PREFACE

Thank you for your purchase of the HYT Patrol Recorder (referred to as “Patrol Point” below). We believe this easy-to-use Patrol Point will provide you with reliable, convenient, and efficient patrol management service. To enable you to fully understand the performance, usage and maintenance of this device, please read this manual carefully before use.

IMPORTANT REGULATORY INFORMATION

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 that is received, including any interference that may cause undesired operation.

WARNING:
Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC ID: R74TX-92
IC: 5465A-TX92

IMPORTANT:
The END-USER of this device shall be responsible for submitting updated information in the event the operating location or other information changes after the initial registration. The grantee shall notify the user of this requirement. The information provided by the grantee or user to the commission shall include:

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the name,
address,
telephone number, and
e-mail address of the user,
the address and geographic coordinates(Latitude & Longitude) of the operating location, and the FCC identification number of the device.

The material shall be submitted to the following address:

Experimental Licensing Branch OET,
Federal Communications Commission,
445 12th street, SW., Washington, DC 20554,
ATTN: RFID Registration.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

WARNING: Operation under this rule part is restricted to RFID TAGS that are used with commercial shipping containers.) Operation must be limited to commercial & Industrial areas; ie Ports, rail terminals & warehouses.

WARNING: To prevent interference to Federal Government radar systems, operation under the provisions of this section is not permitted within 40 kilometers (25MILES) of the following locations:

DoD Radar Site	Latitude	Longitude
Beale Air Force Base	39°08'10"N	121°21'04"W
Cape Cod Air Force Station	41°45'07"N	070°32'17"W
Clear Air Force Station	64°55'16"N	143°05'02"W
Cavalier Air Force Station	48°43'12"N	097°54'00"W
Eglin Air Force Base	30°43'12"N	086°12'36"W

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Precautions and System Maintenance

- There are two types of Patrol Points: Patrol Point with Adapter Jack and Patrol Point without Adapter Jack. The former one is used indoors and adopts the power supply with adapter or battery. The latter one is used indoors and outdoors, and can be powered by battery only.
- When used indoors, it is suggested to adopt the Patrol Point with Adapter Jack, to use the power supply with adapter and ensure long-time reliable operation.
- When used outdoors, the Patrol Point without Adapter Jack must be selected, to ensure effective water protection.
- If adopting power supply with battery, the power situation of the battery will be transmitted with Tx code to the radio. Then the power situation of each Patrol Point can be viewed after read or received via the patrol management software. Replace the battery immediately when it runs low.

Product Inspection

Please unpack the package box carefully and check that all items shipped were received; report any missing or damaged items to your dealer.

Supplied Items (for Patrol Point without Adapter Jack)

Item	Qty. (PCS)
Patrol Recorder (Patrol Point)	1
Owner's Manual	1
Accessory Bag (4 0-ring screws/ 4 expansion screws/ 4 rubber stoppers)	1

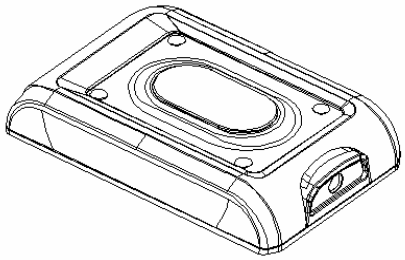
Supplied Items (for Patrol Point with Adapter Jack)

Item	Qty. (PCS)
Patrol Recorder (Patrol Point)	1
Adapter	1
Owner's Manual	1
Accessory Bag (4 0-ring screws/ 4 expansion screws/ 4 rubber stoppers)	1

System Composition

The patrol management system is made up of the following parts:

◆ Patrol Point (transmitter)



1) It is to encode such information as the current Patrol Point ID, time and battery status and then transmit it in the form of radio signals. Precise clock chip is installed in the Patrol Point and supplied with a dedicated battery. The clock can be calibrated via PC programming.

2) Operating Mode:

The Patrol Point can operate in the following modes:

2.1 User Mode: It is the normal operating mode for the Patrol Point. The Patrol Point will operate in this mode after power-on. In this mode, the Patrol Point will send, at intervals, a group of codes including such information as the current Patrol Point ID, time and battery status. The interval can be set in the programming software among 1-10 seconds. 3 seconds is recommended.

2.2 Program & Adjust Mode: The Patrol Point can be programmed wirelessly in this mode, and the transmit power of the Patrol Point can be adjusted, so as to adjust the valid transmit coverage of the Patrol Point.

