

INSTALLATION INSTRUCTIONS

The MD1 Motion Detector is a monitoring device for use with the HME ION IQ® System. The MD1 can be programmed to notify store personnel if a customer enters the front counter area during designated time periods. These instructions provide guidelines for its installation, which should take approximately one hour.

1. EQUIPMENT INCLUDED

- Receiver unit with self-adhesive Velcro® mounting pad
- Motion detector with self-adhesive Velcro® mounting pad
- Phoenix connector, 8-pin
- Cable, 50 ft. (15.24 meters)

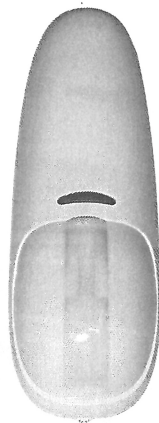


Figure 1. Motion detector



Figure 2. Receiver unit

2. TOOLS NEEDED

- Small, Phillips (cross point) screwdriver
- Wire cutter/stripper

3. PROCEDURE

- Mount receiver unit and connect cable wires in unit
- Route cable from receiver to ION IQ base station and connect cable wires in base station
- Program ION IQ message center
- Install battery in motion detector
- Synchronize receiver and motion detector
- Mount motion detector in front counter area
- Test

3.1 Mount Receiver on Wall

The Receiver should be mounted as close as practical to the ION IQ base station, where it will have the least interrupted reception from the front counter area.

- Before mounting the Receiver on the wall, clean the area where it will be mounted.
- Unscrew the Phillips (crosspoint) screw from the front of the Receiver and lift the front off the unit, and then remove one of the knockouts from the inside-top of the Receiver case, for routing the cable into the unit.
- Locate one of the enclosed self-adhesive Velcro pads and peel the paper backing off one side of the Velcro.
- Carefully fasten the sticky side of the Velcro to the back of the Receiver unit.
- Peel the paper off the other side of the Velcro and position the Receiver unit on the wall with its antenna wire extending from the bottom. Press the unit firmly against the wall.

