



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. It also includes a troubleshooting guide. Please refer to the corresponding Feature Book for detailed features and operations.

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

This manual is applicable to the following product:

PD982i Digital Trunking Portable Radio

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If you have any suggestions or would like to receive more information, please visit our website at: <http://www.hytera.com>.

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 the 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

Hytera's portable 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 environment 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), push the **Push-To-Talk (PTT)** button. To receive calls, release the **PTT** button. 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 a Hytera-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.

IC Statement

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

Après examen de ce matériel aux conformités aux limites DAS et/ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquérir les informations correspondantes

This device complies with Industry Canada 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.

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

EU Regulatory Conformance

As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of the following directives: 1999/5/EC or 2014/53/EU, 2006/66/EC, 2011/65/EU, and 2012/19/EU.

Please note that the above information is applicable to EU countries only.

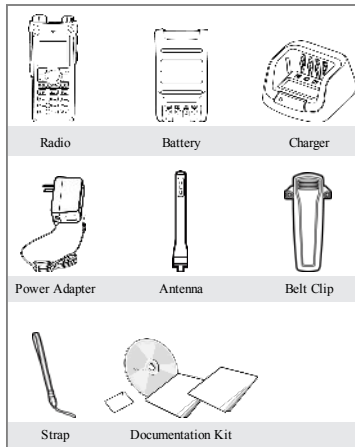
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Items in the Package

Please unpack carefully and check that all items listed below are received. If any item is missing or damaged, please contact your dealer.

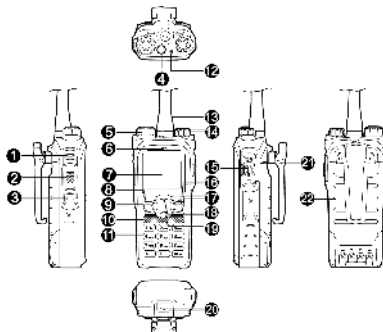


Note

- The pictures in this manual are for reference only.
- The frequency band is marked on the antenna label; if unavailable, see the label on the radio.

Product Overview

Product Controls

















No.	Part Name	No.	Part Name
1	Side Key 1 (SK1)	12	LED Indicator
2	Push-to-Talk (PTT) Key	13	Antenna
3	Side Key 2 (SK2)	14	On-Off/Volume Control Knob
4	Top Key (TK)	15	Accessory Connector
5	Group Selector Knob	16	Back Key
6	Microphone	17	BackDial/End/Home Screen Key
7	LCD Display	18	Up Key
8	OK/Menu Key	19	Down Key
9	Answer/Redial/Call Key	20	Battery Latch
10	Speaker	21	Belt Clip
11	Numeric Keypad	22	Battery












Note










You can adapt your radio to use the **TK**, **SK1**, and **SK2** as shortcuts to various radio features by requesting your dealer to program the keys. For the detailed introduction, refer to the corresponding Feature Book included with the product.

LCD Icon

Icon	Radio Status
	The GPS feature is enabled, and the radio receives GPS data.
	The GPS feature is enabled, but the radio receives no GPS data.
	The number of bars (0–3) indicates the charge remaining in the battery.
	The radio is set at Low power.
	The radio is set at High power.
	An accessory is connected.

Icon	Radio Status
	One or more work orders are received.
	The maximum number of saved work orders is reached.
TM-DW	The radio register switch multiple base stations (BSs) connected via the network.
TM-DL	The radio registers with a single BS.
	The radio is in emergency alarm mode.
	The radio is roaming.
	The Encrypt feature is enabled.
	The radio is hunting. This icon will not appear during the Background Hunt, HomeStation Hunt or Handover.
	The Voice Operated Transmit (VOX) feature is enabled.
	There is/are missed call(s).

Icon	Radio Status
	There is/are unread short message(s).
	The Inbox is full.
	There is/are unread status message(s).
	The BT feature is enabled.
	The wireless device is connected.
	There is no signal in TM-DW mode.
	The number of bars (1–4) indicates the radio signal strength in TM-DW mode.
	There is no signal in TM-DL mode.
	The number of bars (1–4) indicates the radio signal strength in TM-DL mode.
	The speaker is unmuted.
	The radio operates in silent mode.

Icon	Radio Status
	The Loudness and Quality Optimizer (LQO) feature is enabled.
	The Call Divert feature is enabled.
	A half-duplex private call is in progress.
	The Mode Automatic Switch feature is enabled.
	No Micro SD card is detected.
	A private call is in progress or a private contact is in the contact.
	A group call is in progress or a group contact is in the contact.
	An all call is in progress.
	An include call is in progress.

