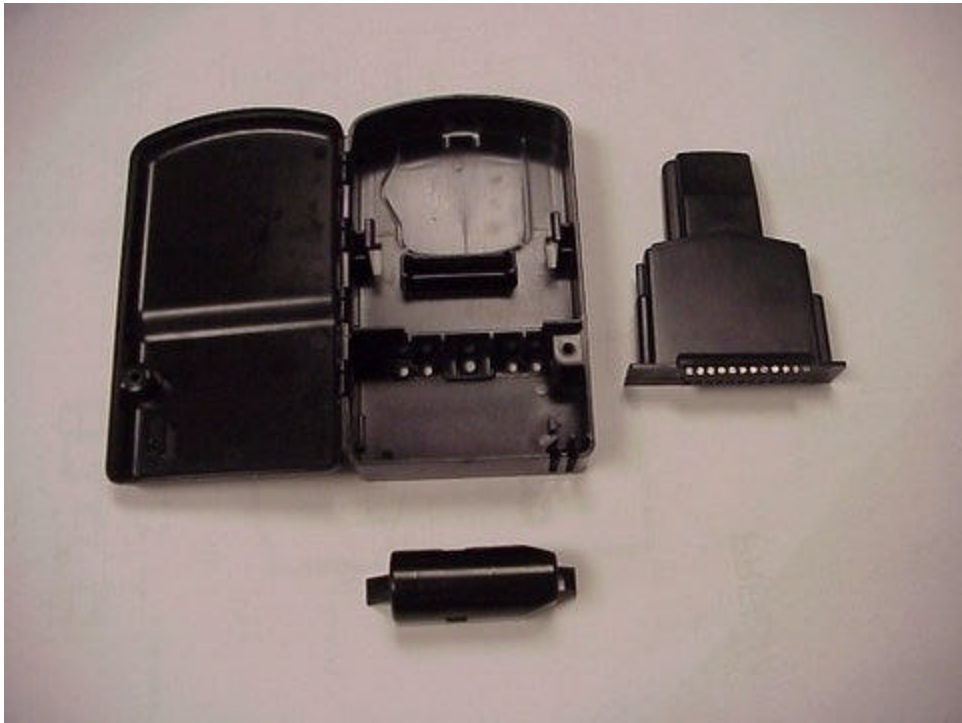
Note: Once the radio is activated and it detected what is connected, the only way to change its configuration as to what is connected is to deactivate the radio using a programming tool and re-activate the radio or use a programming tool to reprogram the port manually.

Warning... Programming a port manually will not allow the unit to perform an automatic detection on that port unless reset to “AutoDetect”. The activation process will not reset the port type.

Appendix A:

The following photos show how the PCB is oriented and installed into an enclosure.







Appendix B: Regulatory Information

FCC Information to User:

Changes or modifications not expressly approved by Sensus Metering Systems could void the user's authority to operate the equipment.

In order to meet FCC's RF exposure limits in section 1.1307 of the Rules, a minimum separation of 20 cm must be maintained between the antenna of this device. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.