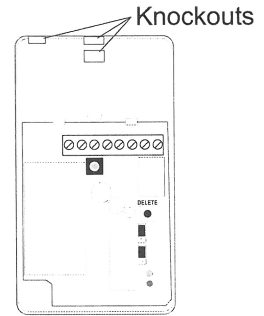


Figure 3. Receiver knockouts

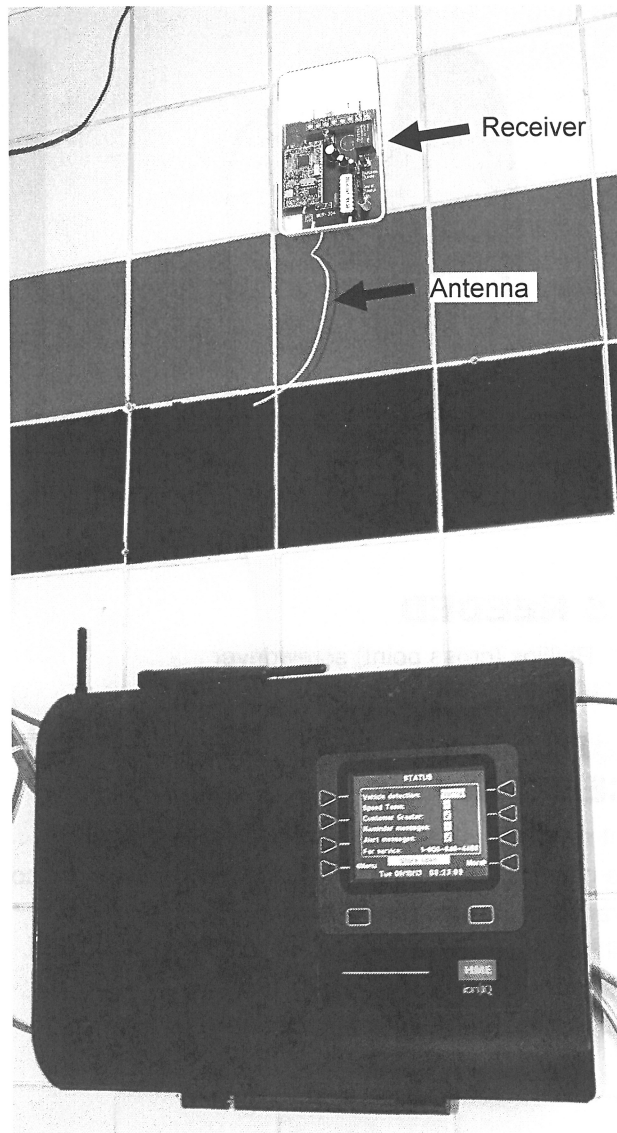


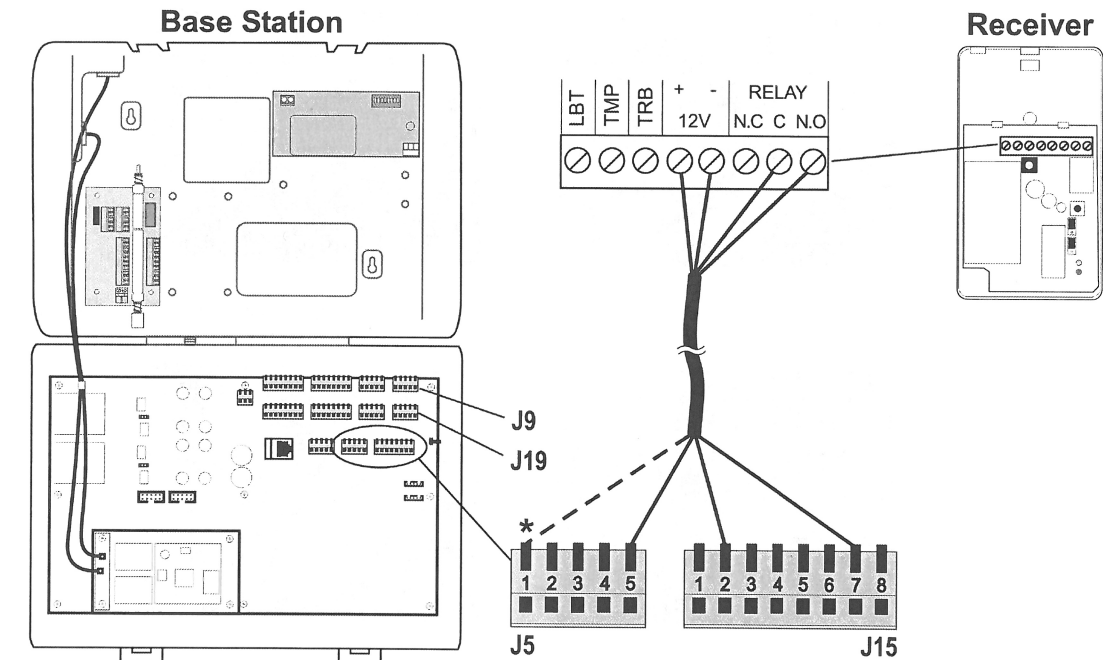
Figure 4. Receiver mounted close to ION IQ base station

3.2 Route and Connect Cable from Receiver Unit to ION IQ Base

- Cut a piece of the enclosed cable long enough to reach from the Receiver unit to the ION IQ base station, with approximately 1 foot (30.5 cm) of slack.

NOTE: In some cases, if the Receiver must be mounted away from the ION IQ base station, it may be necessary to route the cable through walls or over the ceiling. If so, route the cable before cutting it, and leave enough slack at each end to make the connections shown in Figure 5 below.

- At each end of the cable, remove 4 inches (100 mm) of outer insulation from the cable, and strip about ¼ inch (6 mm) of insulation from each of the color-coded wires.
- Open the ION IQ base station cabinet, and leave it open to make the necessary cable connections.
- Route one end of the cable into the knockout hole at the top of the Receiver unit and make the connections shown in Figure 5 below.
- Route the other end of the cable into the opening at the back of the ION IQ base station, and connect the green and white wires to J5 as shown in Figure 5 below.
- Locate the 8-pin Phoenix connector enclosed with the MD1, and connect the red and black wires to pins 2 and 8, and plug the connector into J15 in the ION IQ base station as shown in Figure 5 below.
- Close the ION IQ base station.