LED Indicator

LED Indication	Radio Status
Flashes green	Being turned on.
Flashes green slowly	Standby.
Glow green	Receiving.
Glow red	Transmitting.
Flashes red (on the calling radio)	Establishing a call.
Flashes orange rapidly (on the called radio)	Establishing a Full Off Air Call Set-Up (FOACSU) private call.
Flashes orange slowly	Hunting.
Glow orange	Call hang time: No voice is being transmitted or received on the traffic channel during a call. Within such a period, you can press and hold the PTT key to speak.
Glow blue	The BT feature is being enabled.
Flashes blue every 3s	The BT feature is enabled, but no wireless device is

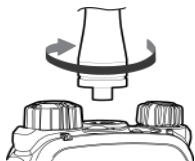
LED Indication	Radio Status
	connected.
Flashes blue every 1.5s	The wireless device is connected.
Flashes blue every 0.1s	The BT feature is being disabled.

Before Use

Attaching the Antenna

Caution

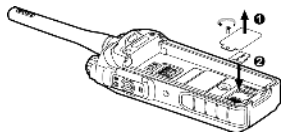
- Rotate the antenna clockwise until hand tight; if over tightened, the antenna or its connector may be damaged.
- Do not hold the radio by its antenna, as it may reduce the radio performance and life span of the antenna.



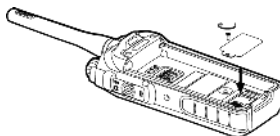
Installing the Micro SD card

Install the Micro SD card as follows (if required):

1. Loosen the screw fixing the Micro SD card cover, remove the cover, and then place the card in the holder correctly as shown below.



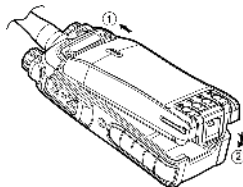
2. Replace the cover and tighten the screw as shown below.



Attaching the Battery

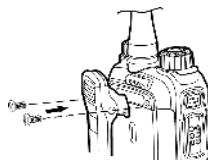
Note

- Upon power-on, the radio automatically checks if the battery is approved by Hytera and gives a corresponding indication.
- Using an unapproved battery makes the battery power indication inaccurate and reduces the radio performance.



Attaching the Belt Clip

1. Unfasten the two screws on the back of the radio.
2. Align the screw holes on the belt clip with those on the back of the radio, as shown below.
3. Tighten the screws.



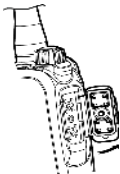
Attaching the Accessories

Caution

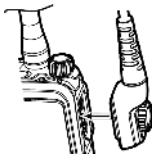
For optimal waterproof and dustproof performance:

- Do not scrape the silicone waterproof pad surrounding the screw hold of the accessory connector.
- Do close the accessory connector cover and fasten the screw after removing the accessory.

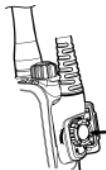
1. Loosen the screw fixing the accessory connector cover, and open the cover as shown below.



2. Align the accessory (such as an audio accessory or a programming cable) plug with the accessory connector.



3. Tighten the screw on the accessory plug.



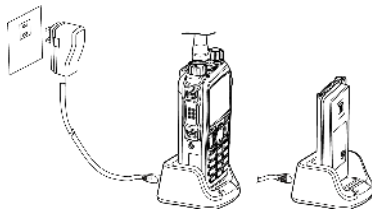
Charging the Battery

Caution

Use the charger specified by Hytera to charge the battery.

Be sure to charge the battery fully before initial use, since reduction of state of charge (SoC) may lead to low battery alarm. You can charge the standalone battery or the radio with battery attached.

It is recommended that your radio remain powered off during charging.







The LED indicator on the charger shows the charging status. For details, see the following table.

LED Indication	Charging Status
Flashes red slowly	The battery is inserted incorrectly.
Glows red	The battery is charging.
Glows orange	The battery is charged to 90% or more.
Glows green	The battery is fully charged.
Flashes red rapidly	The battery fails to be charged.

Checking the Battery Power

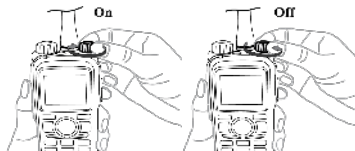
You can check the current battery power by holding down the **Battery Power Indicator** key programmed by your dealer, and release the key to exit. Battery power indications and alert tone are listed below:

Icon	LED Indication/Tone
	The LED indicator glows green.
	The LED indicator glows orange.
	The LED indicator glows red.
	The LED indicator glows red and an alert tone sounds.


