- 10W output power
- 25kHz/8.33kHz channel separation
- FCC, ETSI and marine approved
- Detachable front panel
- Automatic muting facility
- Output for voice-recording
- Man portable unit
- Last resort option with battery unit
- 2HU/19" rack mount option

TR-810

MULTI PURPOSE VHF/AM TRANSCEIVER

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TR-810

- 10W output when used as vehicle installation or desktop mount
- DC voltage range from 10 to 28V
- Fast recall of 3 present channels via dedicated buttons
- A bright and clear graphical display for easy readout
- Built-in loudspeaker with possibilities for an external loudspeaker
- Front or rear connection for microphone input
- Voice recorder output
- Available as man portable unit
- External battery unit with battery indicator on front display
- Easy to install, also available in rack mount option (19"/3HU)
- ETSI and FCC approvals
- 25kHz/8.33kHz channel separation, ETSI approved

TR-810 VHF AM MULTI PURPOSE RADIO

The TR-810 is designed to meet future demands for a lightweight, rugged and flexible radio.

TR-810 is now available as a Desktop radio, Vehicle radio, as a Man Portable radio, as a Last Resort radio and in a 19"/2HU enclosure suitable for rack mounting.

The flexible design is achieved by making the Operators Control Panel (OCP) detachable from the compact base unit. Communication between the two units is via standard CAT-5 cable. By being able to separate the OCP from the base unit, it opens up for three main user applications.

APPLICATION EXAMPLES:

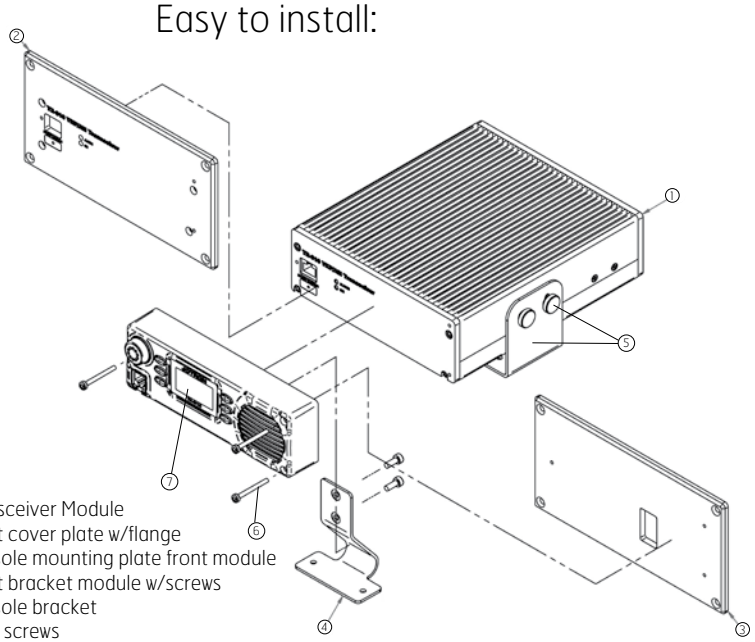
TR-810VE Transceiver Vehicle version
The wide DC operating voltage makes the TR-810 to fit in any vehicle with 12 or 24VDC supply. Microphone, interconnection cables, external loudspeaker and whip antenna for vehicle are included. Also, a 5 meter long extension cable between radio unit and OCP is included enabling to separate the radio transceiver and OCP if you should prefer to mount the radio elsewhere in the vehicle are included.

TR-810DE Transceiver Desktop version
The Desktop version is the TR-810 supplied with an external AC/DC adaptor. The AC/DC adaptor covers 100 to 240VAC. In addition a microphone, bracket for console mounting and antenna cable connector is included.

TR-810LR Transciver Last Resort version
Last Resort radio is the TR-810 as a desktop radio with a Lithium Ion technology battery pack supplying the radio with a DC voltage when AC power fails. Battery status can be monitored on the battery unit itself or on the TR-810 display. Battery capacity is 72Wh making the TR-810 last 7.5 hours in 10% Tx/ 30% Rx/ and 60% idling at 10W ouput power. Up to 9.5 hours can be achieved if output power is reduced to 2.5W.

TR-810MP Transceiver Man Portable version
In this configuration the TR-810 and battery is mounted in a carrying bag with shoulder strap.The bag has an antenna bracket with a whip antenna connected to the radio. Pockets in the bag contains charger and cables. Battery and capacity, as for the TR-810LR above.

