



Hytera AP582 Two-Way Business Analog Radio User Manual

[Home](#) » [Hytera](#) » Hytera AP582 Two-Way Business Analog Radio User Manual 

Contents

- 1 AP582 Two-Way Business Analog Radio
- 2 AP58X Two-way Radio User Manual
- 3 Product Overview
- 4 Compliance Information
- 5 Usage Instructions
- 6 Preface
- 7 Copyright Information
- 8 Disclaimer
- 9 FCC Statement
- 10 Compliance with RF Exposure Standards
- 11 EU Regulatory Conformance
- 12 Documentation Information
- 13 Product Overview
- 14 Before Use
 - 14.1 Attaching the Battery
 - 14.2 Attaching the Antenna
 - 14.3 Attaching the Audio Accessory
- 15 Basic Operations
- 16 Status Indications
- 17 Supplementary Features
- 18 Troubleshooting
- 19 Care and Cleaning
 - 19.1 Product Cleaning
- 20 Optional Accessories
- 21 Abbreviations
- 22 Documents / Resources
 - 22.1 References
- 23 Related Posts



AP582 Two-Way Business Analog Radio



AP58X Two-way Radio User Manual

Welcome to the world of Hytera and thank you for purchasing the AP58X Two-way Radio. This manual includes a description of the functions and step-by-step procedures for use.

Safety Information

To avoid bodily injury or property loss caused by incorrect operation, please carefully read the Safety Information Booklet before use.

Product Overview

The AP58X Two-way Radio is a two-way communication device that allows you to transmit and receive messages over a distance. It is available in four different versions, with X representing 2, 5, 6, or 8.

Packing List

The following items should be included in the product package:

- AP58X Two-way Radio
- Antenna
- Battery
- Belt Clip
- User Manual

Compliance Information

The AP58X Two-way Radio complies with the following standards:

- Federal Communications Commission (FCC) Statement
- RF Exposure Standards and American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005; Canada RSS102 Issue 5 March 2015 Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005 Edition
- ISED Statement
- EU Regulatory Conformance (applicable to EU countries only)

Usage Instructions

Safety Precautions

- Read the Safety Information Booklet before use.
- Keep the radio unit at least 2.5 cm away from the face to avoid RF exposure.
- When worn on the body, always place the radio in an approved holder, holster, case, or body harness, or use the correct clip for this product.
- Use only approved accessories to avoid exposure levels which exceed the FCC's occupational/controlled environmental RF exposure limits.

Transmitting and Receiving Messages

- Press and hold the Push-To-Talk (PTT) key to transmit messages.
- Release the PTT key to receive messages.
- Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy only when transmitting.

Preface

Welcome to the world of Hytera and thank you for purchasing this product. This manual includes a description of the functions and step-by-step procedures for use. To avoid bodily injury or property loss caused by incorrect operation, please carefully read the Safety Information Booklet before use.

This manual is applicable to the following product:

AP58X Two-way Radio (X may represent 2, 5, 6, or 8)

Copyright Information

Hytera is the trademark or registered trademark of Hytera Communications Corporation Limited (the Company) in the People's Republic of China (PRC) and/or other countries or areas. The Company retains the ownership of its trademarks and product names. All other trademarks and/or product names that may be used in this manual are properties of their respective owners.

The product described in this manual may include the Company's computer programs stored in memory or other media. Laws in PRC and/or other countries or areas protect the exclusive rights of the Company with respect to its computer programs. The purchase of this product shall not be deemed to grant, either directly or by implication, any rights to the purchaser regarding the Company's computer programs. The Company's computer programs may not be copied, modified, distributed, decompiled, or reverse-engineered in any manner without the prior written consent of the Company.

Disclaimer

The Company endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technological development. No part of this manual may be copied, modified, translated, or distributed in any manner without the prior written consent of the Company.

We do not guarantee, for any particular purpose, the accuracy, validity, timeliness, legitimacy or completeness of the third-party products and contents involved in this manual.

