

The advanced provider of professional wireless communication

HYT
AMERICA, INC.

TC-780

Professional Two-way Radio



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

www.hytafrica.com

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

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

Bulid-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 - Special Order Only)

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.





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)

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) CH10L07
 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



Remote speaker microphone
SM08N1
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 (440-470 MHz/350-390 MHz)
SM13N4
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
ECN03



D-earset with boom microphone & in-Line PTT
EHN08
D-earset with in-Line PTT & microphone
EHN07



Light-Weight, Single-Ear Headset with in-Line PTT
ECN07
Light-Weight, Behind-the-Head Earset with in-Line PTT
ECN06



3-wire surveillance earpiece with transparent acoustic tube
EAN06 (beige)
3-wire surveillance earpiece with transparent acoustic tube
EAN02 (black)
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 Methods Procedures	810D Methods Procedures	810E Methods Procedures	810F 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 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	VHF: 5W/2W/1W UHF: 4W/2W/1W
Modulation	16KΦF3E/11KΦF3E
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



ISO9001:2000 Certificate NO:FM 61540



Your Local Dealer

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