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WAVE 7000



WAVE 7000 Push-to-Talk for Mobile Devices

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Document History

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About This Manual

This manual provides information about using the Push-To-Talk (PTT) application.

What is Covered in This Manual?

This manual contains the following chapters:

- [Push-to-Talk Icons on page 19](#) describes the indicators on the PTT device.
- [Push-to-Talk Application Description on page 21](#) provides a high-level description of the Push-To-Talk (PTT) application and its features.
- [Push-to-Talk Calls on page 29](#) describes how to make and receive PTT calls.
- [Push-To-Talk Application Administration on page 45](#) describes how to use the PTT application.
- [Troubleshooting of Unexpected Conditions on page 53](#) describes how to troubleshoot PTT application.

Helpful Background Information

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Related Information

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Chapter 1

Push-to-Talk Icons

This chapter describes the Push-to-Talk (PTT) icons available on your device.

1.1

Common Icons

The liquid crystal display (LCD) of your device shows PTT status, text entries, and menu entries. The following icons appear on the device display and are used in the Push-To-Talk (PTT) application. Not all icons used are shown.

Table 1: Common Icons











Icon	Name	Use
	Talkgroups	Displays the Talkgroup screen.
	PSX PTT Application	Starts the application from the Home screen.
	Contacts	Displays the Contacts screen.
	Menu	Shows more options for the screen being displayed.
	Search	Enables the search function for the screen that is displayed.
	Audio Control panel	Configures audio settings for the device and bluetooth accessories when receiving PTT calls.
	PTT Alert Call	Starts the process of an Alert call
	Multi-Select Mode	Select multiple contacts to start a temporary call.
	Private PTT History	Displays session log screen.
	Contact Avatar	Contact detail view.

Table continued...







Icon	Name	Use
	Create New PTT Contact	User can create PTT contacts.
	Signal strength indicators	Indicates network signal strength.

Table 2: Main Session Log Indicators and Icons

Icon	Name
	Start a call to the contact or group. Displays the Private PTT In-session or Call Alert with Acknowledgment screen to start the call.
	Incoming session or alert that was received and shown in the Session Log view. Color is blue.
	Incoming session or alert that was missed and shown in the Session Log view. Color is red.
	Outgoing session or alert. No indication if it was received or missed by the receiver and shown in the Session Log view. Color is green.

Chapter 2

Push-to-Talk Application Description

This chapter describes function and call capabilities of the Push-to-Talk (PTT) application.

- [Push-to-Talk Application Overview on page 21](#)
- [Push-to-Talk Device Key User Features](#)
- [Push-to-Talk Application Call Capabilities on page 26](#)

2.1

Push-to-Talk Application Overview

This section gives an overview of the PSX Push-To-Talk (PTT) application device requirements, provisioning requirements, system requirements, connection requirements, registration requirements, WAVE PTT service requirements, and supported features.

The PSX PTT application offers WAVE PTT services over 4G, 3G, or WiFi network. The quality of service depends on the quality of the data connection.

The PSX PTT application offers a powerful range of capabilities including:

- Call Alert with Acknowledgment
- One-to-One Barge Call and Alert Call
- Multiple types of group calls
- Single talkgroup monitoring
- Talkgroup scanning

PTT contacts are defined either by the PTT App User (Personal Contact) or by the Enterprise Administrator (Enterprise Contact or Group). Individual contacts are defined by each PTT App User for personal use and individual enterprise contacts and talkgroups are always defined and managed by the Enterprise Administrator.

Private calls are calls made to one or a few personal contacts. Talkgroup calls are calls made to a talkgroup which is a large communication group.

Device Requirements

The PSX PTT application allows a Smartphone (or Tablet) to access WAVE PTT services offered by Motorola Solutions. With the following minimal OS specifications:

- The PSX PTT application requires a minimum version of Android 4.4.4 on the handheld device.

Provisioning Requirements

Each PTT user must be provisioned for MSI PTT services. This assigns a unique PTT ID.

All broad-band calls are secure calls (FIPS level 1) and system configurable through the MSI PTT server. Availability of optional features requires system configuration on the MSI PTT server.

System Requirements

The PSX PTT application requires the device is running Android 4.4.4 Operating System or a later release.

