



AP32X Two-way Radio

User Manual

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:

[AP32X Two-way Radio](#)

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ISED compliance statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC SAR statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the ISED. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body and head.

Cet équipement est conforme aux limites d'exposition aux rayonnements de l'ised pour les environnements non contrôlés. L'utilisateur final doit se conformer à des instructions d'exploitation spécifiques afin de respecter la conformité à l'exposition aux radiofréquences. L'émetteur ne doit pas être au même endroit qu'une autre antenne ou un autre émetteur et ne doit pas fonctionner avec une autre antenne ou un autre émetteur.

L'appareil portatif est conçu pour répondre aux exigences d'exposition aux ondes radio de l'ised. Ces exigences fixent une limite moyenne de SAR de 1,6 W / kg pour un gramme de tissu. Les valeurs SAR les plus élevées rapportées conformément à la présente norme lorsqu'elles sont portées correctement sur le corps et la tête pendant la certification du produit.






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Documentation Information

Documentation Conventions

Instruction Conventions

Icon	Description
 TIP	Indicates information that can help you make better use of your product.
 NOTE	Indicates references that can further describe the related topics.
 CAUTION	Indicates situations that could cause data loss or equipment damage.
 WARNING	Indicates situations that could cause minor personal injury.
 DANGER	Indicates situations that could cause major personal injury or even death.

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".
>	Directs you to access a multi-level menu.	In the Port text box, enter "22".
		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.

1. Packing List

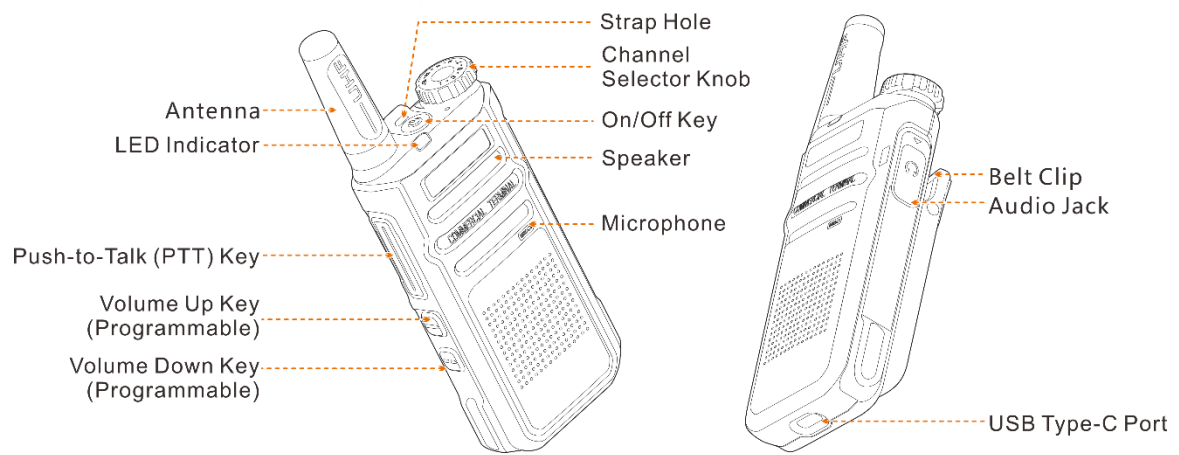
Unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

Item	Quantity (PCS)	Item	Quantity (PCS)
Radio	1	Strap	1
Belt Clip	1	Documentation Kit	1

 **NOTE**

Figures in this manual are only for reference.

2. Product Layout



NOTE

To assign other features to programmable keys, contact your dealer.

3. Before Use

3.1 Charge the Battery

CAUTION

- 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).

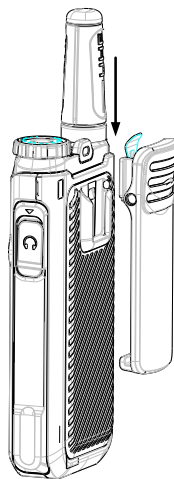
Use the USB Type-C cable to connect the radio with battery attached to the power adapter, power bank, or PC.

You can learn the charging status through the LED indicator.

LED Indicator	Charging Status
Glows red	The battery is being charged.
Flashes red once every 1s	The battery fails to be charged.
Glows green	The battery is fully charged.

