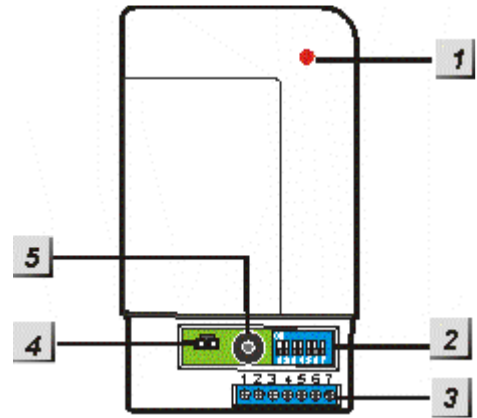# Universal Receiver (UR-8/URA-8)

The Universal Receiver connects any kind of alarm device e.g. siren or strobe light to a Control Panel.

When an alarm is triggered, the Control Panel signals the Universal Receiver which then will activate the alarm device. The Universal Receiver activation can be stopped via the Control Panel.
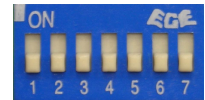
1. LED

2. Function Switch Block

3. Device Connection Terminal

4. Output Selection Jumper

5. Buzzer

● Function Switch Block

Carefully slide down the protective cover exposing the switch block set that consists of 7 switches marked (1 ~ 7) left to right. A switch in the up position indicates the (**ON**) mode. Likewise, a switch in the down position indicates the (**OFF**) mode. Switch function table is below:

SW1		Siren Learning
ON		Learning Mode
OFF		Normal Operation
SW2		Control Unit type and Activation Mode
ON		For CTC-909, CTC-918, CTC-1132 and CTC-1142 Control Panel.
OFF		For Control Panels except CTC-909, CTC-918, CTC-1132 and CTC-1142
SW3	SW4	Relay Operation Mode
ON	ON	Latch until reset
OFF	ON	Reserved
ON	OFF	Pulse on for 3 min
OFF	OFF	System Arm/Disarm Status only, irrespective of SW5 and SW6 position
SW5	SW6	Alarm type
ON	ON	Burglar Alarm
OFF	ON	Fire Alarm
ON	OFF	Water Alarm
OFF	OFF	All Alarms
SW7		Memory Reset
ON		Memory Clear
OFF		Normal

● SW3 & SW4 are used to program Universal Receiver operation modes:

   i)   Latch – once the relay has been activated, it will remain activated until disarmed.

   ii) Pulse – activated for 3 minutes each time.

   <u>*<NOTE>:*</u>

   ☞ When set as Pulse (SW3 is ON, and SW4 is OFF), when using **DTMF/SMS Remote Control** to activate the device, **Latch** will override the **Pulse** setting (i.e. the device will not automatically deactivate after 3 minutes).

iii) System Status On:
1. Away / Home Mode – Relay Activation
2. Disarmed Mode – Relay Deactivation

● **Output Selection jumper(JP2)**

Dry contact relay or DC 9V output selection

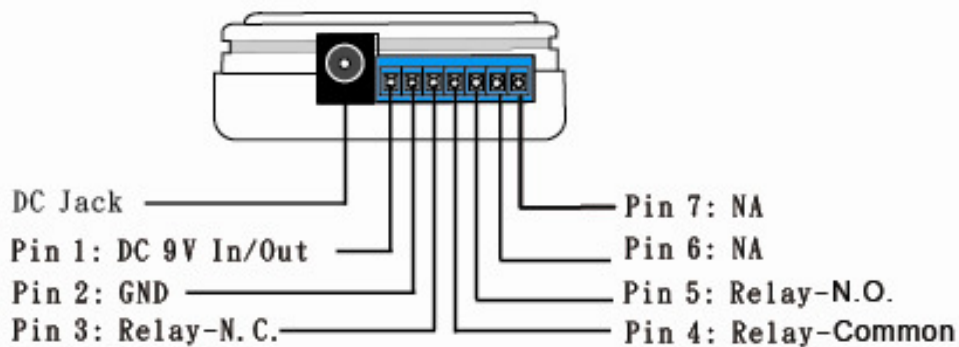Jumper on, with link inserted between two pins – DC 9V output is selected. (Factory Default)

Jumper off, with link removed or parked on one pin – Dry Contact relay output is selected.