Connection Requirements

The PSX PTT application must be able to connect successfully to the MSI PTT server. This requires a successful data connection over WiFi, 3G, or 4G interface.

Registration Requirements

The PSX PTT application must register on the MSI PTT server successfully so the user can make PTT calls. The PSX PTT application requires authentication with an Identity Management token.

WAVE PTT Service Requirement

After the PSX PTT application is installed, the application will auto-start and register with the MSI PTT server whenever the device reboots. The PSX PTT application is always running WAVE PTT service on the device until the user decides to turn **OFF** the WAVE PTT service.

Supported Features

User can use a successfully registered PSX PTT application to access different types of contacts to make different types of PTT calls:

- Personal Contacts
- Personal Groups
- Enterprise Contacts
- Enterprise Talkgroups
 - Single selected talkgroup
 - Scan List of multiple Enterprise Talkgroups
- Broadcast Groups

Users manage different types of PTT Contacts:

- Personal Contact Management
 - Allows user to add, edit, and delete individual PTT contacts (enterprise or non-enterprise).
- Personal Group Management
 - Allows user to add, edit, and delete personal groups.
- Scan List Management
 - Allows user to create, edit, delete, and update Scan Lists made up of talkgroups.

User interfaces with two primary tabs on the PTT application to access contacts and talkgroups:

- **Contacts** tab:
 - Displays the enterprise contact and talkgroup list created and managed by Enterprise Administrator and downloaded by the PSX PTT application.
 - Displays the individual personal contacts, individual Enterprise contacts, and personal group contacts, all defined by the User.
- **Talkgroups** tab:
 - Scan List of talkgroups defined by the user with assigned priority for each talkgroup.

User can use PTT Status to determine availability of a PTT Contact:

- Monitor and display Personal Contact status.
- Monitor and display Personal Group status
- Monitor and display activity of talkgroups

The PSX PTT application supports the following PTT call capabilities:

- Initiate and receive One-to-One Private Calls with a personal or Enterprise Contact
 - Call Alert with Acknowledgment
 - Barge and Alert Calls
- Initiate and receive One-to-Many Private Calls:
 - Call a small group selected ad-hoc by the user
 - Call a small group pre-defined by the user
- Initiate and receive talkgroup calls:
 - Call on a large group pre-defined by the Enterprise Administrator
 - Enable/disable talkgroup Monitoring and Scanning
- Initiate and receive broadcast calls:
 - Call a large group with a high priority pre-defined by the Enterprise Administrator

The PSX PTT application supports the following PTT call-related features:

- Secure or clear calls
- Control of in-call PTT audio level
- Routing of audio to speakerphone, wired-headset, handheld speaker, or bluetooth devices
- Routing of audio to the external speakerphone or internal speaker/mic in handheld mode
- Missed Call notifications for private calls
- History Logs for private calls

The PSX PTT application supports the following features in different device modes:

- PTT call support when device is in vibrate mode

2.1.1

Push-to-Talk Button

A Push-To-Talk (PTT) button is required to start a PTT call or talk during a PTT call. In a half-duplex call, only one person can speak at a time.

PTT app can support either hard PTT buttons on the device or soft PTT buttons. Notifications from hard button press/release are supported on the device platform so that the PTT application will work correctly. Soft PTT button is supported directly within the PTT application.

Hard Push-to-Talk Button

There may be a dedicated PTT hard button on the side of a handheld device. In the absence of a dedicated button, some other available hard button on the device may be configured to serve as a PTT button.



NOTICE: The PSX PTT application is custom-designed to support a dedicated button or a configurable button on selected devices.

Press and hold the **Hard PTT** button to take the floor. While holding the button, speak into the device and your voice can be heard by the other person on the call. Release the **Hard PTT** button to allow other people on the call to take the floor and speak.

Figure 1: Example Device with Dedicated Hard PTT Button



In-App Behavior

When the user selects a target from within the application and presses the **PTT** button, a call is started to the selected target.

