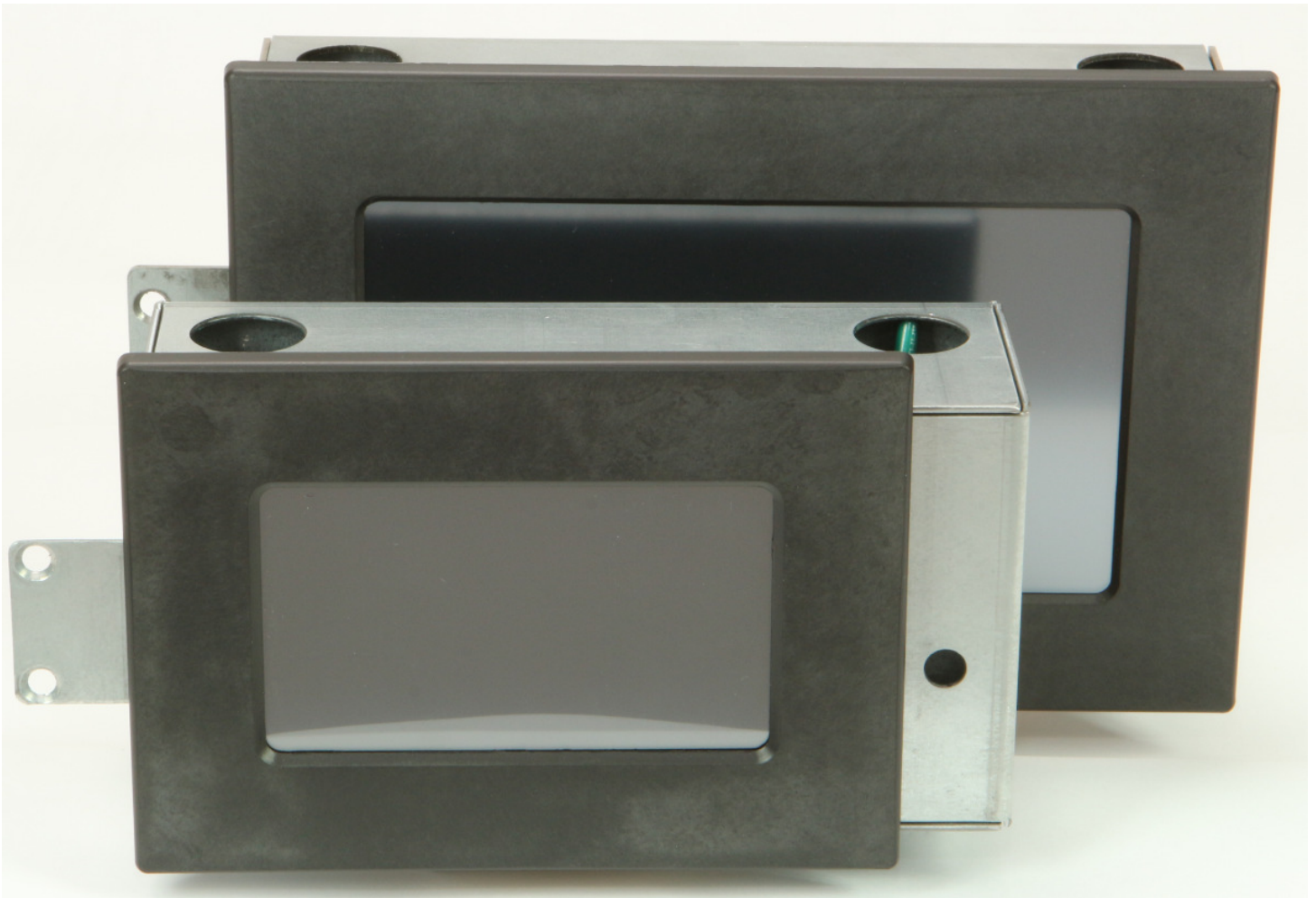


Installing the ILC LightSync 4.3" or 7" Touch Screen Station 2

Rev A



Overview:

The ILC LightSync Touch Screen Station 2 (LS-TSS2) is available with 4.3" and 7.0" screens. The assembly includes a galvanized NEMA-1 back box, 120V power supply, touch screen assembly with magnet mounted bezel.

The screen can be orientated in either a horizontal-landscape or vertical-portrait position.

Typical application would use the landscape mounting as the most common.

The Enclosure is provided with conduit holes for the required 120VAC power and the CAT-5 data cables from the lighting controller.