● **POWER SUPPLY:**

- ● The Universal Receiver can be powered by 9V DC Power Adaptor or connecting an external DC 9V directly to Pin 1 & Pin 2 of the Device connection terminal.
- ● A factory 9V DC 300 mA adaptor is provided. However, a device requiring a larger current should be used with an appropriate power adaptor accordingly.

● **DEVICE CONNECTION TERMINAL:**

Side View

DC Jack
Pin 1: DC 9V In/Out
Pin 2: GND
Pin 3: Relay-N.C.

Pin 7: NA
Pin 6: NA
Pin 5: Relay-N.O.
Pin 4: Relay-Common

- ● Pin 1 & 2 provide constant DC 9V Output or can be used as DC 9V Input
  - ◆ Pin 1 is (+) polarity
  - ◆ Pin 2 is (–) polarity (Ground)
  - ◆ If an adaptor is used, Pin 1 & 2 Provide DC 9V output. If the adaptor is not used, an external DC 9V can be connected directly to Pin 1 & Pin 2 to power the Universal Receiver.

- ● Pin 3, 4 & 5 provide a Dry Contact Relay output or DC 9V output – selected by the (Output Selection Jumper)

- ● Relay Output (the "output selection jumper" is open)
  - ● Pin 3: Normally Close (NC)
  - ● Pin 4: Common (C)
  - ● Pin 5: Normally Open (NO)

- ● DC 9V output (the "output selection jumper" is on)

  Pin 4: Common, a fixed 9V

  - ● Relay Activated:
  - ● DC 9V will switch to Pin 5; Pin 2 & 5 provides DC 9V output to drive the alarm device connected to it.
  - ● Relay Deactivated:
  - ● DC 9V will switch to Pin 3; Pin 2 & 3 provides DC 9V output to drive the alarm device connected to it.

- Output Capacity:
  - For relay output, the contact capacity is 1A 30VDC / 1A 120VAC.
  - For DC 9V output, the maximum current has the same rating as the Power Adapter (=300mA).

● LEARN-IN THE UNIVERSAL RECEIVER:

Step 1: Supply power by adaptor or external DC 9V
- When power is ON, the LED will flash 3 times and 3 beeps will sound, and then the LED off before Universal Receiver is learned-in.

Step 2: Enter Learn Mode using a sharp object to slide SW1 up to (**ON**) position.
- LED flashes rapidly once per second.

A: For working with Control Panels except CTC-909/CTC-918/CTC-1132/CTC-1142:

Step 3A: Program the Control Panel by selecting (**Device +/-**) menu, then (**Program Siren**) menu.

Step 4A: Make sure the SW2 of the Universal Receiver is in Down (**OFF**) position.

Step 5A: Select (**Learn Siren**) in the Control Panel and press (**OK**)

B: For working with CTC-909/CTC-918/CTC-1132/CTC-1142,

Step 3B: Program the Control Panel by selecting (**Device +/-**) menu, then (**Program Siren**) menu.

Step 4B: Slide SW2 of the Universal Receiver to Up (**ON**) position.

Step 5B: Select (**Receiver 1**) or (**Receiver 2**) in the Control Panel and press (**OK**).

Step 6: The Control Panel will sound a long beep and the LED lights steadily for 3 seconds indicating Learning is now complete.

Step 7: Slide SW1 back down to (**OFF**) position to exit learn mode and enter Normal Mode.
- LED will flash every one second representing normal operation.

<NOTE>:

☞ After learning process completion, SW2 adjustment will not be available.