Out-of-App Behavior

When the user is outside the application and in any other view on the device, and presses the **PTT** button, a call is started to a default target as follows:

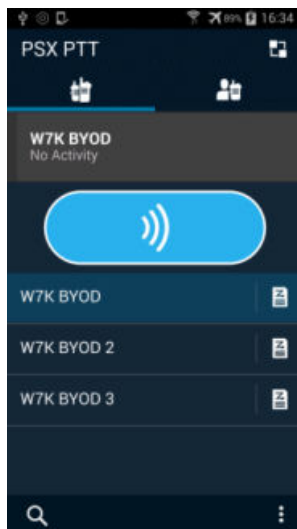
- When scanning is enabled, a call is started to the primary group on the current Scan List.
- When scanning is disabled, a call is started to the last selected talkgroup.

Push-to-Talk On-Screen Soft Button

On a device without hard PTT button support, the PSX PTT application supports a soft PTT button. The soft PTT button is available on the device screen to start a call or to talk during a PTT call.

Press and hold the **Soft PTT** button to take the floor. While holding the **Soft PTT** button, speak into the device and your voice can be heard by the other person on the call. Release the **Soft PTT** button to allow other people on the call to take the floor and speak.

Figure 2: Soft PTT Button on Private Call View

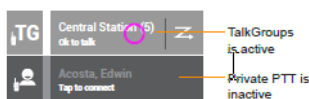


2.1.2

Push-To-Talk Widget

The PSX PTT application has a PTT widget for the Home Screen. The PTT widget allows quick access to PTT calls in progress without opening the PSX PTT application.

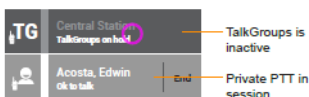
Figure 3: PTT Widget on Home Screen with Active Talkgroups



During and active talkgroup call, the PTT user can use the PTT widget for the following:

- View active talkgroup name and level of participation.
 - For example, "5 members in talkgroup named Central Station"
- Track the progress of an ongoing call with floor status and call status updates.
- Enable/disable scanning by tapping on the scan icon.
- Access the talkgroup list view by tapping on the **TG** icon.

Figure 4: PTT Widget on Home Screen with Active Private PTT Session



When there is an ongoing private call, the PTT user can use the PTT widget to track the call progress on the **Home** screen:

- View name of "caller" in a private call.
- Track progress of an active call with floor and call status updates.
- View "caller" status.
- Tap **End** button to end the call.
- Access the contacts list view by tapping on the private PTT icon.

From the PSX PTT application screen, tap **TalkGroups**  icon, the PSX PTT application opens in **TalkGroups** tab.

From the PSX PTT application screen, tap **Private PTT**  icon, the PSX PTT application opens in **Contacts** tab.

2.2

Push-to-Talk Application Call Capabilities

This section summarizes the call capabilities of the PSX Push-To-Talk (PTT) application.

This section defines the differences between various types of Push-To-Talk (PTT) calls. Availability of optional features requires system configuration on the WAVE server.

Between handhelds, the PSX PTT application supports one-to-one calls and enterprise-wide group calls. All participants in a group call can either talk or listen after someone initiates the group call.

Half-Duplex PTT Call

In a half-duplex call, only one party can talk at a time and all others have to listen. User can start the PTT call by pressing the **PTT** button to transmit (talk) and releases the **PTT** button when done talking. User can continue the call conversation by holding the **PTT** button to take the floor and talk.

2.2.1

Calls Between PTT Handhelds

This section defines the differences between various types of PSX Push-To-Talk (PTT) calls.



NOTICE: Availability of optional features requires system configuration on the WAVE server.

Between handhelds, the PSX PTT application supports one-to-one calls and enterprise-wide group calls. All participants in a group call can either talk or listen after someone initiates the group call.

The PSX PTT application supports the following types of PTT calls:

- Call Alert with Acknowledgment
- One-to-One Barge Call and Alert Call
- Temporary Group Calls
- Personal Group Calls
- Broadcast Group Calls

One-to-One Private Call Types


Call Alert with Acknowledgment

The PTT user selects an individual PTT contact and presses the **PTT** Button. An alert to the callee is requested. The callee has the option of accepting or rejecting the call. While in waiting state, the caller starts hearing tones (when the WAVE server confirms that the callee has received the alert request) to indicate that it is waiting for connection. If the call is accepted, the call proceeds as a regular one-to-one private (barge) call. The call ends when either party ends the call or after call times out.

