# Model X Installation

1. Mount the control unit

Choose a suitable location and mounting method for the control unit inside the crosswalk lighting control/power box. The mounting hole measurements are 5.40" x 3.40" on center. The control unit measures 6.0" x 4.0".

2. Routing Wires

Determine which model you have and how many wires are needed. You need one pair for the button, a second pair if it has a speaker, a third pair if the sign has LED's, and a fourth shielded cable if it has a microphone. We recommend numbered or colored 14-18 AWG wire and 22 AWG 2 conductor shielded cable for the microphone. Drill and tap holes as needed on poles for mounting and wiring push button stations. Route the appropriate wires and mic cables from the control unit to where each of the two push button stations will be located.

3. Connecting Push button Stations

Route wires through wire guide hole on the back plate of the push button station. Connect one wire pair to "button" terminals. Connect second wire pair to "speaker" terminals (if applicable). Connect third wire pair to "LED" terminals (if applicable) observing + and - wire colors.. Connect shielded cable to "Mic" terminals (if applicable) observing + and - wire colors.
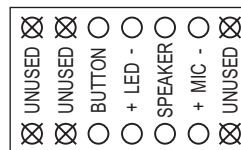
TERMINAL BLOCK LABEL

Double check connections then attach back plate to push button station. Make sure you tape up wires per figure 2 and apply silicone per figure 3 so water will not follow wires into push button station. Repeat for other unit. Note: you may want to complete the hook up and testing of the units before closing and sealing up the back plate.

4. Standard Control Unit Wiring

Refer to the *Standard Model X Wiring Diagram*. Connect one speaker pair to "Spkr1" terminal. Connect other speaker pair to "Spkr2" terminal. Connect both button pairs to XAVCU push button input. Connect a wire pair from lighting controller push button input to button out terminals on XAVCU. If push button station units are equipped with LED's, then connect (maintaining polarity) both LED wire pairs to LED out on XAVCU Connect the LTS IN terminals to a source of voltage which flashes with the pavement lights. If push button stations have microphone, then connect both microphone cables to "Mic IN" terminals on control unit. (Note on wiring diagram how shield should be connected) Recheck all wiring, then connect 120VAC line, neutral, and ground to "Line", "Neut", and "GND" terminals on control unit.

5. Setup and Test

With 120VAC power applied to control unit, press each push button. The crosswalk lights should turn on and a voice message should be heard from the speakers if units have audible message option. Adjust the volume using a small screwdriver on the "Volume" control pot on the control unit. If the system is microphone equipped, verify that the speaker volume changes in relation to the ambient noise level. Tapping on the pushbutton station just before you push on the button should cause the volume to increase. Adjust Mic control as desired to increase or decrease response to ambient noise. Determine the length of time the voice message should sound and set the jumpers J1-1 and J1-2 to repeat the voice message from 1 to 4 times. Refer to the guide printed on the control unit. If you are using the XAVCU as a flash controller, adjust the "Time" control for the desired flash time.

6. Mounting Push Button Stations

If back plates have not been secured and sealed with silicone, secure them now. Bolt stations to poles using 1/4-20 hardware supplied Apply a 1/8-1/4" bead of silicone around top and side edges of frame and screen as shown in figure 3, then install sign.

If arrow is not pointing in the proper direction, remove 4 screws in ring around button. Turn arrow to proper direction and reinstall ring. Once you are sure the system is working properly and installation is complete, install 4 yellow plastic caps over screws in ring so they are flush to outer surface of ring.

Tape wire interface to prevent water from entering and corroding the electrical connections over time.

Model X wiring assembly going into pole

Wires from Model X Control Unit

Figure 2

Silicone

Do not put silicone around bottom so water can drain if any gets inside.

Figure 3

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