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TEL1-40kTTL

Telemetry transmission of TTL pulses from 4Hz to 40kHz Range 300-500m

User Manual



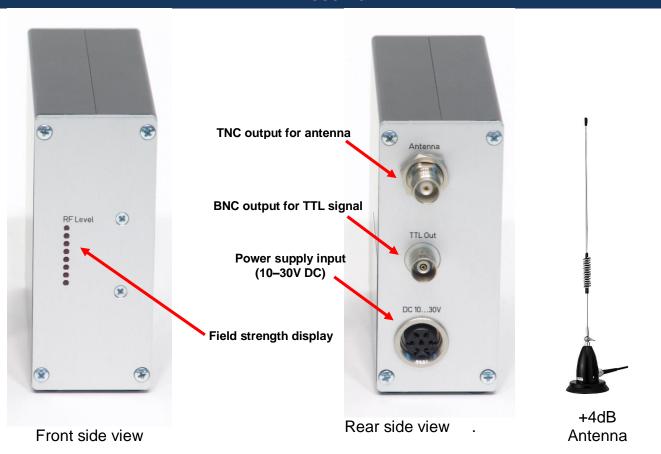


1x TEL1-TTL-40k-TX (Transmitter)1x TEL1-TTL-40k-RX (Reiceiver) 1x 4dB transmitting antenna, 1x 4dB receiving antenna, 2x DC power cable, 1x AC/DC converter (for receiver)

Transmitter



Receiver



Specifications

Transmitter

10 - 30V DC Power supply voltage:

Power consumption: 0.5W Input signal level: TTL Connector type: TNC Weight: 435a

105 x 105 x 45 Dimensions:

(without connectors)

Receiver

10 - 30V DC Power supply voltage: Power consumption: 1.35W Output signal level: TTL (0V, 5V) Output impedance: $2k\Omega$

Connector type: TNC Weight: 490a

Dimensions: 105 x 105 x 45 (without connectors)

Transmitter antenna

Cable: RG 058-PE (length 4m) Gain: +4dB (rel. to $\lambda/4$ antenna)

Frequency range: 410-470MHz Mounting: Magnetic socket

Length: 400mm Connector type: **TNC**

Weight: 600g (without cable)

Receiver antenna

Cable: RG 058-PE (length 4m) Gain: +4dB (rel. to $\lambda/2$ antenna)

Frequency range: 410-470MHz Mounting: Magnetic socket

Length: 400mm Connector type: **TNC**

Weight: 600g (without cable)

Transmission

Transmission range: up to 500m

(line-of-sight connection)

Transmission power: 10mW

Transmission delay: 35us (constant)

Carrier frequencies: 433.3, 433.7, 434.1 or

> 434.5 (simultaneous operation of up to 4 systems possible)

Accuracy for interference-free connection:

Environmental

Operating temperature: -10 - 70°C Storage temperature: -20 - 70°C

20 - 80% (non-condensing) Humidity:

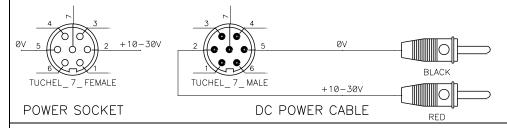
Vibration:

(Mil Standard 810C, Curve C) Shock:

100g (in any direction)

DC power cable

Pin assignment:



Note

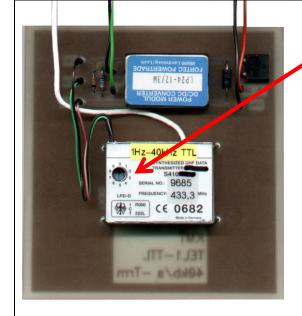
Avoid any contact of the magnetic socket of the antennas with the transmitter or receiver, because the ferrite cores of the internal band filters will premagnetized and change their center frequency. For transportation put every time an iron plate on the magnetic socket area to absorb the magnetic field strength.

Change the Carrier frequency of TEL1 TTL 40k

TEL1-TTL-40k receiver



TEL1-TTL-40k transmitter



- 1. Switch off the power of transmitter and receiver.
- 2. Open the housing
- 3. Select with a screw driver on both systems the switch. Each must have the same position!!
- 4. Close the housing
- 5. Than power on the system

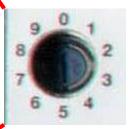
Version: 4--HF channels (Standard)

Pos. 0 = 433.3 MHz

Pos. 1 = 433.7 MHz

Pos. 2 = 434.1 MHz

Pos. 3 = 434.5 MHz



Version: 8-HF channels

Pos. 0 = 432,5 MHz

Pos. 1 = 432.9 MHz

Pos. 2 = 433.3 MHz

Pos. 3 = 433.7 MHz

Pos. 4 = 434.1 MHz

Pos. 5 = 434.5 MHz

Pos. 6 = 434,9 MHz

Pos. 7 = 435,3 MHz

To change the frequency, power ON/OFF is required!!