One-to-One Private (Barge) Calls


The PTT user selects an individual PTT contact and presses the **PTT** button. When the call is established, the caller talks, the transmitting handheld sends the voice and the callee hears the

voice, with the PTT audio barging in on the callee device. The call ends when either party ends the call or after call times out. Private (Barge) calls contact the called party when the call is established. There is no option for the called party to accept or reject the call. Push-to-Talk voice is sent directly to the receiver and audio is played out on the speaker.


 **NOTICE:** One-to-One Private (Barge) or Call Alert with Acknowledgment calls are configurable by the system administrator and only one call type is available.

One-to-One Alert Calls

The PTT user selects an individual PTT contact and presses the **PTT** Button. An alert to the callee is requested. The callee has the option of accepting or rejecting the call. If the call is accepted, the call proceeds as a regular one-to-one private (barge) call. The alert call ends when either party ends the call or after call times out.


 **NOTICE:** One-to-One Private (Barge) and Alert calls are available together depending on the system configuration for Call Alert with Acknowledgment.

One-to-Many Private Call Types

 **NOTICE:** A PTT call ends when the call is ended by the calling party or when call times out and server terminates the call when no one on the call accessed the open talk floor.


Temporary Group Calls

The PTT user selects (ad-hoc) multiple, individual contacts in **Multi-Select** mode and presses the **PTT** Button. A temporary group call is set up between the selected contacts. The call proceeds like any other half-duplex call when only participant talks and all other listen. The temporary group call ends when the initiator ends the call or after call times out.

 **NOTICE:** A temporary group is not saved on the handheld or the server at the end of the call.

Personal Group Calls

The PTT user selects multiple, individual contacts and creates a personal group on the WAVE server. A personal group is visible (on the **Contacts** tab) only to the owner/creator of the personal group. Only the owner can initiate a call to the group and modify the group (rename, add/remove members, and more). Other group members can only receive and respond to a group call when started by the owner of the group. The personal group call ends when the owner/ initiator ends the call or after call times out.

 **NOTICE:** A temporary group can be optionally saved as a personal group using the **Save** icon in **Multi- Select** mode.


Large Communication Group Calls

Talkgroups Calls

The system administrator defines and manages all talkgroups. Scanning and monitoring can be done only on talkgroups. Scanning refers to monitoring of a list of talkgroups whereas monitoring refers to a single talkgroup. In either case, the app user is pulled automatically into a talkgroup which becomes active. The talkgroup call ends when all members leave the call or no member takes the floor for a configured duration of time.

Broadcast Group Calls

The system administrator sets up the broadcast groups. Only selected members are granted the right to initiate a call and only certain members can transmit during the call. All members can hear the call but cannot transmit during the call. The broadcast group call ends when the initiator ends the call.

 **NOTICE:** Broadcast group calls have elevated priority on the system priority. When a device receives a broadcast group call, any other active PTT call is dropped.

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Chapter 3

Push-to-Talk Calls

This chapter describes how to manage the PSX Push-to-Talk (PTT) application, monitor status, and make and receive PTT calls.

- [Push-to-Talk Application On and Off on page 29](#)
- [Push-to-Talk Status on page 30](#)
- [Push-To-Talk Call Handling on page 31](#)

3.1

Push-to-Talk Application On and Off


This section covers how to turn on the application, verify that the application has turned on, turn off the application, and verify that the application has turned off.



NOTICE: Use this feature with caution since PTT calls are not supported after you turn **OFF** the WAVE PTT Service supported by the application.

3.1.1

Turning the Push-to-Talk Application On

Prerequisites: Confirm that the handheld is connected to a network by viewing the signal strength indicators .

When and where to use:

Perform this procedure to turn the PSX Push-to-Talk (PTT) application on. When the PSX PTT application turns on, it connects and registers with the MSI PTT server. Depending on network traffic, a delay may occur before successful registration.

Procedure:


- 1 From the handheld **Home** screen, tap **PSX PTT**  icon.
The **PSX PTT** registration screen displays.

Figure 5: PSX PTT App Icon Home View



- 2 Slide the **PTT Service** switch to **ON**.

PSX PTT application opens in the **Contacts** view.