ION IQ Base Station connections	
* Green	Alert message S1 = J5, 1
NOTE: The green wire connection depends on which Alert message is selected. See page 4.	Alert message S2 = J5, 2
	Alert message S3 = J5, 3
	Alert message S4 = J5, 4
	Alert message S5 = J9, 5
	Alert message S6 = J19, 5
	White
Red - 12V	J15, 2
Black - gnd	J15, 7

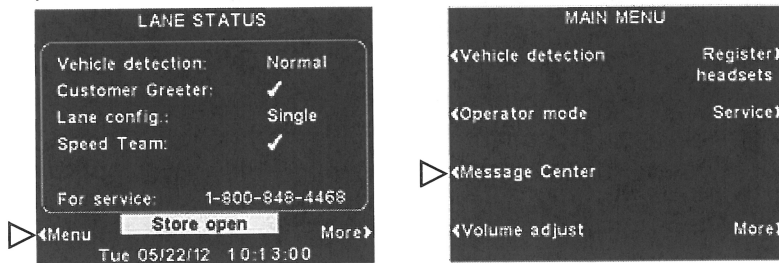
MD1 Receiver connections	
Red	4, 12V+
Black	5, 12V-
White	7, RELAY C
Green	8, RELAY N.O.

Figure 5. Receiver to base station cable connections

3.3 Set Up and Record Alert Message at Base Station

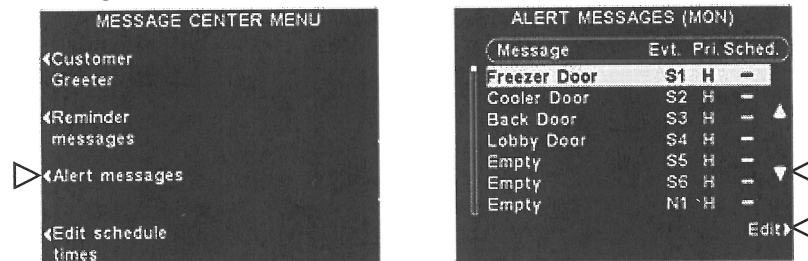
You must record an Alert message that will be played if a customer is present in the front counter area. Record the message(s) at the ION IQ base station as follows:

- With the **LANE STATUS** display on the base station, press the **Menu** button, and then press the Message Center button on the **MAIN MENU**.

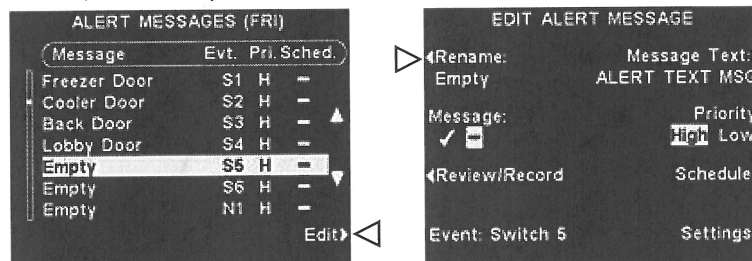


- On the **MESSAGE CENTER MENU**, press the **Alert messages** button, and on the **ALERT MESSAGES** display, use the **▼** button to move the highlight down to the Alert Event message you would like to use, **Evt. S1** through **S6**. You will need to rename those messages as described below.

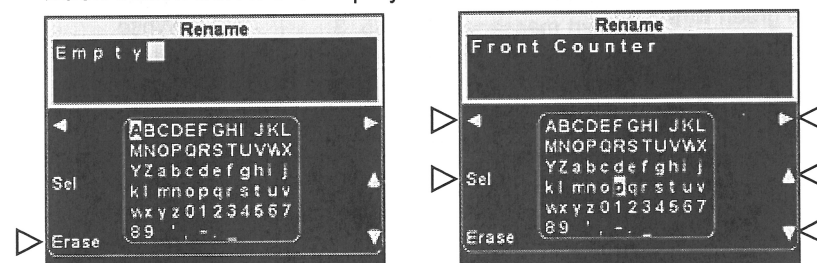
NOTE: The Alert message you choose (S1 through S6) determines the base station wiring shown in Figure 5 on page 3. **S1** through **S5** can be used for a single-lane drive-thru. **S1** through **S6** can be used for a dual-lane drive-thru.



