



Fire Pull Station with Transmitter Model 310

Description:

The model 310 is a self-contained dual action lexan fire pull station with a built in transmitter. It is a UL38 listed device and meets ADA requirements. Operating instructions are molded into the handle. The Model 310 is fully supervised for tamper, low battery and RF signal integrity. The transmitter is powered by a single 3 volt lithium battery as listed under the specifications section of this manual and the label on the product. The model 310 is intended to be used with CWSI Fire Alarm Control Panels. Refer to the control panel manual for compatibility details.

Programming:

The 310 must be enrolled into the FACP before installation of the device. **The Model 310 will not report Alarms or trouble signals unless it is enrolled into the CWSI FACP.** The model 310 can be enrolled at the control panel or any enrolled repeater. Place the FACP in enrollment mode then install the battery in the model 310 transmitter observing polarity marked on the battery holder. The model 310 serial number will be displayed on the FACP. Refer to the control panel installation instructions for further details on enrollment and transmitter programming options. After the model 310 is enrolled, remove the battery and reinstall it only at the transmitters mounting location. **Note: Battery life will be shortened if the battery remains installed and the model 310 is not within communication range of an enrolled repeater or control panel.**

Installation:

Select an accessible location that is not prone to tampering or accidental damage. **The Model 310 must be installed and maintained in accordance with the National Fire Protection Association's Standards (NFPA), the National Electrical Code and within the limits defined by the Americans with Disabilities Act (ADA) or per national/local requirements.** For ADA compliance, if the clear floor space only allows forward approach to an object, the maximum forward reach height allowed is 48-inches (121.92cm). If the clear floor space allows parallel approach by a person in a wheelchair, the maximum side reach height allowed is 54-inches (137.16cm).

The mounting surface should be relatively flat and capable of accepting screws or anchors. The 310 is to be installed in an indoor dry location. Exposure to weather or corrosive conditions may damage the unit. The Pull Station must be mounted on a vertical surface so that the wording on the pull station front can be read correctly. **Perform the signal test described in this manual prior to and after permanently mounting the unit.** Fasten the back box to the mounting surface using four #8 screws that are appropriate for the wall type or anchor. The correct orientation of the back box is with the arrows inside the box pointing up (figure 2). Install the battery in the battery holder observing the polarity markings then push the retaining clip around the battery and snap it onto the battery holder (figure 3). If the Pull Station has already been enrolled a power up reset trouble will be indicated on the FACP. Carefully push the front assembly on to the back box until it snaps into place. Be careful not to bend the transmitter's antenna. Secure the pull station front onto to the back box as shown in figure 2 using the four #8 screws provided. **Do not over tighten the**



screws. Close and lock the pull station using the key provided. Perform the **Signal Test** and **Alarm Test** as outlined in this manual.

Cautions:

1. Make sure the battery is firmly installed in the battery holder with the battery retaining clip around the battery.
2. The unit must be secured tightly to the wall, so as to not be dislodged.
3. Test the unit after any service or battery change or as often as local or national codes dictate.

Alarm Operation:

To activate an alarm from the pull station, push in and pull down on the handle. A yellow indicator under the word push will appear when the pull station is activated. The pull station remains in the activated position until reset.

When the pull station handle is pulled:

1. An initial alarm signal is transmitted.
2. A 60 second delay occurs. If during this delay the pull station is reset then the alarm cycle is ended.
3. The continued alarm condition causes a repeat alarm transmission.
4. Another 60 second delay as in step 2 occurs.
5. Step 3 repeats at 60 second intervals until reset.

To reset the pull station, insert the key into the lock and rotate ¼ turn clockwise. Open the door until the handle returns to normal then close and lock the door. Closing the door automatically resets the switch to the normal position. Opening the door with the key will not activate the alarm switch.

LED: The LED is visible through the front of the pull station and will flash twice when an alarm signal is transmitted.