Easy to install:



1. 82769 - Transceiver Module
2. 84082 - Front cover plate w/flange
3. 84416 - Console mounting plate front module
4. 84391 - Front bracket module w/screws
5. 84084 - Console bracket
6. 84086 - Lock screws
7. 82768 - Front module (OCP)

TR-810VE Transceiver Vehicle version

TR-810DE Transceiver Desktop version

TR-810LR Transceiver Last Resort version

TR-810MP Transceiver Man Portable version

TR-810

MULTI PURPOSE VHF/AM TRANSCEIVER

SPECIFICATIONS	
Frequency range:	118-137 MHz
Channel separation:	25 kHz / 8.33 kHz (selectable)
Frequency stability:	± 1.0ppm
Frequency selection:	25/8.33 kHz steps
Preset channels:	63
Type of modulation:	AM (A3E)
Audio response:	25kHz: +1/-3 dB rel.to 1 kHz, 300-3400 Hz 8.33kHz +1/-3 dB rel.to 1 kHz, 300-2500 Hz
Audio output:	Built in speaker: > 4W
Headphone:	8 - 32 Ω > 100mW
External speaker:	> 4W @ 4 Ω, adjustable from front panel
Mic input:	Dynamic/Electret. Sensitivity 1.9mV
Monitor:	Unbalanced 600 Ω. -7dBm @ 70% modulation
Antenna connector:	50 Ω, BNC-connector
Operating temperature:	-20 to +55°C
Storage temperature:	-40 to +70°C
Operating voltage	12 - 28VDC ±10%
Power consumption:	10W, 80% modulation: < 60 W
Receiver section	
Sensitivity:	10 dB SINAD at 1 µV pd, 30% modulation
Squelch:	Adjustable from min.1 µV pd, to 25 µV pd., Hysteresis: < 3 dB Opening/closing:<50 ms
THD:	<5%, 90% mod, 100 µV, 1kHz
S/N ratio:	>45dB, 100 µV, 30%, 1kHz
Adjacent channel rejection:	>80dB, 25kHz/>65dB, 8.33 kHz
Cross modulation:	>90dB @ 1MHz offset
Blocking:	>95dB @ 1MHz offset
Spurious response rejection:	>90dB
Intermodulation immunity:	>80 dB
Image frequency rejection:	>100dB
If rejection:	>100dB
Permissible input level:	5V EMF
AF AGC:	<3dB change in output level for modulation 30% – 90%
Conducted spurious emissions:	<-70 dBm
Effective Acceptance Bandwidth:	<6dB @ ± 8.5 kHz, 25 kHz , <6dB @ ± 4 kHz, 8.33 kHz channels
Transmitter section	
Modulation:	AM up to 90%. Modulation depth adjustable from front panel
Standing wave ratio:	1 : infinity
Output power:	10W ± 1 dB . Adjustable. (40WPEP) Output is reduced automatically when the VSWR reaches approx 3:1
Keying time:	<20 msec
Release time:	<10 msec
Keying:	Mic connector s
LF compression (VOGAD)	30dB with less than 10% change in modulation
Limiter:	Limiting amplifier prevents over modulation
Distortion:	Less than 5% at 90% modulation
Hum and noise level:	Better than 40dB below at 90% modulation.
Duty cycle:	30% continuous operation at ambient temperature below 55°C
Intermodulation attenuation:	>40 dB with a frequency offset of ± 150 kHz
Battery backup	
Operating temperature:	-20 to +55°C
Storage temperature:	-40 to +70°C
Operating voltage	12 - 28VDC ± 10%
Battery type	Lithium-ion (SAFT)
Battery capacity	72Wh - Approx 11 hours operation (10/90 duty cycle)
Operating time @10W	Approx 7,5 hour. (10/30/60 duty cycle)
Operating time @ 5W	Approx 8,5 hour. (10/30/60 duty cycle)
Operating time @ 2.5W	Approx 9,5 hour. (10/30/60 duty cycle)
Power consumption	
- Charging	< 80W
- Charging + transmit	<140W

APPROVED TO THE FOLLOWING STANDARDS:

Radio performance:
- EN 300 676 V1.3.1:

EMC:
- EN 301 489-1 V 1.5.1 : EMC for radio equipment
- EN 301 489-22 V 1.3.1 : Specific conditions VHF aeronautical equipment
- IEC 60945: Maritime navigation and radio communication equipment.

FCC:
- Part 87 and RSS 141

Safety:
- According to EN/IEC 60950

Vibration and shock:
- EN 300-019-2-2 : Transportation
- EN 300-019-2-5 : for ground Vehicle installations,
- EN 300-019-2-7 : for Portable and non-stationary use

Agent/Distributor:

v.B

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