- With the desired message highlighted on the **ALERT MESSAGES** display, press the **Edit** button, and then press the **Rename** button on the **EDIT ALERT MESSAGE** display.

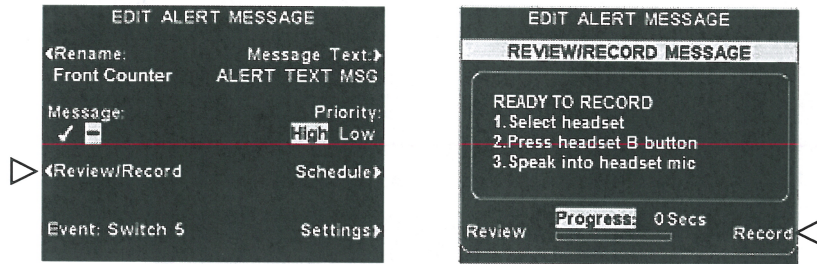


- On the **Rename** display, press the **Erase** button repeatedly until the current Message name is erased. Use the **◀**, **▶**, **▲** and **▼** buttons to move the highlight to a character you would like to use in the alert name (example: **Front Counter**), and press the **Sel** (select) button to enter the highlighted character in the name. When you are finished, press the **Back** button below the display screen to save the name.

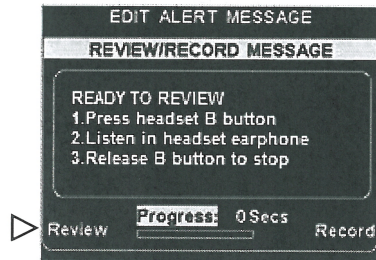


- To record a message, press the **Review/Record** button on the **EDIT ALERT MESSAGE** display. Put on a headset that is registered to the base station, and press the **Record** button on the **REVIEW/RECORD MESSAGE** display. Follow the instructions under **READY TO RECORD**.

(example: A message to record could be “A customer is at the front counter.”)

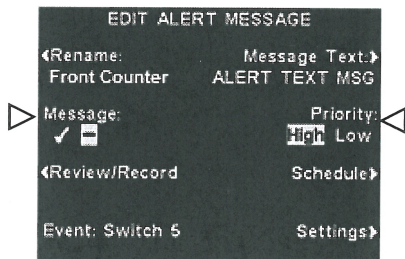


- To review the recorded message, press the Review button on the **REVIEW/RECORD MESSAGE** display, and follow the instructions under **READY TO REVIEW**.

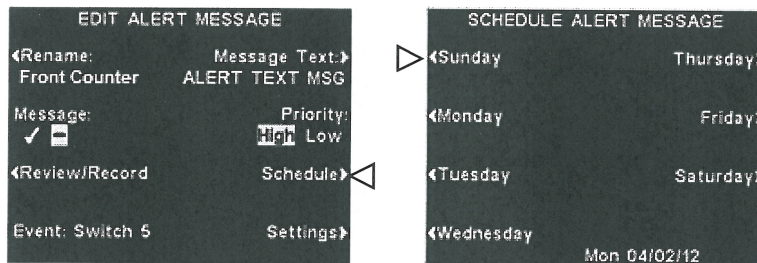


When you are finished, press the **Back** button.

- To turn the message on, press the **Message** button on the **EDIT ALERT MESSAGE** display to highlight ✓.
- To set the message to high priority, so it will play to completion if it has been interrupted, press the **Priority** button on the **EDIT ALERT MESSAGE** display to highlight **High**.

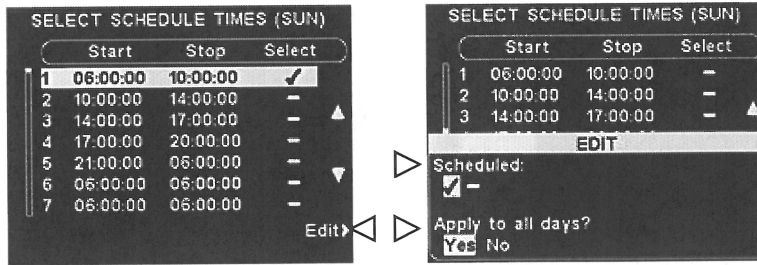


- To schedule the message to play any time a customer is present in the front counter area, press the **Schedule** button on the **EDIT ALERT MESSAGE** display.
- On the **SCHEDULE ALERT MESSAGE** display, press the button for any day.

