AM RADIO TRANSMITTER KEYS

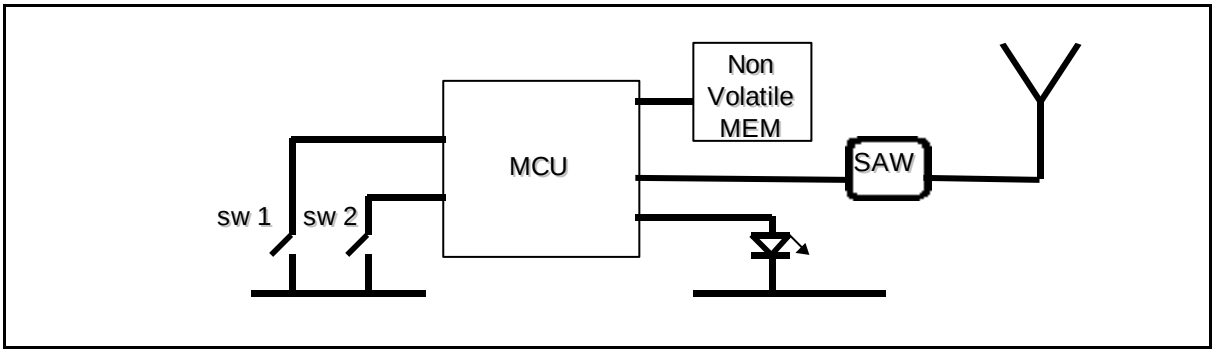
- ONE SW SINGLE CHANNEL. OR TWO SW THREE CHANNEL OPTIONS.
- AVAILABLE AS STANDARD OR *"SCAN PROOF"* CODE HOPPING DATA TRANSMISSION.
- STANDARD UNIT TRANSMITS >16 MILLION COMBINATION CODES.
- OUTPUT POWER = 0.25mW
- RANGE UP TO 70 METRES.
- WATERPROOF CASE.
- CUSTOM MICROCONTROLLER INCORPORATED.
- LOW BATTERY WARNING INDICATION (LED FLASHES).
- DTI APPROVED FOR USE IN THE U.K.
- COMPLIANT TO ETSI300-683
- DIRECTLY COMPATIBLE WITH R.F. SOLUTIONS RECEIVER / DECODER BOARDS.

(Picture is indication only. Actual product may differ)

DESCRIPTION

The R.F. Solutions Radio Transmitter keyfobs are available as either one switch single channel, or two switch three channel units (the third channel is obtained by pressing both switches together). Each unit contains a custom programmed microcontroller, On depression of a key switch, the unit transmits a unique coded data stream protocol. This "signature code" is pre-configured in the firmware.
An acoustic saw resonator is used to ensure frequency locking. An LED is used to indicate code transmission and battery status. Battery supply is from a single 12 Volt D.C. Type GP27.
The case has a Mylar Sticker overlay which may be customised to incorporate any mark or company logo. Please contact our sales Dept for further details.
The case may be fully waterproofed by the addition of a 0.8mm rubber gasket (please contact sales dept for details).
The transmitters are available as either standard data transmission format, or, as "Code Hopping"; Once transmitted, the same data is not repeated. (The data stream appears as a random number).
The transmitters may be operated in conjunction with R.F. Solutions Decoders, please see RF Solutions AM Receiver /Decoder data sheet. Each unit is supplied complete, ready to operate.
Transmitters may also be supplied as a custom solution unique to customer specific requirements. Please contact R.F. Solutions for further information.

BLOCK DIAGRAM



LICENCE EXEMPTION

This range of Radio transmitters conform to ETSI300-683 and are approved by the Department of Trade & Industry (D.T.I.), and therefore the user requires no radio operating licence in the EEC. Please note that the user should check which frequency (418 or 433) is appropriate for the application within the country of operation.

STANDARD DATA TRANSMISSION KEYFOBS

Single switch, single channel and Two switch , three channel transmitter keys which transmit a standard digital code. Each transmitter key is supplied, ready programmed with a unique code from one of >16 million combinations. Available as 418MHz, or 433MHz.

CODE HOPPING DATA TRANSMISSION KEYFOBS

Single switch, single channel and Two switch , three channel transmitter keys which transmit a “grab & scan proof “ digital code. The transmitter key generates a unique transmission code (from one of >16 million combinations) every time the switch is operated. In this system the Rx / Decoder automatically “hops” in sync with the transmitter. The code generated appears as a random number transmission, which will not repeat itself even if the battery is changed.

A data sheet on the data transmission protocol is available from our sales department

LOW BATTERY WARNING

When the battery runs low the LED will start to flash during transmission.

TECHNICAL DATA

PHYSICAL DIMENSIONS	VALUE	DIMENSION
Length (max)	62	mm
Width (max)	35	mm
Height (max)	15	mm

ELECTRICAL CHARACTERISTICS	MIN	TYPICAL	MAX	DIMENSION
Supply Voltage		12		V
Current Consumption (Transmitting)		8.5		mA
Output Power		0.25		mW
Frequency	417.9170	418.000	418.0830	MHz
Frequency	432.90	433.920	434.100	MHz
Operating Temperature	0		60	^{o}Celcius
Transmission Range		45		Metres

PART NUMBER	DESCRIPTION
AM-TX1-CASE	Plastic Case only, with Batt contacts, Mylar overlay 1 Switch
AM-TX2-CASE	Plastic Case only, with Batt contacts, Mylar overlay 2 Switch
AM-TS1-XXX	Standard Transmission 1 Switch
AM-TS2-XXX	Standard Transmission 2 Switch
AM-TH1-XXX	Hopping Transmission 1 Switch
AM-TH2-XXX	Hopping Transmission 2 Switch
XXX = 418 or 433MHz	

Should you require further assistance, please call;

R. F. Solutions,
Unit 21, Cliffe Industrial Estate,
South Street, Lewes,
E Sussex, BN8 6JL. England.
Tel +44 (0)1273 898 000. Fax +44 (0)1273 480 661.
Email: sales@rfsolutions.co.uk
http://www.rfsolutions.co.uk

R F Solutions is a member of the Low Power Radio Association.