

GLT2712 and GLT2712E 8 Channel, 12 VOLT 1 Watt 27MHz TRANSMITTER

The GLT2712(E) is designed to give a controlled range of up to 3 kilometres. The controlled operation can be either electronic or electrical operated device when used with the GLR-.... series of receivers.

The transmitter uses a specially programmed MICRO-CONTROLLER, which ensures the highest reliability, low current consumption on sleep mode (10uA) and greater flexibility. The GLT2712 is the transmitter without a case, while the GLT2712E transmitter is enclosed in an alloy metal case, which has an external supply connection, and a SO239 antenna socket provided.

GLT2712E



GLT2712



The transmitter modes are user selectable by simply setting the 2-Way dip-switch on the transmitter board. Below is a summary of the modes.

MODE 1 : Dip Sw. 1 and 2 OFF : Off Delay 2 to 62 seconds.

Transmitter will transmit a 1.5 second transmission burst and then stop for the "off delay" time selected. The "off delay" time is user selectable between 2 to 62 seconds by adjusting the trimpot of the transmitter board. If another channel is activated during the "off delay" period the new channel will be transmitted immediately. When the "off delay" time lapses, transmitter will transmit another burst. The transmitter will cycle (transmission and off delay) indefinitely, if at least one channel is activated and the supply is connected.

MODE 2 : Dip Sw. 1 ON and 2 OFF : Off Delay 1 to 10 minutes.

Same as mode 1 except the "off delay" is user selectable between 1 to 10 minutes.

MODE 3 : Dip Sw. 1 OFF and 2 ON : Continues transmission.

Transmitter will transmit continuously, if at least one channel is activated and supply is connected. A transmission limit of five minutes is used to comply with local radio regulations.

To activate a receiver longer than 5 minutes, use a delay off feature in the receiver (GLR2701) and transmitter. The delay off feature in the receiver needs to be set more than the transmitter. This ensures that the transmitter keeps resetting the off delay in the receiver.

MODE 4 : Dip Sw. 1 and 2 ON : 1.5 to 10 seconds one burst transmission.

Transmitter will transmit one burst and then go to standby or sleep mode. Adjusting the trimpot will vary the burst length. When another channel is activated and supply is connected, transmitter will emit one new burst.

Sleep mode (10 uA) is activated when all 8-channels are OFF, this applies to all four modes.

TECHNICAL DATA ON GLT2712 and GLT2712E

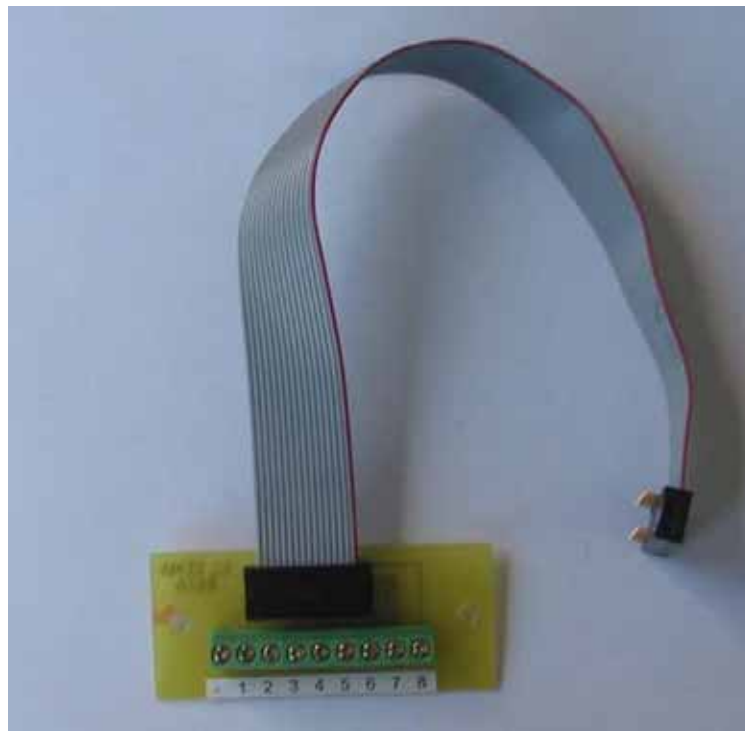
SUPPLY :	11 to 13.6 VDC (for constant RF-Output), screw type terminal. Absolute maximum 14 VDC.
CURRENT CONSUMPTION :	Nominal 300mA at 12VDC supply (Transmitting) Nominal 12mA on standby Less than 10uA on Sleep Mode (Only when no channel are activate otherwise its on standby).
OPERATING FREQUENCY :	27.195MHz (Other frequencies available on 27.045, 27.145 and 27.455 MHz. The 27.455 frequency is not available for Australia).
CARRIER FREQUENCY TOLERANCE :	Crystal controlled, 30 parts per million (0 to 50° C).
R.F. OUTPUT POWER :	1 Watt, into 50 ohms SO239 socket @ 13.6VDC.
ANTENNA :	SO239 socket is provided. Optimum performance use Elsema ANT27L antenna.
TYPE OF EMISSION:	Narrow-band-width Frequency Modulation (5K00F1D)
FREQUENCY DEVIATION LIMITING:	1600 - 1900 Hz non-return to zero.
MODULATION FREQUENCY :	1.8 kHz (0.56 ms/bit) (15% tolerance)
SPURIOUS TRANSMISSION :	-13dBm
NECESSARY BAND WIDTH :	+ - 2.5 kHz
DIGITAL CODING SYSTEM :	Microcontroller based 96-bit word
CODE COMBINATION :	4,294,967,296
DIGITAL CHANNELS :	On board sixteen-pin IC socket. Channels are addressed by joining opposite side of the IC socket pins. Elsema has available a 16 pin 35 cm ribbon cable plug (16W-1)
DIMENSION :	140 X 60 X 34 mm
MOUNTING HOLE SIZE :	4.76 mm or 3/16"
MOUNTING HOLE SPACING:	Length 125 mm (4.92") Width 45 mm (1.77")
<u>WEIGHT</u>	
GLT2712	60 grams
GLT2712E	250 grams
USEABLE OPERATING RANGE :	up to 3000 metres, depending on installation and type of antenna used. Recommended Antenna is Elsema ANT27M or ANT27L.
COMPATIBLE RECEIVERS :	All Elsema type GLR-.... series.

GLT2712E Option : Eight External inputs

Using the 16-Way ribbon cable (Part # 16W-1) and the 16 pin IC socket to terminal (Part # 8WT) gives the user eight external inputs.

To install follow these steps:

1. Remove the aluminum lid from the GLT2712E.
2. Remove the wire link or 8-way code switch from the 16-pin IC socket.
3. Plug one end of the ribbon cable into the 16-pin IC socket.
4. Plug the other end of the ribbon cable into the 8WT
5. File a narrow slot into the aluminum case that has the width of the ribbon cable.
6. Place the ribbon cable into the slot.
7. Screw the lid back onto the case.



To use several channels simultaneously, you need to program the transmitter and receiver using the channelised method.