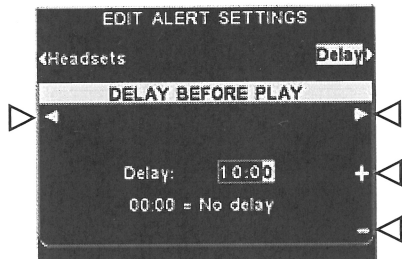
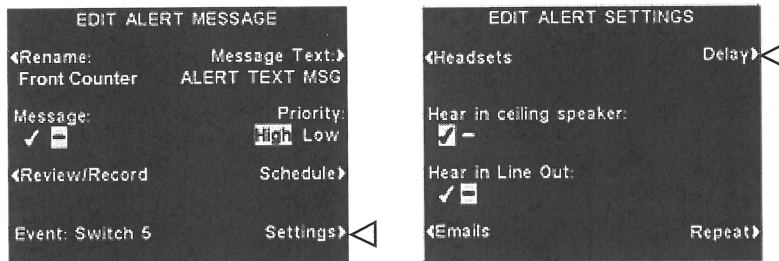


The following settings must be made to enable the Alert messages to be activated during the desired time period.

- On the **SELECT SCHEDULE TIMES** display, press the ▼ button to highlight the desired time period, and then press the **Edit** button.
- On the **EDIT** display, press the Scheduled button to highlight ✓, and then press the **Apply to all days?** button to highlight **Yes**. Press the **Back** button to save these settings.

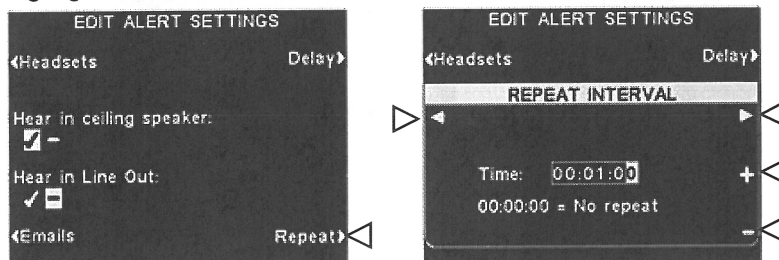


- To set a delay from the time the Front Counter message is triggered until it begins playing, press the **Settings** button on the **EDIT ALERT MESSAGE** display, and then press the **Delay** button on the **EDIT ALERT SETTINGS** display.

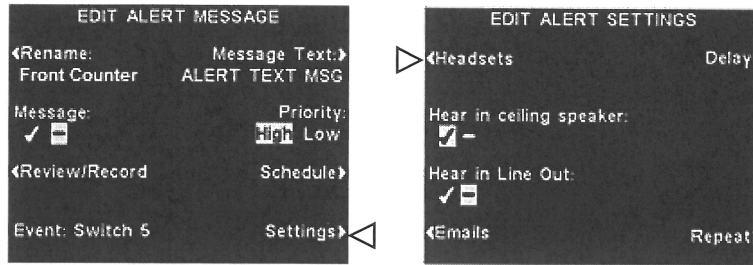


On the **DELAY BEFORE PLAY** display, use the ◀ or ▶ button to move the highlight left or right in the **Delay** field for minutes and seconds (MM:SS), and use the + and - buttons to change the number in the highlighted box. To save these settings, press the **Back** button.

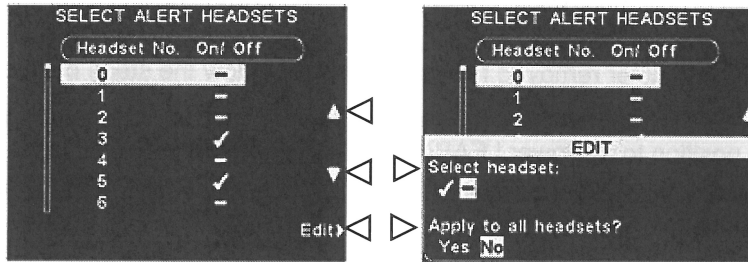
- To have the Alert message play repeatedly at selected intervals, press the **Repeat** button on the **EDIT ALERT SETTINGS** display. Then, on the **REPEAT INTERVAL** display, use the ◀ or ▶ button to move the highlight left or right in the **Time** field for hours, minutes and seconds (HH:MM:SS), and use the + and - buttons to change the number in the highlighted box. To save these settings, press the **Back** button.