The device is designed to be connected to the local bus of a LightLEEDer panel and requires addressing as a series of LightSync devices depending on the number of controls intended to be displayed, see ILC project riser and addressing information for more detail.

The touch screen is a resistive touch device, all programming is done in the ILC touch screen software provided with the device and retained on the supplied micro SD memory card, refer to the programming guide for more detail.

Specifications:**Physical:**

- Galvanized 16gage NEMA-1 enclosure
4.3": 6.5" W x 3.45" H x 2.75" D
7.0": 7.95" W x 4.30" H x 2.75" D
- Black, White or Ivory ABS Bezel:
4.3": 5.75" W x 4.13" H x .25" D
7.0": 8.22" W x 5.51" H x .25" D

Electrical:

- 120/240VAC power supply with 5VDC output
- 1 Amp

Operating Environment:

- Location: Interior space
- Operating Temp: 0-50 degrees Celsius
- Humidity: 10% to 95% non-condensing
- Atmosphere: Non-explosive/corrosive

Certification and Approvals:

- UL
- CUL

Enclosure Installation Procedure

The installation of the 4.3" and 7.0" touch screen assemblies are very similar, besides the fiscal size. The enclosures are mounted in the same manner for both sizes. Figure 1 and Figure 2 show the two screens and enclosures prior to installation.

