

TEL1-40kTTL

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

User Manual



Set contains:



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

Transmitter



Front side view

TNC output for antenna

BNC input for TTL signal

Power supply input
(10–30V DC)



Rear side view



+4dB
Antenna

Receiver



Front side view

TNC output for antenna

BNC output for TTL signal

Power supply input
(10–30V DC)

Field strength display

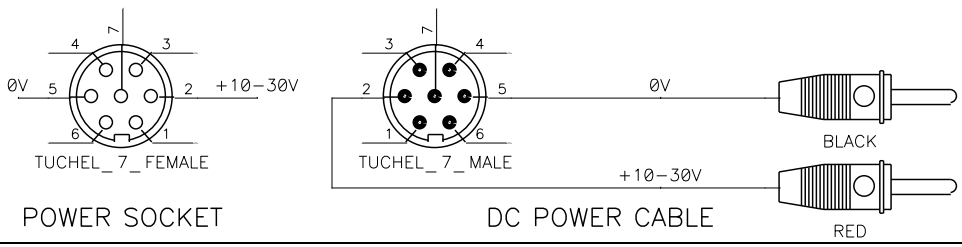


Rear side view



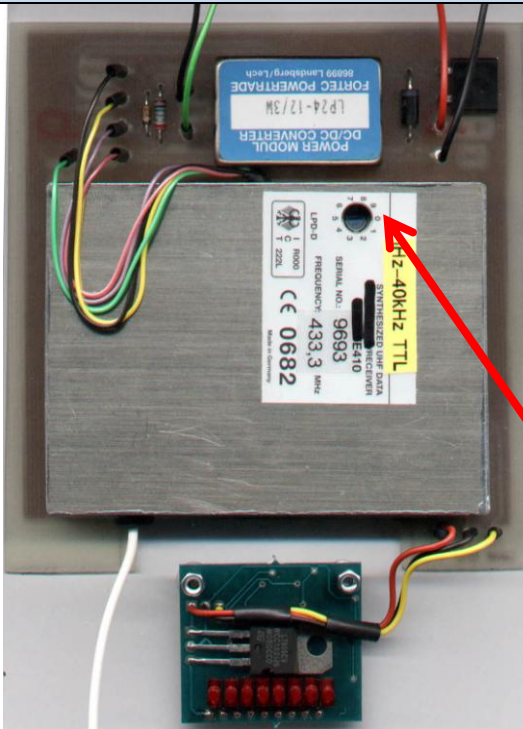
+4dB
Antenna

Specifications

<p>Transmitter</p> <p>Power supply voltage: 10 - 30V DC Power consumption: 0.5W Input signal level: TTL Connector type: BNC Weight: 435g Dimensions: 105 x 105 x 45 (without connectors)</p>	<p>Receiver</p> <p>Power supply voltage: 10 - 30V DC Power consumption: 1.35W Output signal level: TTL (0V, 5V) Output impedance: 2kΩ Connector type: BNC Weight: 490g Dimensions: 105 x 105 x 45 (without connectors)</p>
<p>Transmitter antenna</p> <p>Cable: RG 058-PE (length 4m) Gain: +4dB (rel. to λ/4 antenna) Frequency range: 410-470MHz Mounting: Magnetic socket Length: 400mm Connector type: TNC Weight: 600g (without cable)</p>	<p>Receiver antenna</p> <p>Cable: RG 058-PE (length 4m) Gain: +4dB (rel. to λ/2 antenna) Frequency range: 410-470MHz Mounting: Magnetic socket Length: 400mm Connector type: TNC Weight: 600g (without cable)</p>
<p>Transmission</p> <p>Transmission range: up to 500m (line-of-sight connection) Transmission power: 10mW Transmission delay: 35μs (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:</p>	<p>Environmental</p> <p>Operating temperature: -10 - 70°C Storage temperature: -20 - 70°C Humidity: 20 - 80% (non-condensing) Vibration: 5g (Mil Standard 810C, Curve C) Shock: 100g (in any direction)</p>
<p>DC power cable</p> <p>Pin assignment:</p> 	
<p>Note</p> <p>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.</p>	

Change the Carrier frequency of TEL1 TTL 40k

TEL1-TTL-40k receiver



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

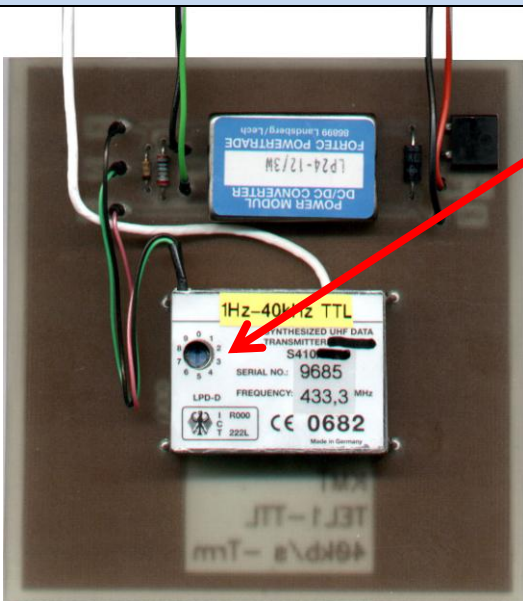
Pos. 1 = 433.7 MHz

Pos. 2 = 434.1 MHz

Pos. 3 = 434.5 MHz



TEL1-TTL-40k transmitter



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!!