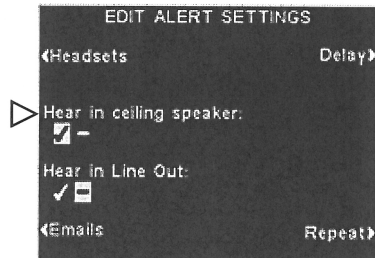
- To choose where the Alert message will be heard, press the **Settings** button on the **EDIT ALERT MESSAGE** display, and then press the **Headsets** button on the **EDIT ALERT SETTINGS** display.



- On the **SELECT ALERT HEADSETS** display, use the **▲** and **▼** buttons to select a headset number in which you would like the Alert message to be heard, and then press the **Edit** button. Press the **Select headset** button to highlight **✓**. Press the **Back** button to save this setting. Repeat this step for each headset in which you would like the Alert message to be heard.
- If you would like the Alert message to be heard in all headsets, press the **Apply to all headsets?** button to highlight **Yes** on the **EDIT** display. Press the **Back** button to save this setting.



- If you want the Alert message to be played in the ceiling speaker, press the **Hear in ceiling speaker** button on the **EDIT ALERT SETTINGS** display to highlight **✓**.



3.4 Install Battery in Motion Detector

- Remove the Phillips screw at the end of the Motion Detector and remove the top from the unit.

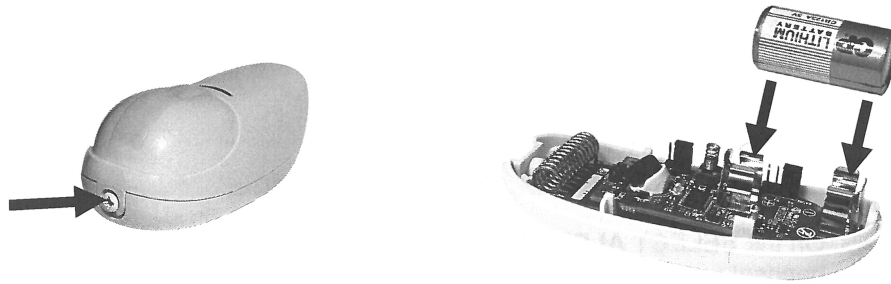


Figure 6. Installing battery in Motion Detector

- Locate the enclosed Lithium battery and install it in the Motion Detector as shown in Figure 6.
- Replace the top on the Motion Detector and secure it in place with the screw that was removed.

3.5 Synchronize Receiver and Motion Detector

The Receiver and Motion Detector must be synchronized so they will communicate with each other. With the front cover removed from the Receiver follow the steps below.

- Locate the OPERATE-LEARN jumper in the Receiver, and carefully move it from the upper OPERATE position to the lower LEARN position, shown as positions 1 and 2 in Figure 7.

CAUTION: When moving the jumper, be careful not to touch the DELETE button, located just above the jumper.

- Press and release the spring switch one time (only). After the spring switch has been pressed, the yellow and red LEDs should both be blinking. When the Receiver and Motion Detector are synchronized, the red LED will remain on steady.
- When the red light is on steady, move the OPERATE-LEARN jumper back to the upper OPERATE position.

NOTE: After moving the jumper to the OPERATE position, you will have 15 minutes to wait before the Motion Detector goes into normal operation. That time will be sufficient to mount and test the Detector unit in the front counter area. During those 15 minutes, the red light on the Detector unit will be flashing. It will then go off until there is activity in the detection area.