If you have any suggestions or would like to receive more information, please visit our website at:

<https://www.hytera.com/en/download-center.html>.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Verification of harmful interference by this equipment to radio or television reception can be determined by turning it off and then on. **The user is encouraged to try to correct the interference by one or more of the following measures:**

- Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a different circuit to that of the receiver's outlet.
- Consult your dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Compliance with RF Exposure Standards

The radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR § 1.1307, 1.1310 and 2.1093
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005; Canada RSS102 Issue 5 March 2015
- Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005 Edition

RF Exposure Compliance and Control Guidelines and Operating Instructions

To control your exposure and ensure compliance with the occupational/controlled environmental exposure limits, always adhere to the following procedures.

Guidelines:

- Do not remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions:

- Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), press the Push-to-Talk (PTT) key. To receive calls, release the PTT key. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy only when transmitting (in terms of measuring for standards compliance).
- Keep the radio unit at least 2.5 cm away from the face. Keeping the radio at the proper distance is important as RF exposure decreases with distance from the antenna. The antenna should be kept away from the face and eyes.
- When worn on the body, always place the radio in an approved holder, holster, case, or body harness or by use of the correct clip for this product. Use of non-approved accessories may result in exposure levels which exceed the FCC's occupational/controlled environmental RF exposure limits.
- Use of non-approved antennas, batteries, and accessories causes the radio to exceed the FCC RF exposure guidelines.
- Contact your local dealer for the product's optional accessories.

ISED Statement

The device has been tested and complies with SAR limits, users can obtain Canadian information on RF exposure and compliance.

This device complies with Innovation, Science and Economic Development Canada Compliance license-exempt RSS standard(s). Operation is subject to the following two conditions:



- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

EU Regulatory Conformance

As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of 2014/53/EU. Please note that the above information is applicable to EU countries only.

Documentation Information

Instruction Conventions

| Icon | Description |
|--|--|
|  NOTE | Indicates references that can further describe the related topics. |
|  CAUTION | Indicates situations that could cause data loss or equipment damage. |

Notation Conventions

| Item | Description | Example |
|-----------------|---|--|
| Boldface | Denotes menus, tabs, parameter names, window names, dialogue names, and hardware buttons. | To save the configuration, click Apply . |
| | | The Log Level Settings dialogue box appears. |
| | | Press the PTT key. |
| " " | Denotes messages, directories, file names, folder names, and parameter values. | The screen displays "Invalid Battery!". |
| | | Open "PSS.exe". |
| | | Go to "D:/opt/local". |
| | | In the Port text box, enter "22". |
| > | Directs you to access a multi-level menu. | Go to File > New . |
| <i>Italic</i> | Denotes document titles. | For details about using the DWS, refer to <i>Dispatch Workstation User Guide</i> . |
| Courier New | Denotes commands and their execution results. | To set the IP address, run the following command: vos-cmd - m name IP |

Key Operations

| Operation | Description |
|----------------|---------------------------------|
| Short press | Press and release quickly. |
| Long press | Press and hold for preset time. |
| Press and hold | Keep the key pressed. |

Packing List

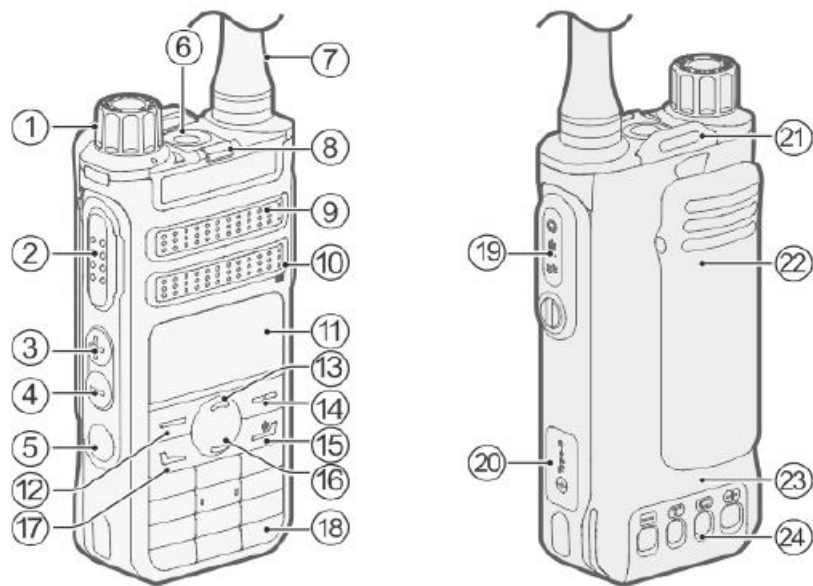
Please unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

| Item | Quantity (PCS) | Item | Quantity (PCS) |
|---------------|----------------|-------------------|----------------|
| Radio | 1 | Belt Clip | 1 |
| Battery | 1 | USB Type-C Cable | 1 |
| Power Adapter | 1 | Strap | 1 |
| Charger | 1 | Documentation Kit | 1 |

Figures in this manual are only for reference.

