The LS-30 system includes a full range of accessories, so you can customize many feature of your security system.

All the radio transmitters used in the LS-30 system, except the Remote Controller, have a unique random code that is set by the factory with 16,777,216 combinations in total. Also with specially designed transmission timing control, the LS-30 system can effectively prevent mutual interference from other transmitters in the system. The Remote Controller uses copy-preventing hopping-code technology, changing its radio code every time you press the button. The combinations possible through this hopping-code are up to 7.3 X 10^{19} . To comply with the regulations in most countries, radio power is limited to below 10mW, and effective range is about 100 meters measured at open field. The range may be somewhat less indoors, depending on the layout of building construction and furniture.

You may enroll all the wireless accessories and change their related settings, either through the guidance of the interactive LCD display on the Base Unit explained in the "INSTALLATION" section that follows, or by using a computer with the proprietary software "HyperSecureLink" through an interface adapter, which offers a quicker and simpler way to perform the installation in.

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

The comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

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.

MAGNETIC CONTACT TRANSMITTER

INTRODUCTION

The TX-3DS is a fully supervised magnetic contact transmitter. With a built-in reed switch it can be used to secure doors and windows.



Fig.5

INSTALLATION

A. Enrolling Code

- 1. Loosen the screw of the TX-3DS, then open the upper case and insert two AAA alkaline batteries.
- Important Notice: In order to reset the microprocessor properly before changing the batteries, please press TEST button for 5 seconds to discharge the energy that remains in the capacitors of TX-3DS. Otherwise, it may not restart after changing batteries.
 - 2. Select "Installer Mode" on the Base Unit, and enter Installer Password to gain access authority. Then select \Set Device\Enroll Device\Burglar Sensor\Enter Zone No. to enroll the ID of the TX-3DS by pressing its TEST button, or do an open/close action on the TX-3DS. You may change its various attributes under \Set Device\Change Device Setting\Burglar Sensor Change, to fulfill different requirements.

B. Mounting

- 1. It is recommended to attach the transmitter to the fixed frame, and the magnet to movable part (namely door or window). Refer to Figure 5, and make sure the gap between the magnet and the mark side of the transmitter is kept within 1 cm.
- 2. Use the base of TX-3DS as a template, and mark the points on the mounting surface through two mounting holes. Then drill two holes and attach the transmitter base with the 2 screws supplied.
- 3. Close the upper cover on the transmitter and tighten the screw.
- 4. Mount magnet near transmitter's mark side. Keep the gap between within 1 cm when door/window is closed.
- Note: If the transmitter is mounted on a metal frame, the RF transmission range will shrink due to radio signal attenuation. To avoid this effect, you may connect an external reed sensor to the AUX. Input Terminals of transmitter PC Board (as shown in Fig.3) and place the transmitter away from the metal frame. After connecting the external reed sensor, please use a pair of pliers or cutter to break the plastic of the wiring inlet (refer to Fig. 4), and place the wire across the wiring inlet before closing the cover.
 - For quick mounting, you may use the supplied double-stick tape and Velcro to attach magnet and transmitter.

C. Testing

- 1. Momentarily open the door/window, and verify the transmission LED lights, showing that transmission is in progress.
- If the TX-3DS has been enrolled in the LS-30 Base Unit, the Base Unit will respond accordingly when the door or window is opened. After testing, close the top cover of the transmitter and tighten it with the screw.

SPECIFICATIONS

Supervision: sends heartbeat signal at 60-minute interval. When Tamper or Low Battery condition is detected, it reports automatically.
Power Source: two AAA alkaline batteries.
Current Drain: 5uA @ standby, 20mA @ operation
Estimated Battery Life: 3 years (@ actuated 10 times/day)
Transmitter Size: 20 x 29 x 123.5 mm
Transmitter Weight (w/o battery): about 34g

GLASS BREAK DETECTOR

INTRODUCTION

The Glass Break Detector is composed of radio transmitter TX-3GS and detector

GB. It sends an alarm signal to the Base Unit when the detector is triggered by the action of glass breaking.





INSTALLATION AND OPERATION

1. Loosen the screw of the radio transmitter TX-3GS, and open the cover. Use a pair of pliers or cutter to break the plastic of wiring inlet (Fig. 1). Then connect the detector to the AUX Input Terminals of the transmitter PC Board and insert two AAA alkaline batteries. Refer to Fig. 2.

