QUICK REFERENCE GUIDE

PD48X DIGITAL PORTABLE RADIO

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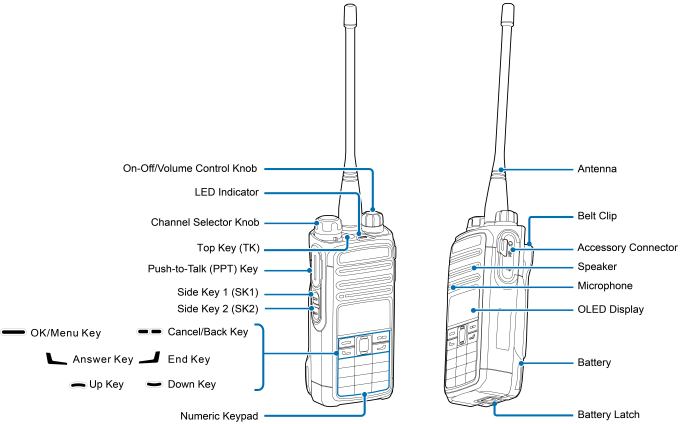
Product Overview



NOTE

For enhanced convenience, you can request your dealer to program **TK**, **SK1**, and **SK2** as shortcuts to assignable radio features. For details, consult your dealer.

Basic Operations

Charging the Battery

⚠CAUTION

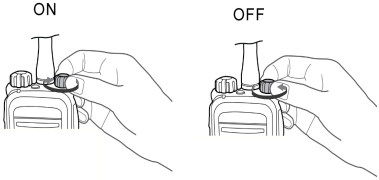
- Read the *Safety Information Booklet* before charging.
- Use the approved charger to charge the battery.
- The remaining lithium-ion battery power is limited to 30% pursuant to the new lithium battery shipment regulation approved by International Air Transport Association (IATA).

Before initial use, charge the battery. You can charge either the standalone battery or the radio with battery attached. It is recommended that the radio remain powered off during charging.

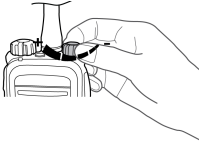
The LED indicator on the charger shows the charging status. For details, see the following table.

LED Indicator	Charging Status	LED Indicator	Charging Status
Glows red	The battery is being charged.	Glows orange	The battery is charged to 90% or above.
Glows green	The battery is fully charged.	Flashes red rapidly	The battery fails to be charged.
Flashes red slowly	No battery is placed on the charger.	/	/

Turning the Radio On or Off



Adjusting the Volume



Locking or Unlocking the Keypad

When the keypad is not in use, it is recommended that you lock it to avoid unintended operations.

To lock or unlock the keypad, do either of the following:

- Press the preprogrammed **Keypad Lock** key.
- On the home screen, press the **OK/Menu** key and then press *.

To allow the keypad to be locked automatically, do as follows:

1. Go to **Menu** > **Settings** > **Radio Set** > **Keypad Lock**.
2. Select **Enable**, and then set **Delay Time** by pressing the **Up** or **Down** key.

NOTE

You can go to **Menu** > **Settings** > **Radio Set** > **Optional Key** to set whether the **PTT** key, programmable keys, **Channel Selector** knob, and **On-Off/Volume Control** knob still work when the keypad is locked.

Using the Keypad

You can use the keypad to enter contact aliases or IDs, and edit messages.

- To switch the input method between alphabetic mode and numeric mode, press #.
- To enter special characters, press 1 in alphabetic mode or * in numeric mode.
- To enter a space, press * in alphabetic mode.

Selecting a Zone

In conventional mode, a zone is a group of channels within the same operational area. The radio supports up to 16 zones, each of which contains up to 16 channels.

To select a zone, do either of the following:

- Go to **Menu** > **Zone**, and then select the zone.
- Press the preprogrammed **Zone Up** or **Zone Down** key.

Selecting a Channel

The radio receives and transmits data and voice on the selected channel. Before selecting a channel, make sure that the current zone contains the channel.

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

Status Indications

LCD Icons

Icon	Radio Status
DM	Direct Mode: The radio transmits and receives directly.
RM	Repeater Mode: The radio transmits and receives through a repeater.
	The number of bars indicates the power left in the battery.
	The radio detects no signal.
	The number of bars indicates the signal strength.
	The radio is set at low power.
	The radio is set at high power.
	An accessory is connected.
	The radio is in emergency mode.
	There is/are missed call(s).
	There is/are unread short message(s).
	The InBox is full.