* The battery runs low. Please recharge or replace the battery.

Basic Operations

Turning On/Off the Radio



Registering with BS

Upon power-on, the radio automatically hunts the control channels to find an available BS for registration. During hunting, the radio displays "Out of Range" with the icon , the LED indicator flashes orange slowly, and the radio emits the hunt tone.





The radio automatically registers with the found BS for communication. If you want the radio to register with another BS, press the programmed **Manual Current Hunt** key to hunt again.

Adjusting the Volume



Inputting via Keypad

You can use the keypad to enter user aliases or IDs and text messages. Here are some useful tips:

- To switch the input method between alphabetic mode and numeric mode, press .
- To enter special characters, press  in the alphabetic mode or  in the numeric mode.
- To enter a space, press  in the alphabetic mode.

Locking or Unlocking Keys and Knobs

When the keypad is not in use, it is recommended that you lock it to avoid accidental key presses. To lock or unlock the keypad, do one of the following:

- **Automatically** lock or unlock the keypad

The Keypad Lock feature allows the keypad to be locked automatically if no operation is being performed within a preset time period.

To enable this feature, go to **Menu > Settings > Radio Set > Keypad Lock**, select **Enable**, and set **Delay Time(s)** by pressing the **Up** or **Down** key.

To disable this feature, select **Disable** under the **Keypad Lock** menu.

- **Manually** lock or unlock the keypad

To manually lock or unlock the keypad, do one of the following on the home screen:

- ▶ Press the **Keypad Lock** key programmed by your dealer.
- ▶ Press the **OK/Menu** key and then press **OK**.



Note

You can go to **Menu > Settings > Radio Set > Optional Key** to set whether the keys and knobs still function when the keypad is locked.

Selecting a Subgroup

A subgroup is a collection of groups. To select a subgroup, do as follows:

1. Press the **OK/Menu** key or the programmed **Subgroup** key to access the **Subgroup** menu.
2. Select the appropriate subgroup.
3. Select **Set Default**, and press the **OK/Menu** key.

Selecting a Group Contact

You can rotate the **Group Selector** knob to select an appropriate group contact. If no corresponding group contact is preset, the radio will emit a tone and display "No Group Program!" on the screen.

Creating a Private Contact

To add a new contact to the private contact list, go to **Menu > Contact > New Contact**, enter the ID and

alias of the new contact, and save it.



Note

The ID and alias of a new contact must be unique.

Call Services

After the radio is turned on and registered, you can make and receive calls. To ensure optimal voice quality of the receiving radio, keep the microphone about 2.5 to 5 centimeters away from your mouth when the radio is transmitting.




Note


If the radio does not register successfully or an empty group is selected by the **Group Selector** knob, the radio cannot initiate any call.

Group Call

A group call is a call from an individual user to a group of users. In a group call, both the calling party and called parties can speak.

Initiating a Group Call


You can press and hold the **PTT** key to directly initiate a group call to the group contact selected by the **Group Selector** knob. In this case, the radio displays  on the screen.

For other ways to initiate a group call, refer to the corresponding Feature Book  with the product.


Note


If your dealer assigns a group contact to the programmed **One Touch Call/Menu** key, you can initiate a group call to the designated group contact by pressing the key.

Answering a Group Call

You can answer a group call without any operation. After the group call is established successfully, the radio emits a tone and displays  on the screen.

Ending/Exiting a Group Call


You can press  to end an outgoing group call or exit an incoming group call.


For other situations in which a group call is terminated, refer to the corresponding Feature Book  with the product.

Private Call

A private call is a call from an individual user to another individual user.

Initiating a Private Call

1. Go to **Menu** -> **Contact** -> **Favorites/Private Contact**.
2. Use the **Up** or **Down** key to select the contact to be called.
3. Press and hold the **PTT** key to initiate a private call. In this case, the radio displays  on the screen

For other ways to initiate a private call, refer to the corresponding Feature Book  with the product.


Note




If your dealer assigns a private contact to the programmed **One Touch Call/Menu** key, you can initiate a private call to the designated contact by pressing the key.

Answering a Private Call


There are two ways to answer a private call.

• FOACSU

When you receive a private call, the radio emits the incoming call tone and displays  on the screen.