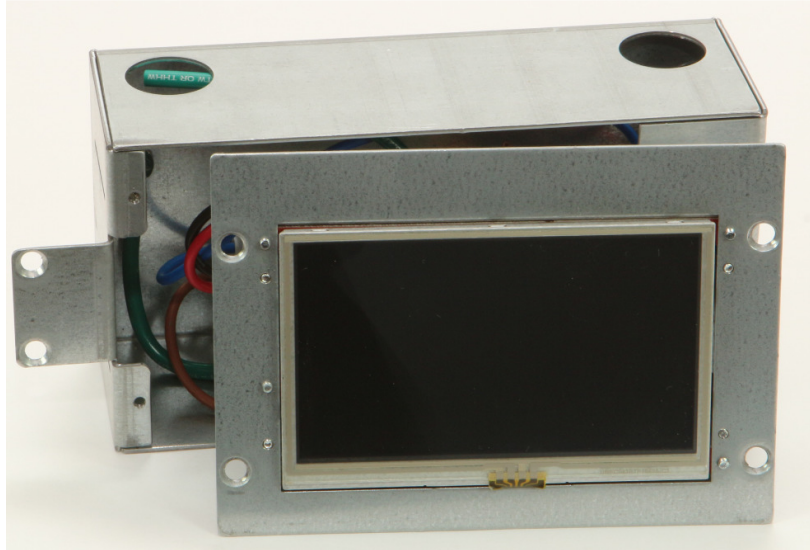


Figure 1 4.3" Touch Screen and Enclosure

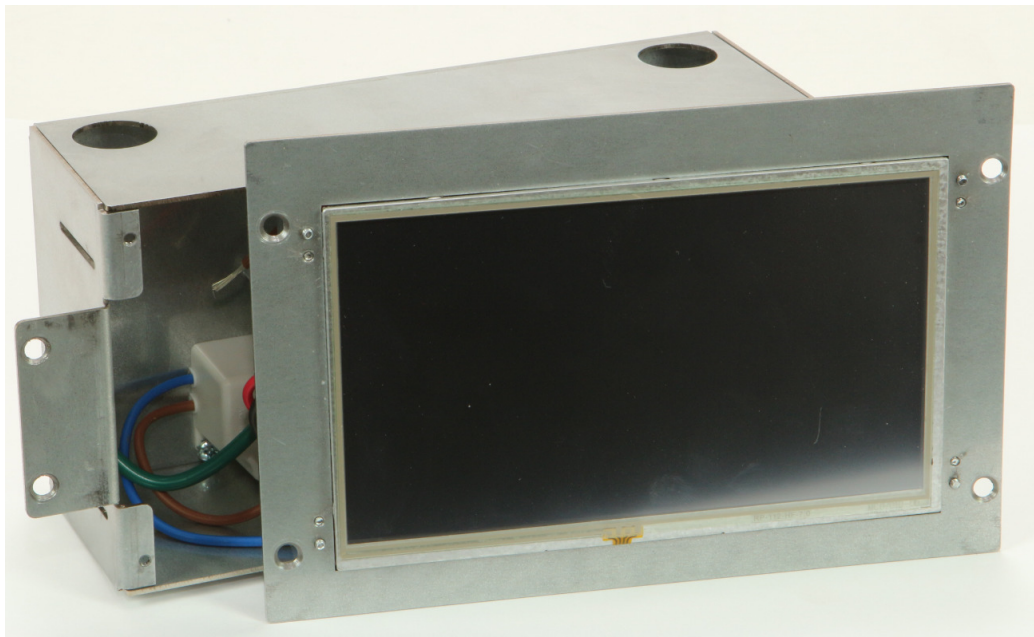


Figure 2 7.0" Touch Screen and Enclosure

1. See the building plans and details to determine the location and mounting height. The touch screens is typically mounted like a wall switch level between 42" and 52" from the floor. See the plans for the designated mounting height and location.

The touch screen station will support a landscape or portrait orientation, be sure to consult with the owner and ILC start-up programmer when choosing the portrait orientation so that the programming can be adjusted accordingly.

2. Mark the center of the mounting tab and wall stud for the location of the screen based on center of screen mounting height.
3. When installing the box be cautious of the power supply and high voltage fish paper divider. You can remove the fish paper divider, and power supply to protect them from damage, then re-installed to prevent loss.
4. Position the enclosure at the wall stud and fasten using the screw holes provided, Keeping the enclosure level, fasten to the face of the stud with 2 screws through the tab provided as shown on figure 3. From the inside of the enclosure install 2 additional screws in the slots provided securing the box to the stud.

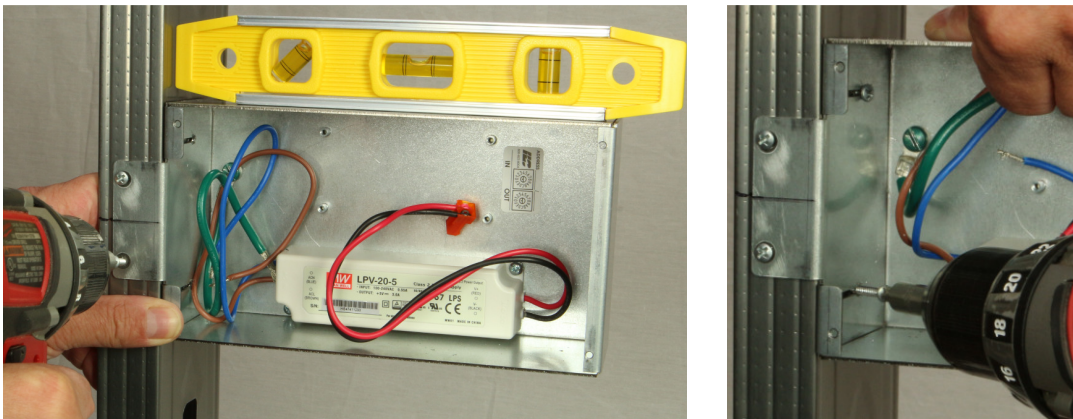


Figure 3 Securing the Enclosure

5. Route a conduit from the circuit breaker panel to the high voltage section near the mounting tab on the enclosure. This will be used for the 120VAC power connection to the touch screen power supply.
6. If conduit is used for the CAT-5 data cable, route from the lighting controller to the right side 1/2" conduit opening. If conduit is not used. Protect the cable with a KO bushing at the enclosure opening shown in figure 5.

Note: Do not run the CAT-5 data lines next to or in the line voltage conduit, as voltage may be induced onto the data line which could cause communication issues.

7. Pull the proper wire from the circuit breaker panel to the touch screen enclosure and terminate to the power supply provided. The power supply circuit should be protected using an appropriate circuit breaker for the application.

8. Connect the line voltage power to the 120VAC power supply, and test for proper voltage. Brown=120V Positive/Hot, Blue=120V Negative/Neutral, Green=Ground. Replace the fish paper divider after connecting.