NOTICE: If the registration is not successful, an error message appears on the **PTT Service** screen and the **PTT Service** switch goes back to **OFF**.

3.1.2

Turning the Push-To-Talk Off

Prerequisites: The PSX Push-to-Talk (PTT) application must be running on the handheld.

When and where to use:

Perform this procedure to turn off the PSX PTT application. When the PSX PTT Application is turned off, it disconnects from the MSI PTT server.

Procedure:

- 1 From the **PSX PTT** screen, tap **Contacts**.
- 2 From the drop-down **Menu** key, select **Settings**.
- 3 Tap **PTT Service** slider to **OFF**.

3.2

Push-to-Talk Status

Personal Contact Status

Contact status is shown in all screens related to personal PTT contacts and allows the user to check the availability of a personal contact for a PTT call.

The status of a contact can be:

- Offline
- Available
- Busy

- 1 If status is *Offline*, the PTT contact is not reachable for a PTT call.
- 2 If status is *Busy*, the PTT contact is requesting a DO NOT DISTURB.
- 3 If status is *Available*, the PTT contact is reached in any type of PTT call.

Personal Group Status

Group status is shown for each personal group in **All** list view from the **Contacts** tab. User can check the availability of a personal group for a PTT call.

The status of a group can be:

- *Offline*
- *Available*

If status is *Offline*, the personal group is not available. If status is *Available*, the PTT group is available.



NOTICE: If at least one other member (than yourself) is available, the status of a personal group is shown as *Available*.

Talkgroup Status

Talkgroup status is shown for each talkgroup in the **Talkgroup** list view. User can check the activity on any talkgroup. The status of a talkgroup can be:

- No visual indication implies “no activity”
- Visual indication implies “activity” on the talkgroup



NOTICE: The status of a talkgroup is marked “active” when a call has is activated on the talkgroup by some member of the talkgroup.

If the talkgroup is being monitored either alone or on a scan list, the PSX PTT application auto-joins the user into that active talkgroup based on priority. The “activity” status enables the user to manually select any “active” talkgroup and join the call, at any time.

3.2.1

Status of Contacts

The status of PTT contacts is shown in the PTT Contacts screens, the PTT Session Log screens, and can be shown in the Android people list. The status of a contact can be:

- *Offline*
- *Available*

If the contact is not connected to and registered with a PTT server, the status shown is *Offline*.

If the contact is connected to and registered with the PTT server, the My Status values shows *Available* of the contact is shown.

When the PTT contacts are synchronized with the Android people list, see [see Turning the PTT Application On and Off on page 27](#), the PTT contacts are added to the Android people list contacts. The Android people list contacts are not added to the PTT contacts. The status of the PTT contacts is shown in both the Android people list and the PTT application.

3.3

Push-To-Talk Call Handling

This section describes how to make and receive the following Push-to-Talk (PTT) calls:

- [Initiate and Receive One-to-One Private Calls to a Personal or Enterprise Contact on page 32](#)
- [Initiate and Receive Multiple Private Calls on page 34](#)

- [Talkgroup Monitoring and Scanning on page 36](#)
- [Initiating a Broadcast Group on page 43](#)

3.3.1

Initiate and Receive One-to-One Private Calls to a Personal or Enterprise Contact

Initiate and receive one-to-one Private Calls with an individual personal contact or Enterprise Contact.




3.3.1.1

Call Alert with Acknowledgment

When and where to use:

Perform this procedure to make a Call Alert with Acknowledgment. Call Alert with Acknowledgment calls contact the called party with an option for the called party to accept or reject the call.

Procedure:

- 1 From the **PSX PTT** main screen, tap **Contacts** .
- 2 Scroll up and down or use the **Search** icon and verify the contact is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.
 **NOTICE:** The contact list does not indicate the contact is secure or non-secure.
- 3 Tap the name of the contact to start a call.
- 4 Wait for the receiver to accept or reject the call.
 **NOTICE:** After the call is connected, if using a soft PTT button, either sender or receiver can initiate the PTT call. If using a hard PTT button, only the receiver is able to initiate the PTT call.

3.3.1.1.1

Receiving a Call Alert Acknowledgment Call

This information applies to a handheld that is locked or unlocked.

