

● TEST MODE

After all devices have been learnt-in, you can use Test mode to find a suitable location for installing.

- Step 1: Enter Test Mode using a sharp object to slide SW6 up to "ON" position. The LED flashes every 2 seconds.
- Step 2: Hold the learnt-in device to desired location. Press the test/learn button on the device. HR will emit a 2-second beep after receiving sensor signal.
- Step 3: Repeat step 2 to do more test.
- Step 4: Sliding the SW6 to "OFF" position to return to normal mode.

● NORMAL OPERATION

- LED stays on indicating normal operation.
 - When any of alarm signals is received from the learnt-in device, the alarm relay (PIN 4&5) will activate based on SW5 setting (Pulse or Latch), then return to the normal operation mode.
 - When low battery signal is received from the learnt-in device, the fault relay (PIN 6&7) will activate based on SW5 setting (Pulse or Latch), then return to the normal operation mode.
 - The PIR sensor, Smoke Detector, Door Contact and Water Sensor will send supervised-signal to the HR at interval between 20-60 min (random). When any supervised-signal lacks (over 4 hrs), HR will according to the setting (SW2) of the supervision activate fault relay output
 - LED indicator flashes in different methods for different fault condition:
 - Low Battery : 1 quick flash
 - Tamper : 2 quick flashes
 - Supervision : 3 quick flashes
- <NOTE>*
- To display more than 1 status, the LED will display each code at intervals of 1 sec.
 - To clear LED fault display, slide SW6 to "ON", then back to "OFF" position.
 - When HR receives test code from IR/SD/DC/MS, it will emit a beeps and flashes LED once.

● CLEAR DEVICE

This function is used to clear all sensor learnt-in memory.

<NOTE>

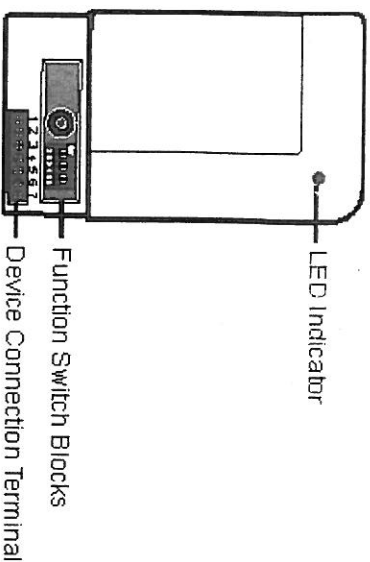
- After this procedure is completed, all devices are required to re-learn before they can operate again.
- Step 1: Remove HR power supply.
- Step 2: Slide all switches up to "ON" position.
- Step 3: Reconnect HR power supply.
- Step 4: LED flashes for 3 secs, then stops.
- Step 5: Slide all switches back down to "OFF" position, the HR returns to Normal Operation Mode with 1 second Beep and LED stays on indicating successful clearance.

Hybrid Receiver (HR-7/HR-8(-F1)/HRA-8)

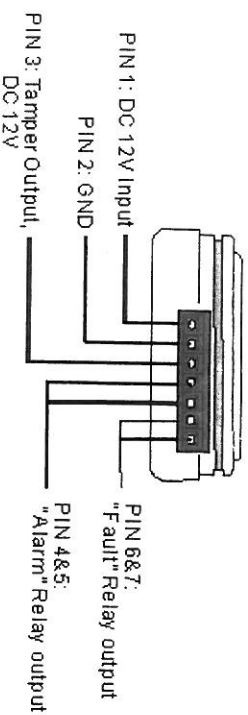
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● IDENTIFYING THE PARTS

Front View



Side View



- Pin 1 & 2 provide constant DC 12V Input
 - Pin 1 is (+) polarity
 - Pin 2 is (-) polarity, Ground
- Pin 3 provides DC 12V tamper output
 - This is for you to connect a wired device, which will activate once HR receives tamper signal from the learnt-in sensors.
- Pin 4 & 5 provides an "alarm" relay output
 - This is for you to connect a wired device, which will activate once HR receives alarm signal from the learnt-in sensors.
- Pin 6 & 7 provides a "fault" relay output
 - This is for you to connect a wired device, which will activate once HR receives fault signal from the learnt-in sensors.

● FUNCTION SWITCH BLOCK

Open the protective cover, notice the switch block set consisting of 6 DIP Switches marked (1-6) left to right. DIP Switch **Top** location indicates the (ON) position. **Bottom** location indicates the (OFF) position.