Important Notice:

In order to reset the microprocessor properly, before replacing the batteries, hold the TEST button down for 5 seconds to discharge the energy that remains in the capacitors of the TX-3GS. Otherwise, it may not restart properly.

2. Select "Installer Mode" on the Base Unit; and enter the Installer Password to gain access authority. Then select \Set Device\Enroll Device\Burglar Sensor\Enter Zone No. to enroll the ID of the TX-3GS by pressing its TEST button. You may change its various attributes under \Set Device\Change Device Setting\Burglar Sensor Change, to fulfill different requirements.

3. Clean and dry the surface of the window, then remove the paper from the double-stick tape on the back of detector, and attach the detector on the window glass. Keep it at least 10cm away from the window frame to get better sensitivity. Refer to Fig. 3.

- 4. Use the base of transmitter as a template, and mark the points on the mounting surface through two mounting holes. Then drill two holes and attach the transmitter is with the 2 screws supplied.
 Note: Avoid mounting the transmitter is ctly on the metal frame, since that would attenuate signal
 - Note: Avoid mounting the transmitter is ctly on the metal frame, since that would attenuate signal transmission and shorten radio range. Keep the transmitter at least 5 cm away from the metal plate. For quick mounting, you may apply supplied Velcro to attach the transmitter to the mounting surface.
- 5. TEST: Press the TEST button of the TX-3GS, or gently tap the detector to check if this activates the Base Unit properly. After testing, put the wire across the wiring inlet properly, then close the top cover of the transmitter and tighten the screw.

SPECIFICATIONS

Supervision: Sends heartbeat signal at 60-minute intervals. When Tamper or

Low -Battery condition is detected, it reports automatically.

Power Source: two AAA alkaline batteries.

Current Drain: 3.5uA @ standby, 20mA @ operation.

Estimated Battery Life: 5 years

Transmitter Size: 20 x 29 x 123.5 mm

Transmitter Weight (w/o battery): about 34g

FLOOD DETECTOR TX-3FS

INTRODUCTION

The Flood Detector is composed of Radio Transmitter TX-3FS and Detector FD.

It sends an alarm signal to the Base Unit when the sensing probes of the detector are immersed in the water.



INSTALLATION AND OPERATION

1. Loosen the screw of the radio transmitter TX-3FS and open the cover. Use a pair of pliers or cutter to break the plastic of the wiring inlet (Fig. 1). Then connect the detector to the AUX Input Terminals of the transmitter PC Board and insert two AAA alkaline batteries.

Important Notice:

In order to reset the microprocessor properly, before changing the batteries, please press the TEST button for 5 seconds to discharge the energy that remains in the capacitors of the TX-3FS. Otherwise, it may not restart properly.

- Select "Installer Mode" on the Base Unit, and enter Installer Password to gain access authority. Then select \Set Device\Enroll Device\Special Sensor\Enter Zone No. to enroll the ID of the TX-3FS by pressing its TEST button. You may change its various attributes under \Set Device\Change Device Setting\Special Sensor Change, to fulfill different requirements.
- 3. Remove the paper from the double-stick tape on the back of detector's holder, then attach the detector to the wall, as close to the floor as possible where flooding may occur.
- 1. Use the base of the transmitter as a template, and mark the points on the mounting surface through the two mounting holes. Then drill two holes and attach the transmitter base with the 2 screws supplied.

Note: - Avoid mounting the transmitter directly on the metal frame, since that would attenuate signal transmission and shorten radio range. Keep the transmitter at least 5 cm away from the metal plate.

- 5. TEST: Dip the FD detector in a cup of water, or press the TEST button on the TX-3FS, to check if this activates the Base Unit. After testing, put the wire across the wiring inlet properly, then close the top cover of the transmitter and tighten the screw.
 - Note: If the detector is tested using water, water may remain on the detector's sensing probes, it must be dried properly. After 1 minute, the detector can be tested with water again.

SPECIFICATIONS

Supervision: sends heartbeat signal at 60-minute interval. When Tamper or Low Battery condition is detected, it reports automatically.

Power Source: two AAA alkaline batteries. Current Drain: 3.5uA @standby, 20mA @activation Estimated Battery Life: 5 years Transmitter Size: 20 x 29 x 123.5 mm Transmitter Weight (w/o battery): about 34g