When a Call Alert Acknowledgment call is received, a **PTT call Invitation** message with **Ignore** and **Connect** are displayed.

- If **Ignore** is selected, the call does not complete and the original screen is displayed. The sender is informed that the target did not accept the call.
- If **Connect** is selected, the **PTT In-Session** screen automatically displays.

3.3.1.2


Making a One-to-One Barge (Private) Call

When and where to use:

Perform this procedure to make a one-to-one private call between two people. Barge (Private) calls contact the called party as soon as the call is established. There is no option for the called party to


accept or reject the call. Push-to-Talk voice is sent directly to the receiver and audio is played out on the speaker.

Procedure:

- 1 From the **PSX PTT** main screen, tap **Contacts** .
- 2 Scroll up and down or use the **Search** icon and verify the contact is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.



NOTICE: The contact list does not indicate the contact is secure or non-secure.

- 3 Tap the contact name to start a PTT call. Do not tap .
- 4 Press and hold the **PTT** button and start speaking after the "chirp".
- 5 Release the **PTT** button to listen.
- 6 If your handheld is secure and the called party is not secure, a warning is displayed. Tap **OK** to continue with a clear call.
- 7 Tap **End** to end the call.

3.3.1.2.1

Receiving a One-to-One Barge (Private) Call

This information applies to a handheld that is locked or unlocked.

When a call is received, the **Private PTT In-Session** screen automatically displays. The receiver can hear the caller and can talk to the caller. When the call ends, the original screen is displayed.


3.3.1.3

Making a One-to-One Alert Call

When and where to use:

Perform this procedure to make a One-to-One Alert Call. An Alert call contacts the called party and allows the called party to Ignore or Connect to the call. If Connect is selected, the call is accepted and the call proceeds like a One-to-One Private (Barge) call. If Ignore is selected, the call is not completed and the caller is informed that the call was rejected.

Procedure:

- 1 From the **PSX PTT** screen, tap **Contacts** .
- 2 Scroll up and down or use the **Search** icon and verify the contact is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.



NOTICE: The contact list does not indicate the contact is secure or non-secure.

- 3 Tap . Do not tap the contact name.

An alert is sent to the contact. The contact is given the option to **Ignore** or **Connect**. See [Information on Receiving Calls](#).

3.3.1.3.1

Receiving a One-to-One Alert Call from a Personal or Enterprise Contact

This information applies to a locked or unlocked handheld.

When the alert is received, a PTT call Invitation message with **Ignore** and **Connect** are displayed.

- If **Ignore** is selected, the call does not complete and the original screen is displayed. The sender is informed that the target did not accept the call.
- If **Connect** is selected, the Private PTT In-Session screen automatically displays.

The receiver can hear the caller and can talk to the caller. When the call ends, the original screen is displayed.

3.3.1.4

Making a One-to-One Private Call Using the Android People List

When and where to use:

Perform this procedure to make a one-to-one private call from the Android people list.

Procedure:

- 1 From the handheld **Home** screen, tap the **All Apps** button.
- 2 Tap **PEOPLE** icon.
The icon is determined by the operating system and the phone manufacturer.
- 3 From the people list, tap the name of a PTT contact.
A PTT contact displays a circle and/or status under their name. The status shown is either available or no status unknown.
- 4 Perform a one-to-one private call:
 - For Call Alert with Acknowledgment, see [Call Alert with Acknowledgment on page 32](#).

3.3.2

Initiate and Receive Multiple Private Calls

Initiate and receive one-to-many Private Calls. Make a PTT call on a small group selected ad-hoc by the user (Temporary group calls) or PTT call on a small group pre-defined by the user (Personal group calls).

3.3.2.1

Calling a Personal Group

When and where to use:

The individual handset user creates and stores a personal group in the device. Only that device can initiate a call to the personal group. The group members can receive the Push-to-Talk (PTT) group call,

the group members can talk during the call, but group members cannot initiate a new PTT call to the personal group.

The group is *Available* if one or more members of the group are *Available* or *Busy*. The group is *Offline* if all members are not available. To create a personal group, see [Adding a Personal Group on page 49](#).

