TX12E   1,2 and 4 Channel AM Remote Control Keyfob Transmitter

The TX12E wireless RF keyfob transmitter is available in 1(-1C), 2 (-2C) and 4 (-4C) button versions. Operating on 433.92MHz, the TX12E is compatible with the SRX series (AM version) wireless remote control receivers to provide an RF remote control link with up to 350ft open field range. The TX12E are SAW controlled resulting in high frequency stability which is an important characteristic not found in typical low cost remote control transmitters. The communication protocol is based on the Holtek HT12E encoder making it also compatible with custom receiver designs or third party receivers employing the HT12D or HT12F decoders.

The TX12E contains a user configurable 8 bit address permitting 256 possible unique address configurations for pairing with the SRX series receivers. This enables multiple remote controls to operate within a common local environment without the risk of false triggering.

Features

- **433.92MHz OOK modulation**
- **SAW stability**
- **1,2 and 4 Button Versions**
- **Ergonomic Enclosure**
- **Small Size: 75 x 43.5 x 18.5mm**
- **12V type 23A battery Operation**
- **Zero standby current consumption**
- **LED Status Indication**
- **Recessed switches**
- **Compatible with SRX series receivers**
- **Compatible with HAT and HT12 series decoders**
- **Compatible with ABACOM Technologies AM   receiver modules on 433.92MHz**
- **Integral tuned loop antenna**

Typical Applications

- **Wireless access control**
- **Security Systems**
- **Wireless Motor control**
- **Wireless Systems control**
- **Wireless Pump control**
- **Robotics**

Configuring the TX12E

Address Configuration:

The first 8 positions of the 10 position address DIP switch must be configured to match the settings of the 8 position DIP switch of the receiver (or vice versa). The default factory settings are switches 2 ON and 4 ON, with the remaining switches set to OFF position. Any switch combination setting may be chosen. We recommend, however, that all switches set to OFF or all switches set to ON be avoided. Although these are indeed valid settings, they offer reduced immunity to interfering signals.

The last 2 DIP switch settings, 9 and 10, of the 10 position DIP switch, are reserved for special applications and must be left in the OFF position. The 4 position DIP switch is also reserved for special purpose applications and should be left in the default factory setting of 1 and 4 OFF and 2 and 3 ON. Changing these switches will affect the coding relating to each of the TX12E pushbutton switches.
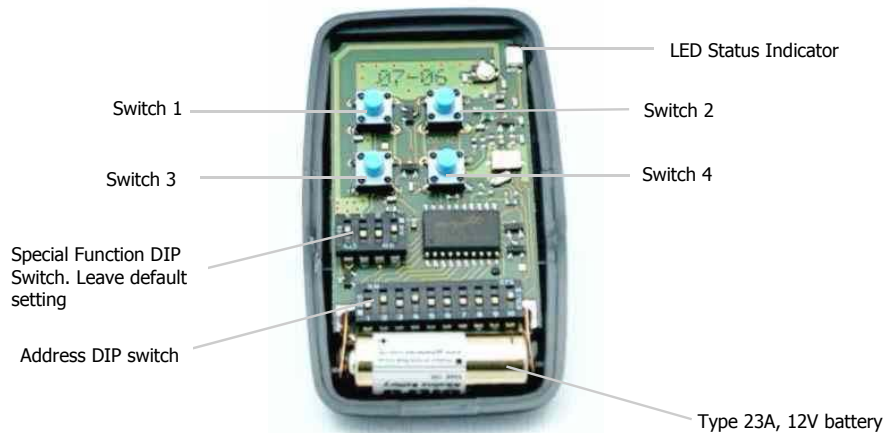
Pushbutton Switch Coding:

Each pushbutton switch has an internal unique associated code, as set out in the table on the following page. This code is fixed, and is used to configure its corresponding operating channel on the SRX series receiver via the 4 position DIP channel switches of the receiver. The -SRX series receiver is supplied with the default settings so that each TX12E pushbutton will operate a single channel.

The user may reconfigure the 4 position DIP switch on the receiver if different functionality is required. For example, if the user requirement is for TX12E pushbutton 1 to operate 2 receiver channels simultaneously, then those two receiver channel's 4 position DIP switches would both be configured with the same code associated with TX12E pushbutton switch 1.

Receiver Coding

By way of example, and with reference to the switch coding table below, keying pushbutton switch 1 on the TX12E will activate the receiver channel whose 4 position DIP channel switch is coded as:

DIP Switch #1……..OFF
DIP Switch #2……..ON
DIP Switch #3……..OFF
DIP Switch #4……..OFF

Any of the receiver channels configured with the above example settings will respond to TX12E pushbutton 1.

The receiver supplied with the TX12E will be coded according to the table below and it therefore may be unnecessary for the user to make any changes to theses settings, unless different functionality is required.

TX12E Transmitter				-SRX series receiver			
Pushbutton Switch 1	Pushbutton Switch 2	Pushbutton Switch 3	Pushbutton Switch 4	DIP Switch 1	DIP Switch 2	DIP Switch 3	DIP Switch 4
ON				OFF	ON	OFF	OFF
	ON			OFF	OFF	OFF	OFF
		ON		OFF	ON	ON	OFF
			ON	OFF	OFF	ON	OFF