

TC-780

Professional Two-way Radio



- Safety Assurance
- Selective Expansion Function
- Powerful Audio Output
- Compact & Light Weight

Recommended Applications

- Police
- Security
- Logistics
- Firefighting
- Government
- Property Management

Accessories

Standard Accessories	Antenna	Strap	RO04	Belt clip	BC08 (compatible with BL1703)	MCU rapid-rate charger (for Li-Ion/Ni-MH Batteries)	CH110L07
Li-Ion battery(1700mAh)	BL1703	Switching Power (100-240V)	PS1009 (for use with different power cords in different countries and areas)				

Optional Accessories															
 Earbud with in-Line PTT ESN05 Earbud with on-MIC PTT ESN06	 2-wire earpiece with wireless earphone and neck loop EWN03	 Earpiece with on-MIC PTT & transparent acoustic tube EAN04	 Received only earpiece with transparent acoustic tube (remote speaker MIC used only) ESS08 Received only earbud/remote speaker MIC used only ESS07	 Noise-Canceling Remote Speaker Microphone (IP56) SM13N5 GPS Remote Speaker Microphone SM13N7	 Light weight, throat-vibrating earpiece ELN02 Ear canal bone induction earpiece EBN01	 Heavy weight, high-quality noise-cancelling headset ECN08 Behind-the-head heavy weight high-quality noise-cancelling headset ECN09	 D-earset with boom microphone & in-Line PTT EHN08	 Light-Weight, Single-Ear Headset with in-Line PTT ECN07	 3-wire surveillance earpiece with transparent acoustic tube EAN06 (beige) 2-wire surveillance earpiece with transparent acoustic tube EAN07:black	 Six-unit switching power (for use with different power cords in different countries and areas) PS7001 Vehicle adapter for charger CHV09	 MCU rapid-rate multi-unit charger for Li-Ion/Ni-MH batteries MCA03	 Ni-MH battery pack (1800mAh) BH1801 Li-Ion battery pack (2100mAh) BL2102	 Chest Pack LCBN13	 Leather carrying case (swivel) LCBY22	Antenna Belt Clip BC09 (compatible with BH1801&BL2102) Programming Cable (COM port) PC18 Programming Cable (USB to Serial Port) PC25

Applicable Military Standards 810C/D/E/F

Applicable MIL-STD	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	1,2	500.3	1,2	500.4	1
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2	501.4	1,2
Low Temperature	502.1	1	502.2	1,2	502.3	1,2	502.4	1,2
Temp. Shock	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1,2
Rain	506.1	2	506.2	2	506.3	1,2	506.4	1,2
Humidity	507.1	2	507.2	2,3	507.3	2,3	507.4	1
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	1
Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	8,10	514.3	1	514.4	1	514.5	1
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4	516.5	1,4

General

Frequency Range (MHz)	UHF: 450-520 / 400-470 / 350-390* VHF: 136-174
Channel Capacity	256
Channel Spacing (kHz)	25/20/12.5
Operating Voltage (v)	7.4V
Battery	1700mAh Li-Ion Battery
Battery Life (5-5-90 Duty Cycle)	About 14 Hours
Frequency Stability (ppm)	± 2.5
Operating Temperature (°F)	-22° ~ +140°
Antenna Impedance (Ω)	50Ω
Dimensions (H x W x D) (w/ battery, w/o antenna) (inches)	4.98" x 2.12" x 1.38"
Weight (w/ antenna & battery) (oz.)	11.99 oz.

Frequencies Marked with an Asterisk() are for Export Only

Transmitter

RF Power Output	5W/2W/1W (UHF/VHF)
Modulation	16K0F3E/11K0F3E
Spurious and Harmonics	-36 dBm<1GHz -30 dBm>1GHz
FM Noise	45/40 dB
Audio Distortion	≤5%

All Specifications are tested according to TIA/EIA-603, and subject to change without notice due to continuous development.

Receiver

Sensitivity	0.25/0.35μV
Selectivity	70/60 dB
Intermodulation	65 dB
Spurious Response Rejection	70 dB
S/N	45/40 dB
Rated Audio Power Output	1 W
Rated Audio Distortion	≤10%

FCC Approved Bands: (136-174MHz)
FCC ID Number: R74TC-780V

FCC Approved Bands: (400-470MHz)
FCC ID Number: R74TC-780U1

FCC Approved Bands: (450-520MHz)
FCC ID Number: R74TC-780U2



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Your Local Dealer



HYT's TC-780 is a medium-to-high tier portable radio developed with state-of-the-art analog technology providing a variety of functions. With LCD display, numeric keypad, full frequency band, 256 channels, the radio satisfies the user's group dispatch needs and delivers powerful functions, stable performance, and high price-to-performance ratio.

TC-780

Professional Two-way Radio

Super Features

Wide Band Coverage

Allows users the flexibility to select their frequency for use in their respective work environment.

Powerful Audio Output

HYT's voice compandor audio enhancement and a powerful 1W speaker (with a diameter of 40mm) ensure superb clear, crisp sound even in noisy environments.