Procedure:

- 1 From the **PSX PTT** screen, tap **Contacts**.
- 2 Scroll up and down or use the **Search** icon and verify the group is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.
- 3 Tap the name of the group.
- 4 Press and hold the **PTT** button and start speaking after the "chirp".
- 5 Release the **PTT** button to listen.

If any members are *Available* or *Busy*, an active session begins and the caller sees an **OK to Talk** message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, everyone sees an **OK to Talk** message. When any member presses and holds the **PTT** button, they see a **Talking** message and the other members see a message showing the name of the member talking.

- 6 Tap **End** to end the call.

3.3.2.1.1

Receiving a Personal Group Call

This information applies to a locked or unlocked handheld.

When a call is received, the *Private PTT In-Session* screen automatically displays and indicates that it is a group call. The receiver can hear the caller and can talk to the caller. When the call ends, the original screen is displayed.

The caller sees an *OK to Talk* message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, everyone sees an *OK to Talk* message. When any member presses and holds the **PTT** button, the members see a *Talking* message and a message showing the name of the member talking.

3.3.2.2

Calling a Temporary Group

When and where to use:

Perform this procedure to create a Temporary Group. Temporary Groups are not stored in the handheld and only that handheld user can initiate a call to the Temporary Group. The group members can receive the Push-to-Talk (PTT) group call, the group members can talk during the call, but group members cannot initiate a new PTT call to the Temporary Group. Both secure and non-secure members are allowed in the Temporary Group.

Procedure:

- 1 From the **PSX PTT** screen, tap **Contacts**.



2 Tap Multi-Select Mode

The **Individuals** screen displays.

3 Select the check box for each contact to add to the group.

Contacts can be added to the group even if the status of the contact is Offline.



4 From the bottom of the screen, tap  **icon to call the temporary group.**

5 Press and hold the PTT button and start speaking after the "chirp".

6 Release the PTT button to listen.

If any members are Available or Busy, an active session starts. The caller sees an **OK to Talk** message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, everyone sees an **OK to Talk** message. When any member presses the **PTT** button, they see a Talking message and the other members see a message showing the name of the member talking.

7 Tap End to end the call.

3.3.2.2.1

Receiving a Temporary Group Call

This information applies to a locked or unlocked handheld.

If any members are Available or Busy, an active session starts. The caller sees an **OK to Talk** message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, everyone sees an **OK to Talk** message. When any member presses the **PTT** button, they see a Talking message and members see a message showing the name of the member talking.

3.3.3

Talkgroup Monitoring and Scanning

This section describes the concepts and interactions of monitoring, scanning, talkgroups, and talkgroup scan lists.

Talkgroups

The MSI Push-to-Talk (PTT) server sets up and controls talkgroups and members of talkgroups. talkgroups and members are set up on the MSI PTT server and pushed down to specified users. Not all users have access to all talkgroups. An individual user cannot add, delete, or modify a talkgroup.

Secure Talkgroups

A talkgroup is considered secure if all of the members in the talkgroup are secure. The talkgroup is listed with a lock icon if it is secure. Only secure users have access to secure talkgroups.

Monitoring Talkgroups

The user can have access to many talkgroups but activity can be monitored only for one talkgroup at a time. In the **Talkgroups** screen, the talkgroup is selected and the selected group is monitored. The

user uses the device normally, and when there is a call for that one monitored talkgroup, the user hears the call and can respond to it. If there is a call for a talkgroup that the user has access to but is not monitoring, the user does not hear the call. The user can change the monitored talkgroup at any time. The talkgroup being monitored is referred to as the priority group.

When talkgroups are turned off in the application by the user, there is no monitoring of talkgroups for that specific user.

Scan Lists

There is a maximum of ten scan lists in the app for a particular user. In a single scan list, there is a maximum of nine members plus the selected talkgroup for a total of ten.

A scan list is created for a talkgroup. Any talkgroup can have a list and more than one talkgroup can have a list at the same time. A talkgroup can only have one list. A talkgroup that has a list is called a priority talkgroup.

The members of a scan list are other talkgroups. The scan list may contain both secure and nonsecure talkgroups. The user decides which talkgroups have a scan list and which talkgroups are members of the list. The user creates, deletes, and edits scan lists.