Product Overview

Product Layout



| No. | Part Name | No. | Part Name | No. | Part Name |
|-----|------------------------|-----|-------------|-----|---------------------|
| 1 | Channel Selector Knob | 9 | Speaker | 17 | Contact Key |
| 2 | Push-to-Talk (PTT) Key | 10 | Microphone | 18 | Keypad |
| 3 | Volume Up Key | 11 | LCD Display | 19 | Accessory Connector |
| 4 | Volume Down Key | 12 | OK/Menu Key | 20 | USB Type-C Port |
| 5 | Side Key 3 (SK3) | 13 | Up Key | 21 | Strap Hole |
| 6 | TK (Top Key) | 14 | Back Key | 22 | Belt Clip |
| 7 | Antenna | 15 | On-Off Key | 23 | Battery |
| 8 | LED Indicator | 16 | Down Key | 24 | Charging Contacts |

Programmable Keys

For enhanced convenience, you can request your dealer to program the TK and SK3 as shortcuts to radio features. For details, consult your dealer.

Before Use

Charging the Battery

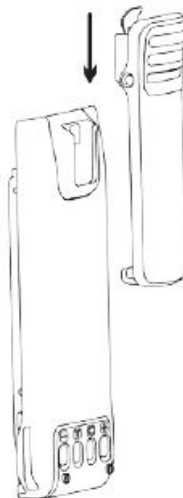
- Use the approved charger to charge the battery.
- Read the Safety Information Booklet before charging.
- The remaining lithium-ion battery power is limited to 30% pursuant to the new lithium battery shipment regulation approved by the International Air Transport Association (IATA).
- Use the charger to charge the battery alone or the battery attached to the radio.
- The LED indicator on the charger shows the charging status. For details, check the label on the bottom of the charger.
- Use the USB Type-C cable to connect the radio with battery attached to the power adapter, power bank, or PC.

The LED indicator on the radio shows the charging status, as described in the following table.

| LED Indicator | Charging Status |
|---------------------|----------------------------------|
| Glows red | The battery is being charged. |
| Flashes red rapidly | The battery fails to be charged. |
| Glows green | The battery is fully charged. |

Attaching the Belt Clip

Align the holder on the belt clip with the groove on the battery, and then press the belt clip downwards into place.

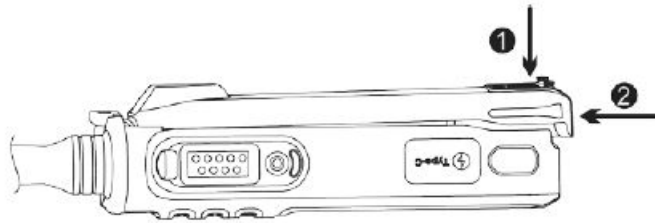


You can press and hold the belt clip spring plate and push the belt clip upwards to remove it.

Attaching the Battery

Caution

- Use the approved battery to avoid the risk of explosion.
 - Dispose of the used battery according to “Precautions for Disposal” in the Safety Information Booklet.
1. Align the tabs on the battery with the grooves in the battery slot.
 2. Press and push the battery into the battery slot until a click is heard.

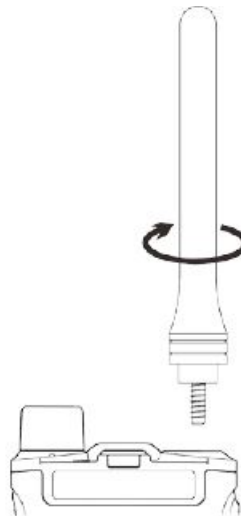


To remove the battery, make sure that the radio is turned off, and then lift the battery latch.

Attaching the Antenna

caution

Do not hold the radio by the antenna and swing it. This may affect the antenna performance and shorten the life span of the antenna.