<NOTE>

● (SW1) Learn-in mode programming options:

- ◆ In learning mode, LED indicator will flash every second.
- ◆ If the RF signal is received, one long beep indicates the device has been previously learned-in.
 - ☞ Please refer to section "Learn-in device" below to find more information.

● (SW2) is used to enable/disable Supervision function:

- ◆ When supervision function enables, any lack (over 4 hrs) of sensor (IR/SD/DC/MS) response will activate Fault relay output from the HR.

SW1	Siren Learning
ON	Learning Mode
OFF	Normal Operation
SW2	Supervision
ON	Enable
OFF	Disable
SW3	Fault Output
ON	Tamper Included
OFF	Tamper excluded
SW4	Relay Operation
ON	Normal Close
OFF	Normal Open
SW5	Relay Operation
ON	Latch
OFF	Pulse
SW6	Test mode / Clear Fault
ON	In Test Mode
OFF	In Normal Mode

● (SW3) is used to included/excluded Tamper as Fault output.

- ◆ When SW3 is put on "ON" position, PIN 3 will export 12V once the tamper of PIR sensor or Door Contact is triggered.
- ◆ After Tamper condition is restored, PIN 3 output returns to 0V.
- ◆ When SW3 is put on "OFF", PIN 3 always stays at 0V whenever IR or DC Tamper is triggered or restored.

● (SW4) is used to program Normal Open/Normal Close Relay mode.

- ◆ This Switch is used to program NO / NC for both Alarm and Fault relays
- ◆ When SW4 is put on "ON" position (NC), both relays deactivate in normal operation mode, they will activate once fault or alarm signal is received accordingly.
- ◆ When SW4 is put on "OFF" position (NO), both relays activate in normal operation mode, they will deactivate once fault or alarm signal is received accordingly.

● (SW5) is used to program output type:

- ◆ LATCH – once relay activates, it will continue to activate until fault / alarm is restored.
- ◆ PULSE – any activation will result in a 3-second pulse.

<NOTE>

When the SW5 is set as Latch, and more than two devices are triggered, PIN 4 & 5 Relay can return to normal operation mode only when all triggered devices are restored. That is, for example:

Door Contact (DC):

Open = Output activate; Close = Output restore

● LEARN-IN DEVICES

● (SW6) used to enter/exit Test mode:

- ◆ In Test mode: LED flashes every 2 seconds.
- ◆ The HR will beep for 2 seconds after receiving sensor signal.
- ◆ Fault detection will cause LED to flash. To stop flash switch SW6 from "On" to "Off".
 - Note: this operation only clears LED, not the fault.

If the alarm or fault signal comes from IR sensor, the relay activates as pulse only.

Smoke Detector (SD):

Trigger = Output activate; Press the Test button when alarm, or when the smoke concentration is lower than the set value for 3 min or more (auto restore) = Output restore

Wrist Transmitter (WTR)/Panic Button (PB):

Button pressed = Output activate; Button pressed and held for 7 sec = Output restore

Water Sensor (WS):

Water detected = Output activate; Dry = Output restore

Remote Control (RC):

Arm/Panic/Home button pressed = Output activate; Disarm button pressed = Output restore

● (SW6) used to enter/exit Test mode:

- Step 1: Supply 12V DC power to PIN 1&2.
 - ◆ LED flashes for 3 secs, and then HR emits a 1-second beep.
 - ◆ LED stays on while the HR is in normal mode.
- Step 2: Enter Learn-in Mode using a sharp object to slide SW1 up to (ON) position.
 - ◆ LED flashes rapidly once per second.
 - ◆ Press test/learn Button on the device.
- Step 3: Press test/learn Button on the device.
 - ◆ HR emits a short beep after sensor is learned-in.
 - ◆ A long beep sounds indicating the device has been previously learned-in.
- Step 4: Repeat from step 3 to learn-in additional devices.

<NOTE>

Available devices for the HR are: PIR sensor (IR), Smoke Detector (SD), Door Contact (DC), Water Sensor (WS) and Panic Button (PB), Wrist Transmitter (WTR), and Remote Control (RC).

The HR can learn up to 10 devices.

- Step 5: Return to Normal Mode using a sharp object to slide SW1 down to the "OFF" position.

- ◆ LED stays on after return to normal operation mode.

<NOTE>

If 10 total devices have been added, the HR will continue beeping a warning sound until the SW1 is switched to "OFF". Only one device can be learned-in at a time (this prevents faulty signaling).