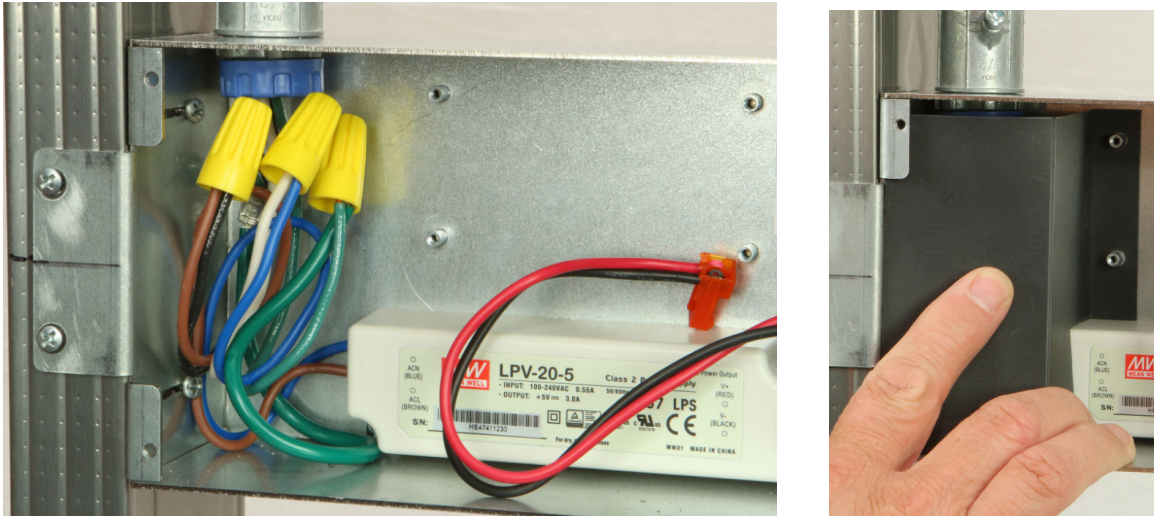


Figure 4 Power Connection / Fish Paper

9. Install the CAT-5 data cable from the panel local bus, or from the previous LightSync device as shown on the ILC riser layout. Leave plenty of cable at the lighting controller end, and 6-8 inches at the touch screen enclosure end. Terminate the CAT-5 data cable with RJ-45 connectors and test as shown in figure 5. Be sure to mark the cable for in and out to the next device in line.



Figure 5 Testing the CAT-5 data cable

10. Install wall covering and cut out the opening for the touch screen. **DO NOT cut out the hole to the outside of the enclosure.** Cut to Inside edge top & bottom and 1/4" beyond the left & right inside edge exposing the two mounting screw holes left and right. Do not install the touch screen assembly until the wall is finished to prevent paint or dust damage to the electronics. Refer to Figures 6, 7, and 8.

