



HYT TC-700 Analog Portable Radio User Manual

[Home](#) » [HYT](#) » HYT TC-700 Analog Portable Radio User Manual 

HYT TC-700 Analog Portable Radio



Contents

- 1 Introduction**
- 2 Super Functions**
- 3 New Functions**
- 4 Accessories**
 - 4.1 Optional Accessories**
- 5 Recommended Applications**
- 6 Applicable MIL-STD-810C/D/E/F**
- 7 General**
- 8 Transmitter**
- 9 Receiver**
- 10 Documents / Resources**
 - 10.1 References**

Introduction

Ideal for high-level professionals who want powerful yet streamlined communication tools, the TC-700 series are packed with cutting-edge technology and HYT innovations. HYT's voice compander audio enhancement and a powerful 1W speaker ensure superb clear, crisp sound, even in noisy environments. Its sleek, ergonomic design makes this TC-700 series radio easy to hold and carry – and it's so lightweight you can take it virtually anywhere.

Super Functions

Wide-band Coverage

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

Powerful Audio Output

HYT's voice compander 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-700's Lone worker, Man Down (optional) and Emergency Siren features are designed to assure your safety in case of emergencies or accidents.

Built-in Scrambler

Maintaining private and secure communications is increasingly important, with potentially sensitive information flowing back and forth. The TC-700's 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.

Channel Annunciation

The feature enables radio to report the current channel number when power on or switching channel, offering you

notable convenience.

HYT HDC2400™ and HDC1200 Signalling

HYT HDC2400™ signaling system allows features including Identification, Calling Timer, Voice Storage, Retrieve Record, Individual Call, Group Call, Broadcast, Stun/Kill & Revive, Status Inquiry, Short Message and Data Transmission. (Some are features of dispatch center.)

Compatible with MDC1200, the HDC1200 Signalling allows functions including PTT ID Encode, Emergency Encode, Radio Check Decode, Stun/Kill & Revive, Individual Call, Group Call, Broadcast, etc.

New Functions

Lone Worker

The 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.

Man Down (optional)

When feature enabled, a defined emergency procedure is activated if the radio is horizontally or inversely positioned for a certain length of time. Place the radio vertically to disable the emergency.

Safety Check

Should the user not respond to a safety check signal from the dispatch center or another authorized radio, then a defined emergency procedure is activated.

Power on Self-Test

The radio itself checks radio status automatically when power on, and emits corresponding alert if an error occurs, allows the user to early detect unit faults.

Embedded Message & Serial Number

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.

Emergency

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

Auto Contact

The feature is especially helpful in high-demanding communication environments, such as climbing, exploration, and rescue work. When feature enabled, the radio beeps when the user is moving out of communication range.

Rental

The Rental feature limits the time period that a radio can be rented. The radio will be disabled once the time elapses.

Software upgradeable (optional)

Allows new functions add-in to accommodate future updates.

PC Tuning

Enables remarkable ease of maintenance.

Patrol Record (optional)

Patrol system for real-time (or non-real-time) data transmission consists of the TC-700 radio supporting Patrol Record, patrol transmitter TX-90, control center TM-800, patrol management software, data transmission cable.

Accessories

Standard Accessories	UHF / VHF Antenna	MCU Rapid-rate Charger CH10L07	Li-ion Battery (1700mAh) BL1703
	Switching Power Adapter (100-240V) PS1009 (different power cords for different countries and areas)		
	Spring Belt Clip BC08 (compatible with BL1703)		Strap RO04

Optional Accessories

- Li-ion Battery (2100mAh) BL2102
- Ni-MH Battery (1800mAh) BH1801



- MCU Rapid-rate Multi-unit Charger for Li-ion/Ni-MH Batteries MCA03



- Six-unit Switching Power PS7002
Vehicle Adapter CHV09



- Noise-Cancelling Remote Speaker Microphone (350-390MHz) SM13M2
Water Resistant Remote Speaker Microphone(IP56) SM13M1



- Earbud with in-Line PTT & VOX ESM11
Earbud with on-MIC PTT & VOX ESM12



- D-earset with Boom Microphone & VOX EHM16
- D-earset with in-Line MIC & VOX EHM15



- Light Weight, Single-Muff Headset with in-Line PTT & VOX ECM12



- Remote Speaker Microphone SM08M3
- Receive-only Earpiece with Transparent Acoustic Tube (for use with remote speaker microphone) ESS08
- Receive-only Earbud (for use with remote speaker microphone) ESS07



- 3-Wire Surveillance Earpiece with Transparent Acoustic Tube (black/beige) EAM16 / EAM15

Earpiece with on-MIC PTT & VOX & Transparent Acoustic Tube EAM12 2-Wire Surveillance Earpiece with VOX & Transparent Acoustic Tube (black) EAM13



- Light Weight, Throat-Vibrating Earpiece ELM01
Ear Canal Bone Induction Earpiece EBM01



- Behind-the-Head, Noise-Canceling Headset ECM14
Noise-Canceling Headset ECM13



- 2-wire Earpiece with Wireless Earphone and Neck Loop EWM03



- Chest Pack LCBN13

Leather Carrying Case (swivel) (thin battery / thick battery) LCBN41/ LCBN42



Spring Belt Clip BC09(compatible with BH1801&BL2102)

Programming Cable (COM port) PC19

Programming Cable (USB to serial port) PC26

Recommended Applications

- Security
- Firefighters
- Public utilities
- Property management
- Construction sites
- Hotel



Applicable MIL-STD-810C/D/E/F

Applicable	810C		810D		810E		810F	
MIL-STD	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)	VHF: 136-174 UHF: 350-390 420-470 440-490 400-470
Channel Capacity	16
Channel Spacing(KHz)	25 /20/12.5
Operating Voltage(V)	7.4
Battery	1700mAh (Li-ion)
Battery Life (5-5-90 duty cycle)	About 14 Hours
Frequency Stability(ppm)	±2.5
Operating Temperature(°C)	-30~+60
Antenna Impedance(Ω)	50
Dimensions(LxWxH)(with battery, without antenna)(mm)	122x55x35
Weight (with antenna & battery)(g)	316

Transmitter

RF Power Output	5W/1W (VHF) 4W/1W (UHF)
Modulation	16KΦF3E/11KΦF3E
Spurious and Harmonics	-36dBm<1GHz -30dBm>1GHz
FM Noise	45/40dB
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	70/60dB
Intermodulation	65dB
Spurious Response Rejection	70dB
S/N	45/40dB
Rated Audio Power Output	1W
Rated Audio Distortion	≤10%



Address: HYT Tower, Hi-Tech Industrial Park North, Beihuan Rd., Nanshan District, Shenzhen, China **Tel:** +86-755-2697 2999 **Fax:** +86-755-8613 7139 **Post:** 518057
[Http://www.hytera.com](http://www.hytera.com) **Stock Code 002583**

Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.


HYT, Hytera  are registered trademarks of Hytera Co., © Ltd. 2012 Hytera Co., Ltd. All Rights Reserved

Hytera Communications Corporation Limited

HYT is a registered trademark of Hytera Co., Ltd. Stock Code: 002583.SZ



Documents / Resources

 The thumbnail shows a black handheld radio with a silver antenna. To the left of the radio, the text 'TC-700 Professional Two-way Radio' is visible. Below the radio, there are several bullet points in small text.	<p>HYT TC-700 Analog Portable Radio [pdf] User Manual</p> <p>TC-700 Analog Portable Radio, TC-700, Analog Portable Radio, Portable Radio, Radio</p>
--	---

References

-  [Hytera | Official Site - Trusted Two Way Radio and Critical Communications Solution](#)