Safety Assurance

Safety and security are critical factors for modern organizations. The TC-780's Lone Worker, Safety Check, and Man Down (optional) features are designed to assure your safety in case of emergencies or accidents.

Built-in Scrambler

The Scrambler feature provides enhanced security for your important public safety and private security communications.

Whisper

The Whisper feature means that even the quietest message can be transmitted and understood.

Reserved Expansion Port

Expansion ports are reserved for second development: Patrol Record, Encryption, SmarTrunk™ trunking system and GPS remote speaker microphone.

HYT HDC2400™ and HDC1200 Signaling

HDC2400™ Signaling is exclusive to HYT, and enables the system to achieve features such as ANI (Automatic Number Identification), Call Timer, Record, Record Inquiry, Individual Call, Group Call, Broadcast, Status Inquiry, Safety Check, Stun/Kill/Revive, etc.

The HDC1200 Signaling is compatible with MDC1200, and allows functions including PTT ID Encode & Decode, Emergency Encode, Radio Check Encode & Decode, Kill & Revive Decode, Individual Call, Group Call, Broadcast, Status Message Encode, and Fixed Message Encode.

Firmware Upgradeable

Build-in Flash MCU allows the radio firmware to be upgraded to include the latest features.

Main Features

Power on Self-Test

The radio itself checks radio status automatically when powered on, and emits corresponding alert if an error occurs (e.g. CPU error or EEPROM error), allowing the user to early detect unit faults.

Soft Power Off

After the radio is powered down, it allows some circuits to continue working, and won't need to be reconfigured each time it enters the field.

Front Panel Programming

Menu operation and limited keypad access allow you to easily customize parameters and channel settings.

LCD Battery Gauge

Indicates battery strength levels for more effective power management.

2-Tone Encode & Decode

The 2-Tone Encode and Decode functions are assignable at a per channel basis. An incoming message is signaled with audio and visual alert.

High Transmit Power

5W transmit power accommodates wide communication coverage.

Embedded Message & Serial No.

The radio's memory can store messages including service and programming records, for remarkable ease of maintenance. The feature also makes a unit identifiable by Serial Number.

Short Message

Users can edit messages via keypad, or send predefined messages. Messages can be sent between radios or via the control center. A received message could be displayed on the LCD.

Lone Worker

The Lone Worker feature provides added security and safety for individuals who work remotely from their team. Should a user not respond to a regular warning tone then a defined emergency procedure is activated.

Safety Check

Should the user not respond to a safety check signal, a defined emergency procedure is activated.

Emergency

Press the Emergency key to emit an emergency alarm, or send an ENI (Emergency Number Identity) / background tone to a pre-defined person or the dispatch center (selectable via programming software).

Vibrate

The vibrate feature provides notification to users in working conditions where quiet operation is required.

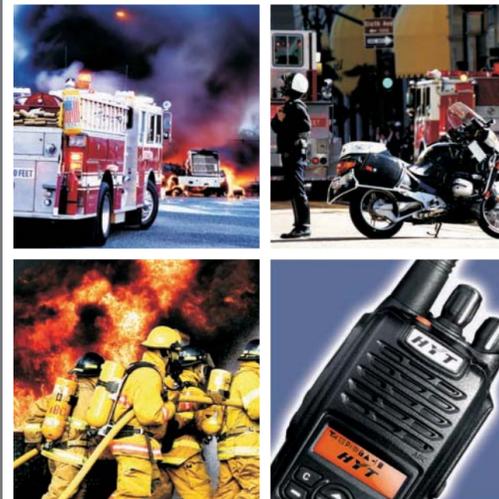
Man Down (optional)

Providing even greater safety for employees in hazardous environments, the TC-780's optional Man Down feature automatically summons assistance when the radio falls over for a predetermined time period.

Patrol Record & Digital Encryption/SmarTrunk™ Trunking System (optional)

TC-780 supports patrol record. A patrol system is composed of TC-780 patrol radio, TX-90 patrol point, patrol center, patrol management software and data transmission cable. It's function is to allow the software user to monitor and control security personnel as well as send real-time information about the patrol rounds.

With digital encryption, confidential communication is available for TC-780. Also, the SmarTrunk™ option board can work hand-in-hand with a controller to realize all functions of SmarTrunk™ trunking system.



Mechanical Features

- ★ Reliability and Durability
The radio uses components of famous brands, and meets strict quality tests.
- ★ Ergonomic Design
- ★ Laser-etched Nameplate
- ★ IP54-Rated Dust & Water Protection

Other Features

- ★ DTMF Encode & Decode
- ★ CTCSS/CDCSS
- ★ Voice Compandor
- ★ MSK Wireless Clone
- ★ PC Tuning
- ★ Dual Priority Scan
- ★ Battery Save
- ★ Low Battery Alert
- ★ Kill/Revive
- ★ Programmable Function Keys
- ★ Talk Around
- ★ Channel Alias
- ★ Programmable Alert Tone
- ★ Battery Gauge
- ★ Auto Acknowledgement
- ★ ATIS
- ★ VOX
- ★ Power-on Password and Data Password
- ★ RSSI (Received Signal Strength Indicator)