Attaching the Audio Accessory

Caution

For optimal waterproof and dustproof performance, do as follows:

- Attach the accessory with care to avoid scraping the silicone rubber surrounding the accessory connector screw hole.
- Close the accessory connector cover and fasten the screw after removing the accessory.

1. Loosen the screw on the accessory connector cover, and then remove the cover.



2. Insert the audio accessory plug into the accessory connector.



3. Tighten the screw on the audio accessory plug.



Basic Operations

Turning On or Off the Radio

To turn on or off the radio, press and hold the On-Off key.

Adjusting the Volume

Press the Volume Up key to increase the volume, or Volume Down key to decrease the volume.

Selecting a Zone

A zone is a group of channels within the same operational area. The radio supports 8 zones, each of which consists of up to 16 channels.

To select a zone, do either of the following:

1. Through the menu
 - Press the OK/Menu key.
 - Press the OK/Menu key to select Zone.
 - Select the zone.
 - Press the OK/Menu key.
2. Through the programmable key Press the preprogrammed Zone Up or Zone Down key.

Selecting a Channel



















The radio receives and transmits voice and data on the selected channel. Before selecting a channel, make sure that the current zone contains the channel. Rotate the Channel Selector knob to select a channel.

Call on Analog Channel (Without Signaling)

When you are speaking during a call, keep the microphone about 2.5 cm to 5 cm away from your mouth. This ensures optimal voice quality on the receiving radio. On an analog channel without signaling, you can initiate a call to all the other users on the channel. Rotate the Channel Selector knob to select the analog channel, and then press and hold the PTT key.

Status Indications

LCD Icon

| Icon | Radio Status |
|---|---|
|  | More bars indicate more remaining battery power. |
|  | The battery power runs out. Recharge or replace the battery. |
|  | The radio detects no signal. |
|  | More bars indicate stronger signal strength. |
|  | In analog mode, the radio transmits when the PTT key is pressed. |
|  | The radio operates in low power mode. |
|  | The radio operates in high power mode. |
|  | The radio is scanning. |
|  | The radio stays on an active channel. |
|  | Direct Mode: The radio transmits and receives directly. |
|  | Repeater Mode: The radio transmits and receives through a repeater. |
|  | The VOX feature is enabled. |
|  | The speaker is turned on. |
|  | The radio operates in silent mode. |
|  | An accessory is connected. |
|  | The Monitor feature is enabled. |
|  | The Scrambler feature is enabled. |
|  | The Squelch feature is enabled. |

LED Indicator

| LED Indicator | Radio Status |
|--|---------------------------|
| Glows green | The radio is receiving. |
| Flashes red slowly once every 1 minute | The battery power is low. |
| Flashes red rapidly once every 0.2s | The radio is programming. |
| Flashes orange slowly | The radio is scanning. |
| Glows orange | The call is on hold. |

| LED Indicator | Radio Status |
|---------------|-------------------------------|
| Flashes green | The radio is being turned on. |
| Glows red | The radio is transmitting. |

Supplementary Features

Backlight

You can turn on the backlight to illuminate the LCD, which facilitates your operation under dim light. Press the OK/Menu key, select Backlight, and then press the OK/Menu key. You can select Always on, 5s, 15s, 30s, or 60s.

VOX

When the voice detected by the microphone reaches the value to trigger the transmission, the radio automatically transmits the voice without the PTT key pressed. The VOX Gain feature preprogrammed by your dealer is used to control the sensitivity of microphone transmission. **To enable this feature, do either of the following:**

- Press the preprogrammed VOX key.
- Press the OK/Menu key, select VOX, and then press the OK/Menu key.

Power Level

The Power Level feature allows you to set the TX power level to high or low. High power enables communication with radios far away from you but consumes more battery power. Low power enables communication with radios close to you and saves battery power. Press the preprogrammed Adjust Power Level key to adjust the power level.

Scan

The Scan feature allows you to listen to activities on other channels, keeping track of your team members.

To enable this feature, do either of the following:

- Press the preprogrammed Scan key.
- Press the OK/Menu key, select Scan, and then press the OK/Menu key.

With this feature enabled, the radio scans according to the scan list preset for the current channel. The LED indicator flashes orange slowly. When detecting activities on a channel, the radio stays on the channel and the LED indicator glows green.