Icon	Radio Status
	● A private call is in progress. ● A private contact is on the contact list.
	● A group call is in progress. ● A group contact is on the contact list.
	● An all call is in progress. ● An all call contact is on the contact list.

LED Indications

LED Indicator	Radio Status
Flashes green	The radio is being turned on.
Glows green	The radio is receiving.
Glows red	The radio is transmitting.
Flashes orange slowly	The radio is scanning or roaming.
Flashes orange rapidly	The radio is working in emergency mode.
Glows orange	Call hang time: No voice is being transmitted or received on the channel during a call. Within such a period, you can press and hold the **PTT** key and speak.

Call Services

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.

Call on Digital Channel

You can initiate or receive the following types of calls on a digital channel:

- Private call: a call from an individual user to another individual user.
- Group call: a call from an individual user in a group to all the other members in the group.
- All call (enabled by your dealer): a call from an individual user to all the other users on the current channel.

Initiating a Call

When initiating a private, group, or all call, the radio displays , , or respectively.

You can initiate a call in any of the following ways:

- On the home screen, press and hold the **PTT** key to initiate a call to the private, group, or all call contact preset for the current channel.
- Go to **Menu** > **Contact** > **Contact List** / **Favorite Contact**, select the private, group, or all call contact, and then press the **PTT** key.
- On the home screen, press or the preprogrammed **Contact List** key, select the private, group, or all call contact, and then press the **PTT** key.
- Go to **Menu** > **Call Logs** > **Outgoing/Incoming/Missed** > **Outgoing List** / **Incoming List** / **Missed List**, select the private contact, and then press the **PTT** key.
- Go to **Menu** > **Contact** > **Manual Dial**, press to switch the private contact or group contact interface, enter the contact ID, and then press the **PTT** key.

NOTE

With the One Touch Call feature configured by your dealer, you can press the preprogrammed **One Touch Call** key and then the **PTT** key to initiate a private or group call.

Receiving and Responding to a Call

When receiving a private, group, or all call, the radio displays , , or respectively.

You can listen to the call without any operation.

To respond to the call, press and hold the **PTT** key and speak.

Ending a Call

A private or group call ends when the call hang time expires.

An all call ends when the calling party releases the **PTT** key.

Call on Analog Channel

In conventional mode, you can initiate or receive a call on an analog channel with or without signaling.

Call Without Signaling

A call without signaling is a call initiated to all the other users on an analog channel without signaling.

To initiate a call without signaling, rotate the **Channel Selector** knob to select the analog channel, and then press and hold the **PTT** key.

Call With Signaling

A call with signaling is a call initiated to a specific contact on an analog channel with signaling.

To initiate a call with signaling, do as follows:

1. Rotate the **Channel Selector** knob to select the analog channel.
2. Go to **Menu** > **Contact** > **Contact List**, and then select the contact.
3. Press and hold the **PTT** key and speak.

Emergency Call

In case of an emergency, you can initiate an emergency call to seek help from your companion or the control center. With the highest priority, the emergency call can be initiated even when the radio is transmitting or receiving.

This feature is configured and enabled by your dealer. For details, refer to the *User Manual*.

Message Services

The radio can send and receive short messages, which include text messages and quick text messages.

- Text message: a message containing text and editable.
- Quick text message: a frequently used text message predefined by your dealer.

Viewing a Message

To view a newly received message from the home screen, press the **OK/Menu** key.

To view a received or sent message from the InBox or OutBox, go to **Menu** > **Message** > **InBox**/**OutBox** > **Inbox List**/**Outbox List**, and then select the message.

Sending a Message

Sending a Text Message

To send a text message, do as follows:

1. Go to **Menu** > **Message** > **New Msg**, and then type the text using the keypad.
2. Press the **OK/Menu** key, and then select **Send**.
3. Select the contact or enter the contact ID, and then press the **OK/Menu** key.

Sending a Quick Text Message

To send a quick text message, do as follows:

1. Go to **Menu** > **Message** > **Quick Text**, and then select the quick text message.
2. Press the **OK/Menu** key, and then select **Send**.
3. Select the contact or enter the contact ID, and then press the **OK/Menu** key.