Power on the Patrol Point and then press the button on the side of the Patrol Point to enter this mode.

Connect the Patrol Radio with PC via the programming cable, to program the patrol piont wirelessly via the programming software of Patrol Point.

In this mode, the Patrol Radio can be used to adjust the transmit power of the Patrol Point. Please refer to the introduction of the Patrol Radio for detailed operations.

2.3 Test Mode: Generally, this mode is not used by the user. It is suggested to disable the mode when programming.

3) Specifications:

3.1 Frequency: 434MHz

3.2 Transmit Coverage: 0.1-100m (adjustable via the Patrol Radio)

3.3 Power Supply: 1.5V AA Alkaline battery×3; for the patrol point with adapter jack, the 220V AC power may be applied by plugging the adapter onto it. When battery with general capacity is used as power supply, and “Compatible TX-90 System” is not checked when programming, the battery is conservatively estimated to last two and a half years, or even last above seven years; if “Compatible TX-90 System” is checked when programming, it is estimated to last about 9 months. The battery life varies with the selected transmission interval, transmit power and

battery capacity and lasts longer if with longer transmit interval, lower transmit power and higher battery capacity. It is suggested to use high capacity alkaline battery or rechargable battery.

3.4 Operating Temperature: -40℃/+70℃

◆ Patrol Radio (receiver)

TK

SK1

SK2

Besides the available functions and features of conventional radio, the Patrol Radio used in the patrol management system is also capable of receiving information transmitted from Patrol Point. When the patrol person with Patrol Radio enters into the coverage of the Patrol Point, the radio will receive and automatically record information such as the current Patrol Point ID, battery strength and time, which can be read from the Patrol Radio via the patrol manangement software or transmitted directly by the Patrol Radio to the patrol manangement software, to be viewed and analyzed. The radio will emit a prompt tone indicating successful recording.

The Patrol Radio can be used to adjust the transmit power of Patrol Point. Operations:

Power on the Patrol Radio while holding down SK1 and SK2 on it for two seconds. Release the keys when the LED flashes orange once, to enter Point Power Adust Mode, so as to adjust valid transmit coverage of Patrol Point.

The keys function as follows in this mode:

SK1: increase valid transmit coverage of Patrol Point.

SK2: decrease valid transmit coverage e of Patrol Point.

PTT: test valid transmit coverage of Patrol Point.

TK: automatically adjust the valid transmit coverage of Patrol Point to where the Patrol Radio locates.

◆Patrol Management Software

This software can be applied to set patrol plan, patrol route; receive patrol information transmited from the Patrol Radio and read patrol information in the Patrol Radio; manage and analyze collected information; supervise patrol person. Please refer to the corresponding help file of the software for detailed operations.

◆Applied Solution:

a. At each place where the patrol person is required to patrol install a Patrol Point, which transmits patrol information regularly.

b. When the patrol person with Patrol Radio passes by the Patrol Point, the Patrol Radio will receive and automatically record the patrol information, and also can send the patrol information to the patrol management softare.

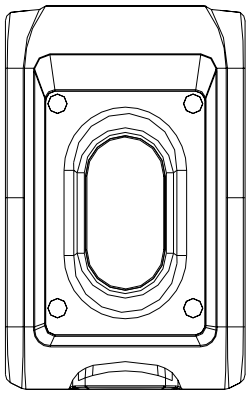
c. The patrol management software is installed on PC, receiving patrol information transmitted by the Patrol Radio or reading the patrol information in the Patrol Radio, to generate database; analyzing all patrol information; checking whether the patrol person with Patrol Radio is on duty according to the patrol plan.

Equipment Installation

1. Place Selection

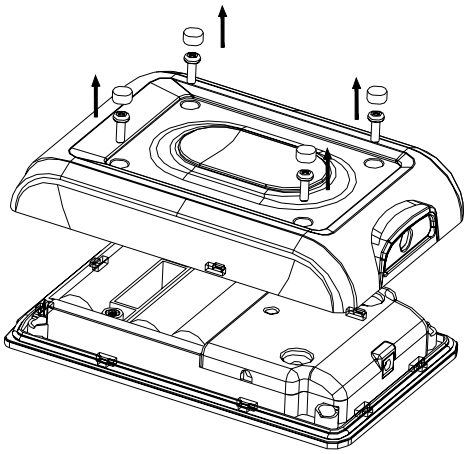
The installation place should be away from metal objects and are out of easy reach. The front of the Patrol Point should face the route to ensure reliable receiving.

