TRX OUTPUT

Operational Features of the TRX Output

The TRX OUTPUT comes with a 4 way DIP Switch that allows you to select which output, or outputs, the unit will follow.

The 4 way DIP switch on the TRX Output allows output selection as follows;

DIP SWITCH NUMBER				FUNCTION SELECTED
1	2	3	4	
OFF	OFF	OFF	OFF	OUT A Follows Output # 1
ON	OFF	OFF	OFF	OUT A Follows Output # 2
OFF	ON	OFF	OFF	OUT A Follows Output # 3
ON	ON	OFF	OFF	OUT A Follows Output # 4
OFF	OFF	ON	OFF	OUT A Follows Output # 5
ON	OFF	ON	OFF	OUT A Follows Output # 6
OFF	ON	ON	OFF	OUT A Follows Output # 7
ON	ON	ON	OFF	OUT A Follows Output # 8
OFF	OFF	OFF	ON	Follow Output's # 1 & 2 , 1 = OUT A, 2 = OUT B
ON	OFF	OFF	ON	Follow Output's # 3 & 4 , 3 = OUT A, 4 = OUT B
OFF	ON	OFF	ON	Follow Output's # 5 & 6 , 5 = OUT A, 6 = OUT B
ON	ON	OFF	ON	Follow Output's # 7 & 8 , 7 = OUT A, 8 = OUT B

The DIP switches are only checked at power-up so if the settings need to be changed the unit must be powered down and then at power-up the new DIP switch settings will start working.

At power-up the unit puts a dynamic load on the battery for 5 seconds and then checks the battery voltage. If after 5 seconds the battery voltage is still below the upper threshold the load will continue for another 5 seconds. If after 15 seconds the battery voltage is still below the upper threshold the unit will start working and send a battery low to the panel (if it had been previously loaded as a radio zone). While the battery test is happening the unit will not respond to the main transceiver so there may be a maximum of 15 seconds after power-up before the unit will respond to outputs.

There are two outputs on the board labelled "OUT A" and "OUT B". They are both fully isolated electronic switches rated at 100mA. There is an LED associated with each output that is on when the output is on. This is a useful diagnostic tool during the testing phase. The outputs can be used to trigger motorised garage doors, driveway gate controllers or lighting systems in response to a trigger from the panel.

This device can be run from an external 6V power supply with the battery now serving as a standby back-up battery as opposed to a primary battery. If a battery is fitted with an external power supply the battery is still checked every 10 minutes and the unit can report a battery low when the voltage drops below a preset threshold. If no battery is fitted the unit will not send a battery low, ie it requires a battery to be fitted before it can send a battery low. The correct procedure for replacing a battery on a unit that is powered by an external 6V supply is to remove both the battery and external supply, fit the new battery then after about 15 seconds reconnect the external power again.

Installing the TRX Output

- 1) Fit the 3.6V C cell battery to the TRX OUTPUT.
- 2) Place the panel TRX connected to the ELITE S into learn mode (press and hold the learn button for 2 seconds until the LED begins to flash).
- 3) Place the TRX OUTPUT into learn mode by holding the learn button down for 2 seconds until the LED begins to flash (the learn button is the red pushbutton on the PCB).
- 4) This process will learn the TRX OUTPUT to the panel TRX. Once the TRX OUTPUT has been learnt to the panel TRX the TRX OUTPUT LED will stop flashing.
- 5) The TRX OUTPUT will now respond to the programmed outputs as set by the 4 way DIP switch but if the TRX OUTPUT "battery low" signals need to be indicated back at the panel the unit will need to be learnt as a zone into the panel. Select a spare zone on the panel and ensure the zone is set to a wireless input (eg P122E#E, where # equals the selected zone number, then ensure options 1 & 5 are on. Option 1 enables the zone and option 5 sets it as a wireless zone). Also the zone wireless type at P127E should be set to a 3 or 4. If set to 3 the protocol is Freewave with the supervise signal being active. If set to 4 it is also Freewave protocol but the supervise signal is ignored.
- 6) When the zone has been enabled and set as a wireless zone now set the panel into learn mode by entering P164E#E (where # equals the selected zone number). The LED farthest away from the DIP switch on the panel TRX will begin flashing when the zone learn mode has started.
- 7) Now operate the tamper signal on the TRX OUTPUT by removing the shorting link across the tamper pins on the PCB. When a valid signal has been received by the panel the zone learn mode will automatically stop. Once learnt the tamper shorting link can be fitted again.
- 8) The TRX OUTPUT is now locked to the panel TRX and is learnt as a wireless zone at the panel.
- 9) Test the connection between the TRX OUTPUT and the panel by triggering the tamper signal (remove the tamper link briefly then fit it again to clear the tamper). The panel must be out of program mode for the tamper alarm to occur.