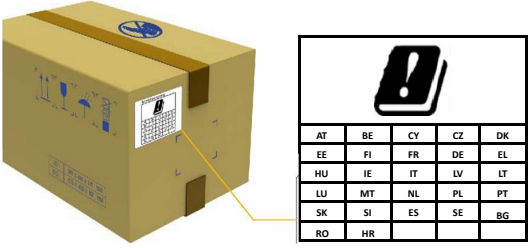
Deleting a Message

To delete a message, do as follows:

1. Go to **Menu** > **Message** > **InBox/OutBox/Drafts** > **Inbox List/Outbox List/Drafts List**, and then select the message.
2. Press the **OK/Menu** key, and then select **Delete**.
3. Press the **OK/Menu** key.

The product supports Bluetooth EDR, BDR and BLE 1M function

For details on more features and operations, please visit our website at: http://www.hytera.com, or scan the QR code to download the *User Manual*.



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.

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 conformité 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 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.
Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes :
1.Cet appareil ne doit pas provoquer d'interférences.
2.Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

L'exposition aux champs rf de conformité et de contrôle d'orientations et instructions

Pour contrôler l'exposition et s'assurer de la conformité avec les limites d'exposition professionnelle / environnement contrôlé, toujours respecter les procédures suivantes.
Lignes directrices:
Ne pas enlever l'étiquette de l'appareil d'exposition aux radiofréquences.
Sensibilisation des utilisateurs instructions devraient accompagner dispositif lorsque transférés à d'autres utilisateurs.
Ne pas utiliser cet appareil si les exigences opérationnelles décrites ci - après ne sont pas remplies.
Les instructions de fonctionnement:
Transmettre non plus que le facteur d'utilisation nominal de 50% du temps.à transmettre (parler), pousse le pousse à parler (ptt). Pour recevoir des appels, les ptt.50% du temps de transmission, ou moins, est important parce que la radio génère de l'énergie rf seulement lors de la transmission des (en termes de mesure de la conformité aux normes).
Ie groupe de la radio continue d'au moins 2,5 cm de la surface.garde la radio à la bonne distance est important, car l'exposition aux champs rf diminue avec la distance de l'antenne.l'antenne doit se tenir loin du visage et des yeux.

Quand portés sur le corps, toujours place de la radio dans un étui, hytera approuvé titulaire, ou un harnais ou par l'utilisation de la vidéo pour ce produit.utilisation des accessoires non approuvés peuvent entraîner des fac qui dépassent les niveaux d'exposition professionnelle et environnementale contrôlée des limites d'exposition aux rf.
Les opérations doivent satisfaire aux deux conditions suivantes:
Ce dispositif peut ne pas causer d 'interférences nuisibles.
Ce dispositif doit accepter toute interférence reçue,
Y compris les interférences qui peuvent provoquer des accidents.Operation
Non approuvé des antennes, les piles et les accessoires causes la radio à dépasser les lignes directrices sur l'exposition aux radiofréquences de fac.
Communiquez avec votre distributeur local pour les accessoires facultatifs du produit.

SAR tests are conducted using standard operating positions accepted by the FCC/ISEDC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value.
Before a new model device is a available for sale to the public, it must be tested and certified to the FCC/ISEDC that it does not exceed the exposure limit established by the FCC/ISEDC, Tests for each device are performed in positions and locations (worn on the body)as required by the FCC/ISEDC.
For face-up, 25mm was used for test, this equipment should be installed and operated with minimum distance 25mm.
For body worn operation, this device has been tested and meets the FCC/ISEDC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal .
Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

Les essais SAR sont effectués à l’aide de positions d’exploitation normalisées acceptées par la FCC/ISEDC avec l’appareil transmettant à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées, bien que le SAR soit déterminé au niveau de puissance certifié le plus élevé, le niveau réel de R-S de l’appareil pendant son fonctionnement peut être bien inférieur à la valeur maximale.
Avant qu’un nouveau dispositif de modèle ne soit disponible à la vente au public, il doit être testé et certifié à la FCC/ISEDC qu’il ne dépasse pas la limite d’exposition établie par la FCC/ISEDC, les tests pour chaque appareil sont effectués dans des positions et des emplacements (portés sur le corps) comme l’exige la FCC/ISEDC.
Pour le face-vers le haut, 25mm a été utilisé pour l’essai, cet équipement doit être installé et actionné avec une distance minimale de 25mm.
Pour un fonctionnement porté sur le corps, cet appareil a été testé et répond aux directives d'exposition RF FCC/ISEDC lorsqu'il est utilisé avec un accessoire conçu pour ce produit ou lorsqu'il est utilisé avec un accessoire qui ne contient pas de métal.
Le non-respect des restrictions ci-dessus peut entraîner une violation des lignes directrices sur l’exposition aux RF.