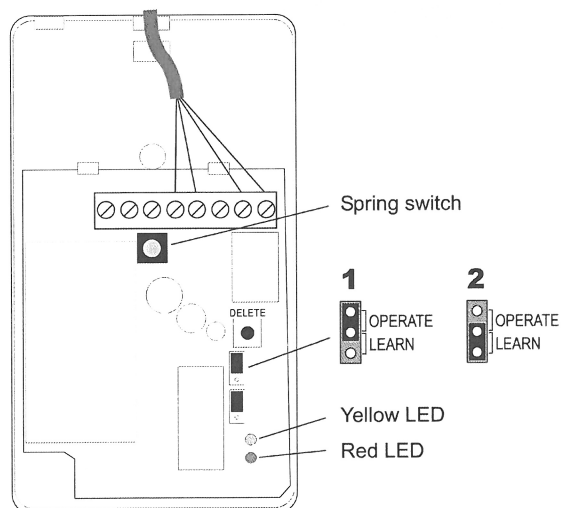


Figure 7. Receiver jumper, spring switch and LEDs

- Put the front cover back on the Receiver, taking care that the red light fits through the hole on the cover, and replace the screw to hold the cover securely in place.

3.6 Mount Motion Detector in Front Counter Area

Typical mounting will be with the enclosed self-adhesive Velcro pads, as follows.

Note that the preset range for the detection area is approximately 18 feet (6 meters).

- Locate the remaining Velcro pads. Remove the paper from one side of the Velcro, and place its sticky surface on the back of the Motion Detector.
- Determine where the Motion Detector should be mounted for the best coverage of the front counter area, and where it will be out of reach and least noticeable.
- Remove the remaining paper from the Velcro pad and press it onto the wall to mount the Motion Detector securely at the selected location.

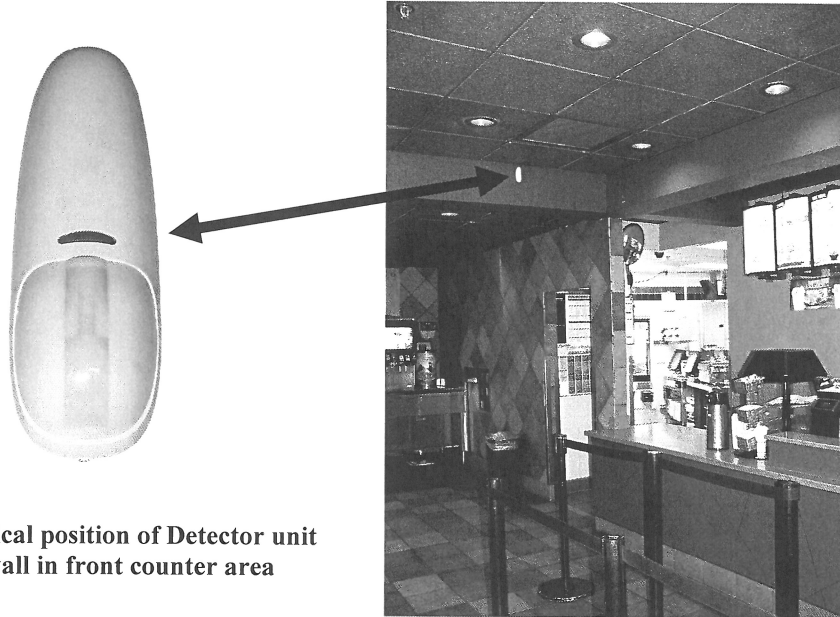


Figure 8. Typical position of Detector unit on wall in front counter area

- After installing the Motion Detector, leave the detection area before testing its operation.

NOTE: If it is necessary to mount the unit at an angle from the wall or ceiling, use the enclosed bracket and hardware, and refer to the instructions enclosed in the Motion Detector package.

3.7 Test

Testing of the Motion Detector should be done within 15 minutes after you placed the jumper in the Receiver in the OPERATE position. During this time, you can move into and out of the detection area without having to wait for the Detector to reset. After the initial 15 minutes, each time you leave the detection area you will have to wait for the MD1 to reset before returning, or you will not be identified as a new detection.

- Wearing a headset that was set up for the Front Counter alert message, go into the front counter detection area and listen for the recorded alert message to be played in the headset and/or ceiling speaker.

4. ROUTINE OPERATION

During normal operation, if there is any activity in the front counter detection area, red lights on both the Detector unit and the Receiver will go on for approximately 5 seconds, and you will hear the recorded message (example: "A customer is at the front counter.") in your headset and/or from the ceiling speaker.

NOTE: 2 minutes after a customer leaves, or after there is no more activity in the detection area, the Motion Detector will be reset to detect any new activity in the area.

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