3.2 Attach 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.



NOTE

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

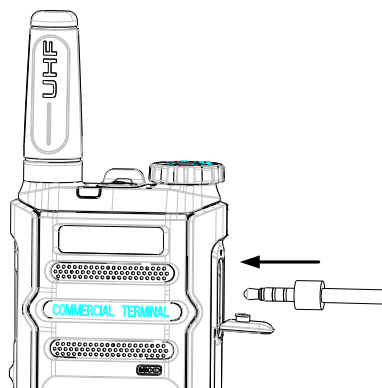
3.3 Attach the Audio Accessory

CAUTION

For optimal waterproof and dustproof performance, do as follows:

- Attach the accessory with care to avoid scraping the silicone rubber surrounding the audio jack.
 - Close the audio jack cover after removing the accessory.
-

1. Open the audio jack cover.
2. Insert the audio accessory plug into the audio jack.



4. Basic Operations

4.1 Turn On or Off the Radio

Long press the **On-Off** key.

4.2 Check the Battery Power

Press the preprogrammed **Check Battery Power** key.

You can learn about the remaining battery power through the LED indicator and Text To Speech (TTS).

LED Indicator	TTS	Battery Level
Glows green for 2s	Battery power level 3	High
Glows orange for 2s	Battery power level 2	Medium
Glows red for 2s	Battery power level 1	Low

4.3 Force Restart the Radio

If the radio fails to work properly, you can force restart the radio.

1. (Optional) Disconnect the USB Type-C cable from the radio.
2. Long press the **On-Off** key for over 13s.

4.4 Adjust the Volume

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

4.5 Select a Zone

A zone is a group of channels within the same operational area. The radio supports 2 zones, each of which consists of up to 16 channels.

To select a zone, press the preprogrammed **Zone Up** or **Zone Down** key.

4.6 Select 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.

To select a channel, rotate the **Channel Selector** knob.

4.7 Make a Call on Analog Channel (Without Signaling)

To ensure optimal voice quality on the receiving radio, keep the microphone about 2.5 cm to 5 cm away from your mouth during speaking.

On an analog channel without signaling, you can initiate a call to all the other users on the channel.

1. Rotate the **Channel Selector** knob to select an analog channel.
2. Press and hold the **PTT** key.

5. Operating Status

You can learn the radio status through the LED indicator.

LED Indicator		Radio Status
Flashes green		The radio is being turned on.
Glowes red		The radio is transmitting.
Glowes green		The radio is receiving.
Flashes red	Once every minute	The battery power is low.
	Once every 0.2s	The radio is being programmed.
Flashes orange slowly		The radio is scanning.
Glowes orange		The call is on hold.

6. Supplementary Services

NOTE

To configure the features in this chapter, contact your dealer.

6.1 VOX

Voice Activated Transmit (VOX) allows the voice to trigger transmission. 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. VOX Gain preprogrammed by your dealer is used to control the sensitivity of microphone transmission.

To enable or disable VOX, press the preprogrammed **VOX** key.

6.2 Power Level

Power Level 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.

To adjust the power level, press the preprogrammed **Adjust Power Level** key.

6.3 Scan

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

To enable or disable Scan, press the preprogrammed **Scan** key.

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

6.4 Squelch

6.4.1 Squelch Off

Squelch keeps the speaker unmuted regardless of whether carrier exists, during which the radio sounds background noise.

To enable Squelch, press the preprogrammed **Squelch Off** key.

6.4.2 Squelch Level

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.

To adjust Squelch Level, press the preprogrammed **Adjust Squelch Level** key.

6.5 Scrambler

Scrambler 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.

To enable or disable Scrambler, press the preprogrammed **Scrambler** key.

6.6 Monitor

Monitor allows the radio to receive more signals including weak signals, and helps you to recognize weak voices in the speaker.

To switch between Monitor Squelch Mode and Receive Squelch Mode, press the preprogrammed **Monitor** key.

6.7 Talk Around

Talk Around allows you to continue communication in direct mode when the repeater malfunctions or your radio is out of the coverage of the repeater.

To switch between Direct Mode and Repeater Mode, press the preprogrammed **Talk Around** key.

7. Troubleshooting

Phenomena	Analysis	Solution
The radio cannot be turned on.	The battery may have run out.	Recharge the battery.
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.
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.	Reinsert the power adapter to the socket.
	The USB Type-C cable may be poorly connected.	Reconnect the USB Type-C cable.

If the above solutions cannot fix your problems, or you may have some other queries, please contact us or your local dealer for more technical support.

8. Care and Cleaning

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

8.1 Product Care

- Do not pierce or scrape the product.
- Do not drop 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 audio jack cover when no accessory is in use.

8.2 Product Cleaning

CAUTION

Turn off the product before cleaning.

- Clean up the dust and fine particles on the product surface 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.

9. Optional Accessories

CAUTION

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.

10. Abbreviations

Abbreviation	Full Name
IATA	International Air Transport Association
LED	Light-Emitting Diode
PTT	Push-to-Talk
TTS	Text To Speech



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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>