Talk Around

The Talk Around feature allows you to continue communication in direct mode when the repeater malfunctions or your radio is out of the coverage of the repeater. With this feature preprogrammed by your dealer, press the preprogrammed Talk Around key to switch between direct mode and repeater mode.

Squelch Level

The squelch level refers to the squelch threshold required for the speaker of the radio to be turned on. The higher squelch level requires stronger signal. Press the preprogrammed Adjust Squelch Level key to adjust the squelch level.

Scrambler

The Scrambler feature allows the radio to invert the frequency spectrum of transmitted audio signals. Only the receiving radio with the same Scrambler settings can restore the audio signals. This prevents eavesdropping and ensures communication privacy. Press the preprogrammed Scrambler key to enable this feature.

Monitor

The Monitor feature allows the radio to receive more signals including weak signals, and helps you to recognize weak voices in the speaker. Press the preprogrammed Monitor key to switch between monitor squelch mode and receive squelch mode.

Squelch Off

With the Squelch Off feature enabled, the speaker will keep unmuted regardless of whether carrier exists. Then

the radio sounds background noise. Press the preprogrammed Squelch Off key to enable this feature.

Troubleshooting

| Phenomena | Analysis | Solution |
|--|---|--|
| The radio cannot be turned on. | The battery may be installed improperly. | Remove and reattach the battery. |
| | The battery power may have run out. | Recharge or replace the battery. |
| | The battery may suffer from poor contact caused by dirtied or damaged battery contacts. | Clean the battery contacts. |
| The keys do not work. | The keys may fail to function temporarily. | Restart the radio. |
| | The keys may be damaged. | Contact your dealer or Hytera technicians for maintenance. |
| The LED indicator is abnormal. | The indication may be abnormal. | Restart the radio. |
| | The LED indicator may be damaged. | Contact your dealer or Hytera technicians for maintenance. |
| The LCD does not display any information. | The LCD may fail to function temporarily. | Restart the radio. |
| | The screen may be damaged. | Contact your dealer or Hytera technicians for maintenance. |
| During receiving, the voice is weak, discontinuous, or totally inactive. | The signal may be weak. | Make sure that the radio is within the signal coverage. |
| | The volume may be low. | Increase the volume. |
| | The speaker may be blocked or damaged. | Clean the surface of the speaker. |
| The battery fails to be charged. | The power adapter plug may be inserted into the socket improperly. | Reconnect the radio to the power adapter. |
| | The USB Type-C cable may be poorly connected. | Reconnect the USB Type-C cable. |

Care and Cleaning

To guarantee optimum performance as well as a long service life of the product, follow the tips below.

Product Care

- Do not pierce or scrape the product.
- Keep the product far away from substances that can corrode the circuitry.
- Do not hold the product by the earpiece cable.
- Close the accessory connector cover when no accessory is in use.

Product Cleaning

Turn off the product and remove the battery before cleaning.

- Clean up the dust and fine particles on the product surface and charging contacts with a clean and dry lint-free cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the keys, knobs, and front case after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays, or oil preparations, so as to avoid surface case damage.
- Make sure that the product is completely dry before use.

Optional Accessories

Use the accessories approved by Hytera only. Otherwise, we will not be liable for any loss or damage arising out of the use of unauthorized accessories. Contact your local dealer for the optional accessories used with the product.

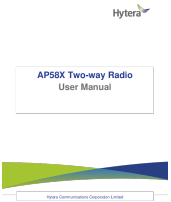
Abbreviations

| Abbreviation | Full Name |
|--------------|------------------------|
| LCD | Liquid-Crystal Display |
| LED | Light-Emitting Diode |
| PTT | Push-to-Talk |
| SK | Side Key |
| TK | Top Key |

is the trademark or registered trademark of Hytera Communications Corporation Limited.
© 2021 Hytera Communications Corporation Limited. All Rights Reserved.

Address: Hytera Tower,
Hi-Tech Industrial Park North,
9108# Beihuan Road,
Nanshan District, Shenzhen, People's Republic of China
Postcode: 518057
<https://www.hytera.com>

Documents / Resources

| | |
|---|---|
|  | <p>Hytera AP582 Two-Way Business Analog Radio [pdf] User Manual AP582 Two-Way Business Analog Radio, AP582, Two-Way Business Analog Radio, Business A nalog Radio, Analog Radio</p> |
|---|---|

References

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