Alarm Test:

Before testing, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Activate an alarm as described in the Alarm Operation section of this manual. Verify an alarm is received at the control panel. The pull station remains in the activated position until reset. The led will flash twice when an alarm is transmitted. Reset the pull station after alarm reception has been verified at the control panel.

Signal Test:

The test must be performed while the pull station is held in its intended mounting location. Initiate the test by placing a strong magnet along the middle left side of the pull station as shown in figure 1. The model 310 piezo sounder will beep once. A delay of up to 15 seconds will occur followed by either one or two beeps. One beep indicates an unacceptable location and two beeps indicate an acceptable location. If only one beep is heard then relocate the model 310 mounting position closer to the nearest repeater or control panel and perform the test again. Continue this procedure until 2 beeps are achieved. **Do not mount the transmitter unless 2 beeps are heard when performing 5 consecutive signal tests.** This test must be performed before and after transmitter installation. Note: A CWSI model AR-3(A), AR-5 repeater or Control Panel must be powered up, installed and enrolled before running this test. Refer to the signal survey section of the control panel manual for more information.

Low battery:

The battery voltage is tested under load every 90 seconds. When a low battery voltage is detected, a low battery trouble will be transmitted and repeated every 90 seconds. Where more than one type of trouble exists, all will be repeated every 90 seconds. The led will flash once when a low battery trouble is transmitted.

Battery Replacement:

Warning: Always install a new battery of one of the approved types as listed in the Specifications section of this manual and the product label. When a battery is first inserted, a low battery test is performed. If the battery passes the test, the unit should not send a low battery signal. If the battery does not pass this test, the unit will continue to send a low battery until a good battery is installed. The transmitter will not power up if the battery is lower than 2.3 volts.

To replace the battery:

1. Place the CWSI FACP in Test mode to prevent any unwanted alarms.
2. Open the Pull Station door using the key provided. This will not cause an alarm. Separate the Pull Station front from the back by removing the 4 screws in figure 2. A tamper trouble will be indicated on the control panel when the Pull Station front and back are separated. Remove the battery retaining clip then remove the battery and dispose of properly.
3. To insure proper power down sequence, wait a minimum of 20 seconds before installing a new battery.
4. Install the new battery in the battery holder then push the retaining clip around the battery and snap it onto the battery holder (figure 3). Observe the polarity diagram inside the battery holder. A power up reset trouble signal should be indicated on the FACP upon installation of the new battery.
5. Carefully push the front assembly on to the back box until it snaps into place (figure 2). Be careful not to bend the transmitter's antenna. Secure the pull station front onto to the back box using the four #8 screws provided. **Do not over tighten the screws.** Close and lock the pull station using the key provided.
6. Test the Pull Station for alarm operation as described in the alarm testing section.
7. If the Pull Station does not function for alarm operation as described in item 6 then start over at step 2. If it still doesn't operate correctly then replace the entire unit.
8. Remove the panel from test mode.

Tamper:

The Model 310 has an on board tilt sensor that will cause a tamper signal to be transmitted if the 310 case is opened or the unit removed from its mounting position. Upon detection of a tamper, a tamper signal is sent immediately and repeated every 90 seconds until the condition is restored. Where more than one type of trouble exists, all will be repeated within 90 seconds. The led will flash once when a tamper is transmitted. Note: This trouble is self-restoring on CP-3500D and newer FACP's.

Power Up Reset Trouble

The model 310 will report this trouble when the battery is installed. This is normal. If a power up reset occurs anytime after the initial indication then the transmitter is malfunctioning. Replace the unit. The led will NOT flash when a power up reset is transmitted.