☞ Any mode change requires SW2 reset.

☞ Please refer to the following tables to set the SW3 & SW4

Control Panels except CTC-909/CTC-918/ CTC-1132/CTC-1142		Panel Status			Alarm Status	
SW3	SW4	Learn	Arm	Home	Disarm	Alarm	Disarm
ON	ON	Learn Siren	None	None	None	Activate	Deactivate
ON	OFF	Learn Siren	None	None	None	Activate	Deactivate
OFF	ON	Learn Siren	None	None	None	None	None
OFF	OFF	Learn Siren	Activate	Activate	Deactivate	None	None

CTC-909/ 918/ 1132/ 1142		Panel Status			Alarm Status	
SW3	SW4	Learn	Arm	Home	Disarm	Alarm	Disarm
ON	ON	Rcv1\Rcv2	None	None	None	Activate	Deactivate
ON	OFF	Rcv1\Rcv2	None	None	None	Activate	Deactivate
OFF	ON	Rcv1\Rcv2	None	None	None	None	None
OFF	OFF	Rcv1\Rcv2	Activate	Activate	Deactivate	None	None

CTC-909/ 918/ 1132/ 1142			Remote Control SMS				Remote Control DTMF			
			Panel		UR1\UR2		Panel		UR1\UR2	
SW3	SW4	Learn	Arm	Disarm	Activate	Deactivate	Arm	Disarm	Activate	Deactivate
ON	ON	Rcv1\Rcv2	None	None	Activate	Deactivate	None	None	Activate	Deactivate
ON	OFF	Rcv1\Rcv2	None	None	Activate	Deactivate	None	None	Activate	Deactivate
OFF	ON	Rcv1\Rcv2	None	None	None	None	None	None	None	None
OFF	OFF	Rcv1\Rcv2	Activate	Deactivate	None	None	Activate	Deactivate	None	None

● INSTALLATION:

Step 1: Locate a suitable spot for Universal Receiver mounting.
Step 2: Use the mounting bracket as a template to mark off the hole positions.
Step 3: Drill 2 holes and insert wall plugs into holes.
Step 4: Use screws to tightly secure mounting bracket.
Step 5: Hang the Universal Receiver on the bracket.
Step 6: Connect the alarm device to the Universal Receiver then install the alarm device location.
Step 7: Slide SW3 and SW4 into the preferred Relay Operation Mode setting.
Step 8: Slide SW5 and SW6 into the preferred Alarm type setting.
Step 9: Plug the power adaptor into wall outlet and cord into DC jack,
- When power is ON, the LED will flash 3 times and 3 beeps will sound.
- The LED will flash slowly indicating the power adaptor is properly connected and the Universal Receiver is learned-in already. The LED off indicates Universal Receiver is not learned-in.
Step 10: The Universal Receiver is now ready for operation.

● NORMAL OPERATION:

- The LED flashes every one second indicating normal operation.
- When the Control Panel receives an Alarm Code the Relay is active for 3 minutes (if programmed) or until (**Disarm**) code is received.
  - LED stops flashing and lights steadily for as long as the relay is active.
- Universal Receiver automatically deactivates the relay output when (**Disarm**) code is received from Control Panel and the Universal Receiver returns to Normal Operation Mode with flashing LED.

● RESET THE UNIVERSAL RECEIVER:

Resetting Universal Receiver should be done whenever Operation Mode needs changing or the Universal Receiver malfunctions.
Step 1: Slide SW7 up to (**ON**) position.
Step 2: Remove power by unplugging the AC adaptor.
Step 3: Replace the AC adaptor and supply power back to the Universal Receiver.
Step 4: Slide SW7 back down to (**OFF**) position. LED will flash 3 times and 3 beeps will sound and the Universal Receiver returns to Normal Operation Mode with LED off indicating a successful reset.

<NOTE>:

☞ After reset, the Universal Receiver requires to be again learned-in before normal operation.