You can press  or press and hold the **PTT** key within the preset time period to answer the call. After the call is established successfully, the radio emits a tone and displays  on the screen. If you do not answer this call, the radio will display  on the screen to notify you of the missed call.

• OACSU

You can answer a private call without any operation. The call is established automatically, and the radio displays  on the screen.

Ending a Private Call

You can press  to end a private call.

For other situations in which a private call is terminated, refer to the corresponding Feature Book  with the product.

Emergency Call

In case of emergency, you can use the Emergency Call feature to ask for help from other personnel or the control center.

This feature needs to be configured and enabled by your dealer. For details, refer to the corresponding Feature Book included with the product.

Message Services

Message services allow you to send and receive text and quick text messages.

Sending a Text Message

To edit and then send a text message, do as follows:

1. Go to **Menu > Message > New Msg**, and then edit the text.
2. Press the **OK/Menu** key, and then select **Send**.
3. Select **Favorites, Private Contact, Group Contact**, or **Manual Dial**.
4. Select the required contact or enter the contact number.
5. Press the **OK/Menu** key to send the text message.

Sending a Quick Text Message

Quick text messages are preprogrammed by your dealer, and you can edit each message before sending it. To send a quick text message, do as follows:

1. Go to **Menu > Message > Quick Text**, and then select the required quick text.
2. (Optional) Edit the quick text.
3. Press the **OK/Menu** key, and then select **Send**.
4. Select **Favorites, Private Contact, Group Contact**, or **Manual Dial**.
5. Select the required contact or enter the contact number.
6. Press the **OK/Menu** key to send the text message.

Sending a Status Message

Status messages are preprogrammed by your dealer, and you cannot edit the messages. To send a status message, do as follows:

1. Go to **Menu > Message > Status Msg**, and then select the required status message.
2. Press the **OK/Menu** key, and then select **Favorites, Private Contact, Group Contact**, or **Manual Dial**.
3. Select the required contact or enter the contact number.
4. Press the **OK/Menu** key to send the text message.

Viewing a Received Message

To view a received message, do as follows:

1. Go to **Menu > Message > Inbox > Inbox List**, and then select the message to be viewed.
2. Press the **OK/Menu** key to view the details.

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 run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirty or damaged battery contacts.	Clean the battery contacts or replace the battery.
The radio cannot register.	The radio may not detect signals from the BS.	Make sure the radio is within the coverage of the BS.
	The radio may not be authorized.	Contact the BS manager to check if the radio is authorised in the network management system.
The radio registers repeatedly.	The signal may be intermittent.	Make sure the radio is within the coverage of the BS.
The radio cannot establish a call.	The signal may be weak.	Make sure the radio is within the coverage of the BS.
The called party disconnects repeatedly during communication.	The signal may be intermittent or weak.	Make sure the radio is within the coverage of the BS.
The voice is unclear.	The signal may be weak.	Make sure call participants are within the communication range.

Phenomena	Analysis	Solution
During reception, the voice is weak, intermittent or totally inactive.	The battery power may be low.	Recharge or replace the battery.
	The volume level may be low.	Increase the volume by rotating the On-Off/Volume Control knob clockwise, or request your dealer to disable the Digital MIC AGC feature.
	The antenna may be loose or may be installed incorrectly.	Turn off the radio, and remove and then reattach the antenna.
	The speaker may be blocked.	Clean the surface of the speaker.
You cannot communicate with other group members.	The signal may be weak.	Make sure you and the group members are within the communication range.
You are unable to hear anyone because of too much noise and hiss.	The signal may be weak.	Make sure call participants are within the communication range.
	You may be located in an unfavorable position. For example, your communication may be blocked by high buildings or blocked in an underground area.	Move to an open and flat area, and restart the radio to try again.
	It could be the result of external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
You cannot use the keys.	The keypad may fail to function temporarily.	Restart the radio.
The LCD does not display any information.	The LCD may fail to function temporarily.	Restart the radio.

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

Care and Cleaning

To guarantee optimal performance as well as a long service life of the product, please follow these tips.

Product Cleaning

 **Caution**

Turn off the product and remove the battery before cleaning.

- Clean up the dust and fine particles on the products surface and charging piece 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 the product is completely dry before use.

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 antenna or earpiece cable.
- Close the accessory connector cover when no accessory is in use.

Optional Accessories

Contact your local dealer for the optional accessories used with the product.

 **Caution**

Use the accessories specified by Hytera only; otherwise, the Company will not be liable for any loss or damage arising out of the use of any unauthorised accessories.