MOUNT PULL STATION IN A VERTICAL POSITION ONLY

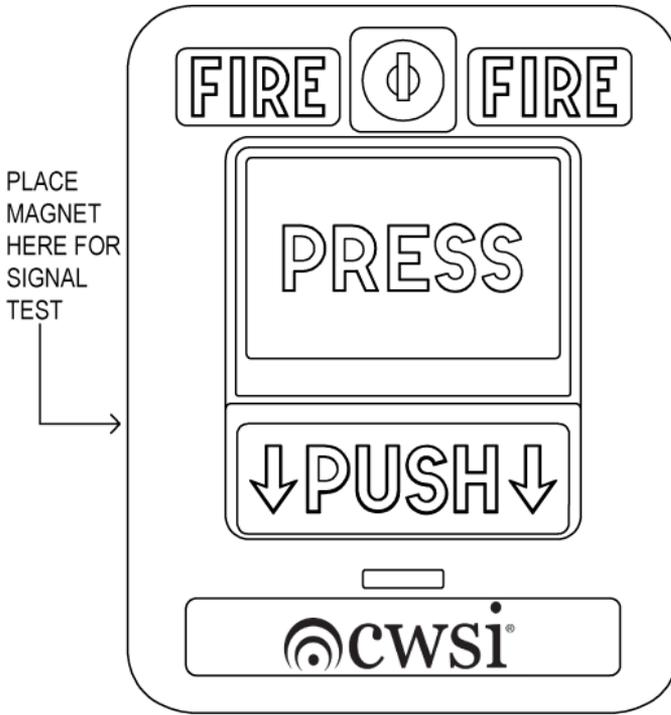


Figure 1

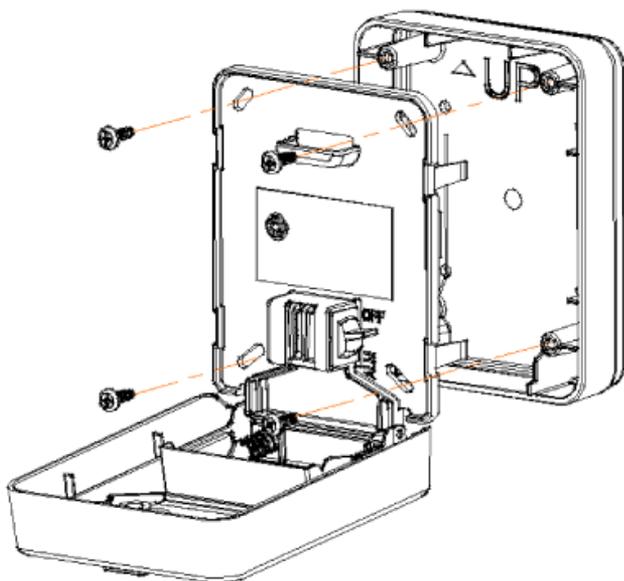


Figure 2

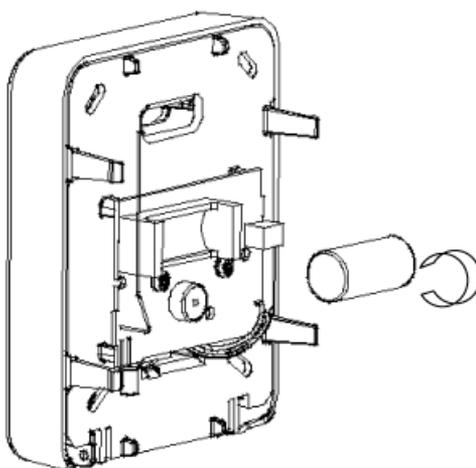


Figure 3

Specifications:

- Battery Type: 3 Volt Lithium; Duracell DL123A, Panasonic CR123A.
- Battery Life: 12 Months Minimum
- Battery Replacement: Upon Low battery report and/or during annual maintenance.
- Operating Temperature Range: 32°F to +100°F.
- Operating Humidity Range 0 to 95% RH.
- Testing: Follow this manual and NFPA 72 or local requirements.
- Transmission: In compliance with FCC part 15 for reception on equipment manufactured by Tyco Fire & Security GmbH
- Test Transmission: Every 90 seconds.
- Size: 5.50 Inches high, 4.25 Inches wide, 2.30 Inches deep.
- Weight 10 oz.

FCC Statement

Important: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Disclaimer

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