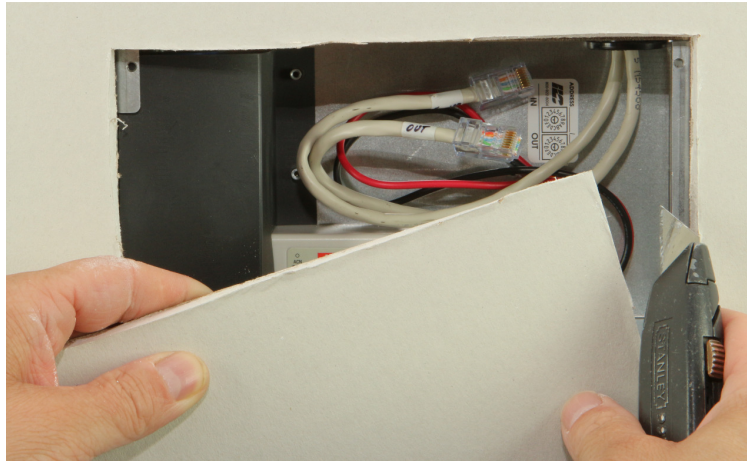


Figure 6 Wall Covering Opening

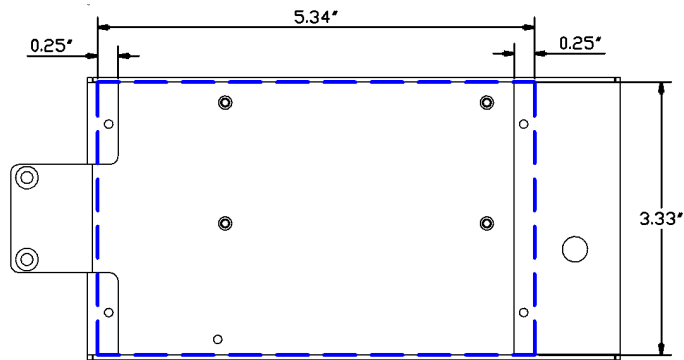


Figure 7 Cut-Out for a 4.3" Screen

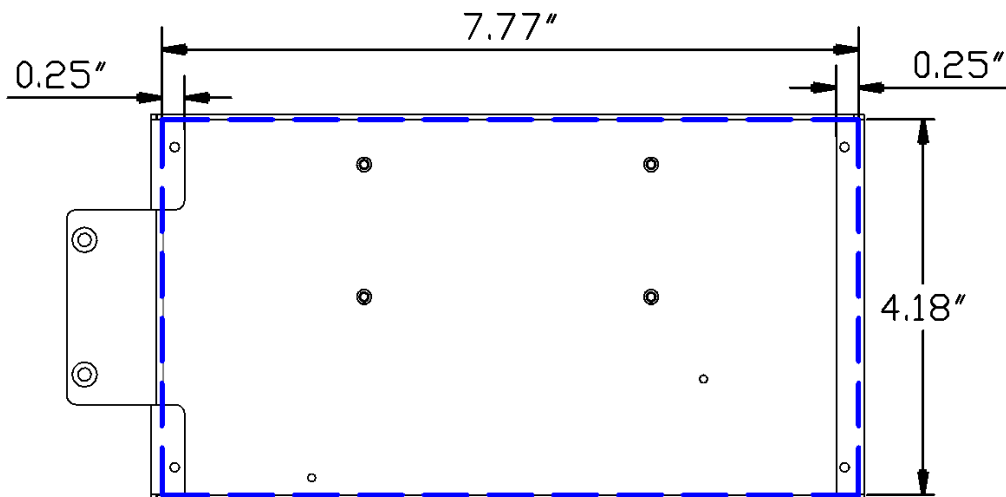


Figure 8 Cut-Out for a 7.0" Screen

11. Once the finish work has been completed, clean out sheetrock dust and painting debris from installed enclosure. Also verify that the 4 mounting holes on the enclosure tabs are accessible and clean.

12. Connect the 5VDC power connector to the touch screen assembly as shown in figure 9

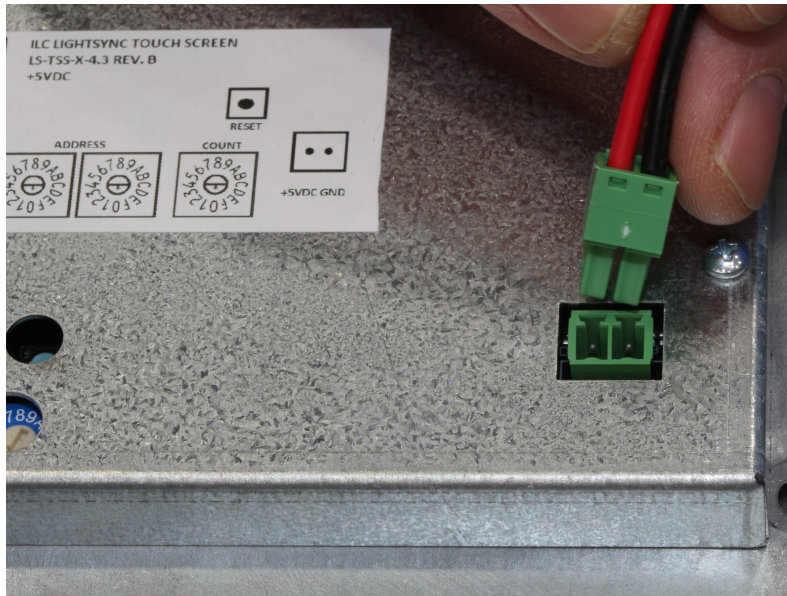


Figure 9 5VDC Power Connection

13. Connect the CAT-5 data cable noting the In & Out RJ-45 ports as shown in figure 10



Figure 10 Cat-5 Data Cable Connection

14. Set the LightSync start address (base address) as designated in the ILC riser.
See figure 11 for example setting of 24



Figure 11 Setting the TSS2 Device Address

15. Place the touch screen in the opening, orient so front assemble glass screen flat cable is in the lower portion of the screen as shown in figure 13 for landscape orientation, or on the right side for portrait orientation.