The following direction is recommended:

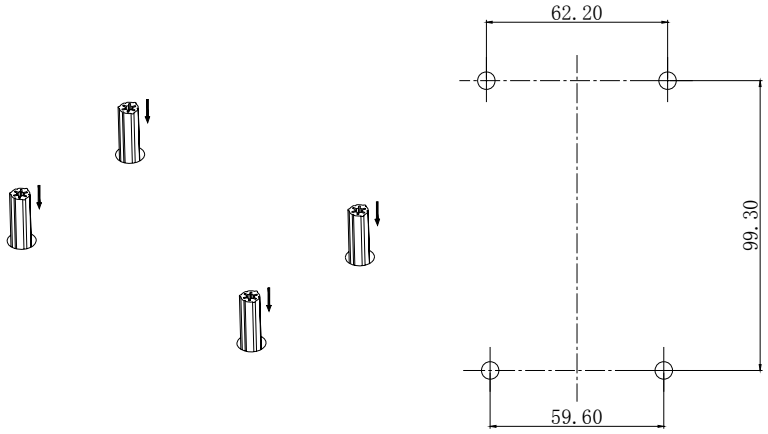


2. Shown as the following figure, remove the four rubber stoppers and the four screws with a screwdriver,

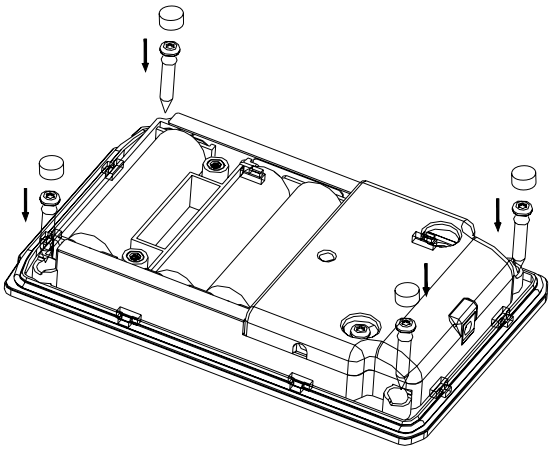
and open the Patrol Point.



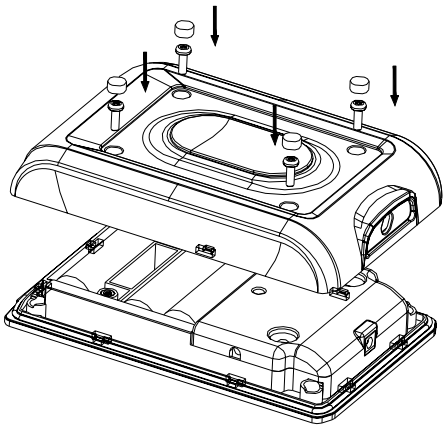
3. Drill four holes in proper places in the wall, the diameter of which should be consistent with that of the green rubber stopper. The place and size of the hole are shown as the following figure. Then lay the four green rubber stoppers, with the face parallel to the wall, shown as the following figure.



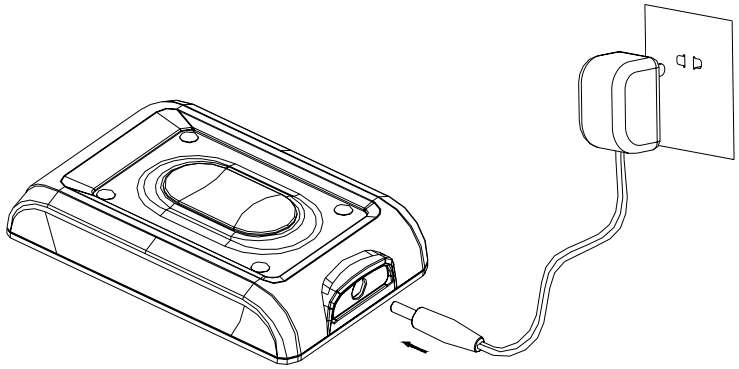
3. Fasten the four 0-ring screws (PTS3.3X20) to fix the chassis onto the wall. Then stuff rubber stopper into the screw holes to ensure waterproof performance, shown as the following figure.



4. Place the front cover on the chassis. Lock the four screws in the indicated directions and then fasten one screw to fix the cover, shown as the following figure.



5. If the power of the Patrol Point is supplied through adapter, insert one end of the adapter into the transmitter, and the other into the AC socket, shown as the following figure.



HYT endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the above specifications and design are subject to change without notice due to continuous development.
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