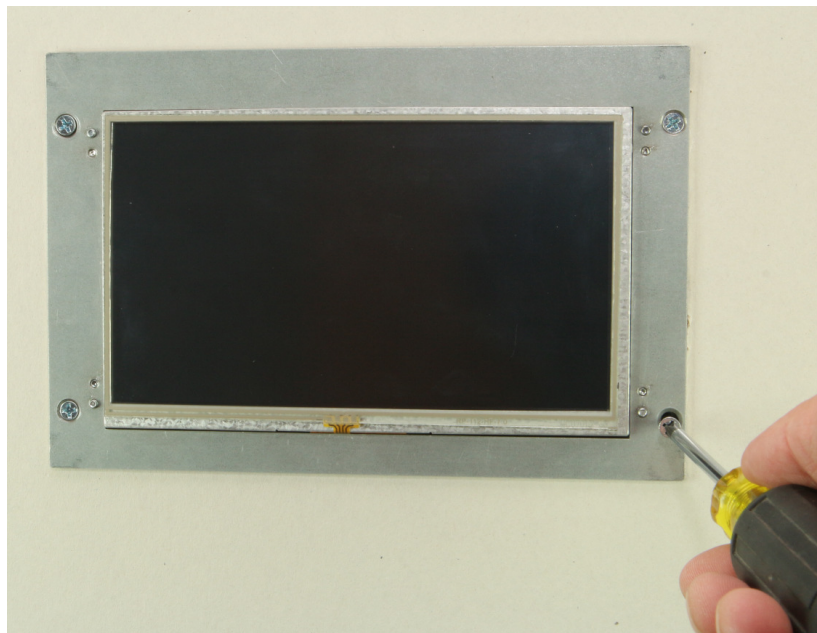


Figure 12 Touch Screen Assembly Installation

16. Fasten the touch screen using the 4 - #6, 6/32 flathead screws provided, the bezel plate should fit snugly to the wall. **Do not overtighten the screws, as damage may occur.**

17. Install the plastic bezel to the bezel plate using the magnets affixed to the cover.

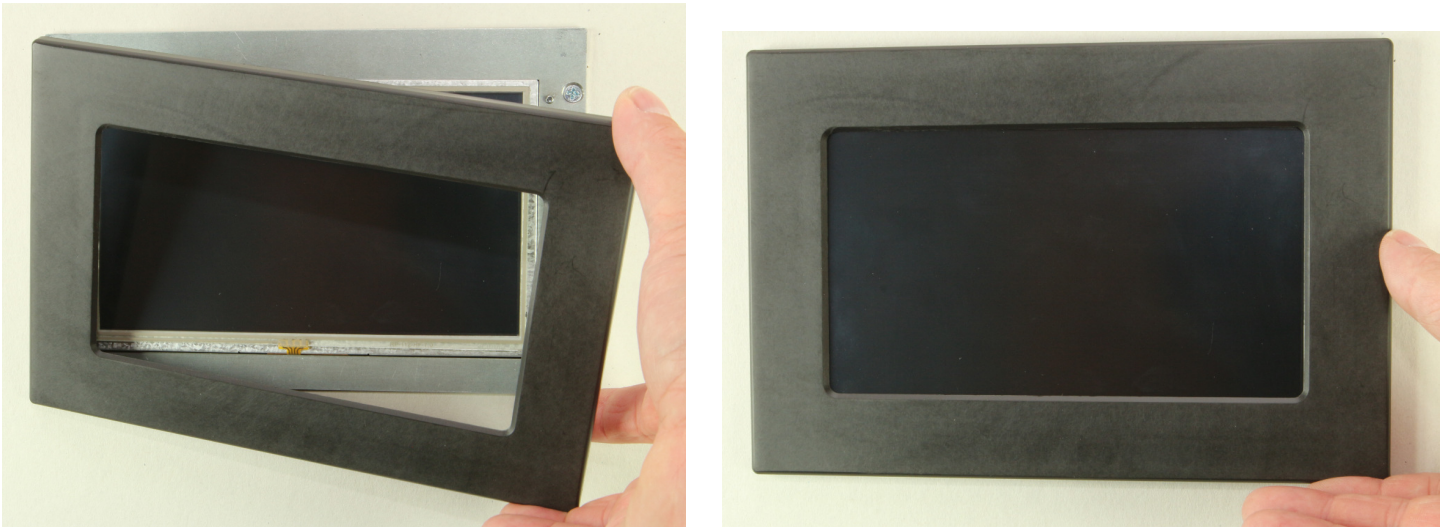


Figure 13 Installing the Plastic Bezel

The LightSync Touch Screen Station 2 will require programming to operate. This is done using the LS-TS2 pro programming software provided with the device. Refer to the software operations manual for details as to programming options. Refer to the plan page details and electrical engineers specified operation and the owner for additional information as to how the touch screen operation is intended to work. Verify the loads to be controlled and the desired operations.

Contact ILC at 1-800-922-8004 with additional questions or for scheduling a site visit to program the touch screen