Scanning

Scanning refers to monitoring the talkgroups that are part of a specific scan list. Scanning can be turned on and off for each individual list. It has no effect on monitoring the priority talkgroup.

When a talkgroup is selected, monitoring of that priority talkgroup starts (if talkgroups are turned on). If that talkgroup has a scan list, then scanning of the groups on the scan list also starts. The user can turn scanning off for that scan list.

Call Interaction

When a talkgroup is being monitored and the associated scan list is being scanned, the user hears any calls made to the priority talkgroup and to any of the talkgroups on the list. The priority talkgroup has highest priority and overrides a call from a group on the list. The groups on the list all have equal priority and cannot override each other.

When a priority talkgroup call is in progress, the user does not hear any calls from any of the other groups on the list. The priority talkgroup is auto-joined (above all other ongoing PTT calls) whenever it becomes active. All other talkgroups will be auto-joined in order as they become active.

Nuisance Delete

Nuisance delete refers to temporarily placing a member of a scan list on the Nuisance Deleted Talkgroup List. The activity for a talkgroup on the Nuisance Deleted Talkgroup List is ignored. When the Talkgroup is removed from the Nuisance Deleted Talkgroup List, it is automatically placed back on the scan list.

3.3.3.1

Turning on Talkgroups

When and where to use:

Perform this procedure to run on talkgroups. Talkgroups are turned on by default and must remain on to communicate with a selected group. All talkgroups are turned on or off at the same time.



NOTICE: When the talkgroups are off, tapping any talkgroup in the **Talkgroups** screen automatically turns the talkgroups on and selects that talkgroup.

Procedure:

- 1 From the **PSX PTT** main screen, tap **TalkGroups**.
- 2 From the drop-down menu, tap **Turn on Talkgroups**.

3.3.3.2

Selecting a Talkgroup

When and where to use:

Perform this procedure to select a talkgroup.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.
- 2 Tap a Talkgroup.

The Talkgroup is highlighted and the name and activity is available. The **PTT** button is activated.

3.3.3.3

Turning Off Talkgroups

When and where to use:

Perform this procedure to turn off the talkgroups. Talkgroups are turned on by default. Turn off talkgroups to stop scanning and communicating with the groups. All talkgroups are turned off or on at the same time.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.
- 2 From the drop-down menu, tap **Turn off Talkgroups**.

3.3.3.4

Talkgroup Monitoring and Scanning

This section describes the concepts and interactions of monitoring, scanning, talkgroups, and talkgroup scan lists.

Talkgroups

The MSI Push-to-Talk (PTT) server sets up and controls talkgroups and members of talkgroups. talkgroups and members are set up on the MSI PTT server and pushed down to specified users. Not all users have access to all talkgroups. An individual user cannot add, delete, or modify a talkgroup.

Secure Talkgroups

A talkgroup is considered secure if all of the members in the talkgroup are secure. The talkgroup is listed with a lock icon if it is secure. Only secure users have access to secure talkgroups.

Monitoring Talkgroups

The user can have access to many talkgroups but activity can be monitored only for one talkgroup at a time. In the **Talkgroups** screen, the talkgroup is selected and the selected group is monitored. The user uses the device normally, and when there is a call for that one monitored talkgroup, the user

hears the call and can respond to it. If there is a call for a talkgroup that the user has access to but is not monitoring, the user does not hear the call. The user can change the monitored talkgroup at any time. The talkgroup being monitored is referred to as the priority group.

When talkgroups are turned off in the application by the user, there is no monitoring of talkgroups for that specific user.

Scan Lists

There is a maximum of ten scan lists in the app for a particular user. In a single scan list, there is a maximum of nine members plus the selected talkgroup for a total of ten.

A scan list is created for a talkgroup. Any talkgroup can have a list and more than one talkgroup can have a list at the same time. A talkgroup can only have one list. A talkgroup that has a list is called a priority talkgroup.

The members of a scan list are other talkgroups. The scan list may contain both secure and nonsecure talkgroups. The user decides which talkgroups have a scan list and which talkgroups are members of the list. The user creates, deletes, and edits scan lists.

Scanning

Scanning refers to monitoring the talkgroups that are part of a specific scan list. Scanning can be turned on and off for each individual list. It has no effect on monitoring the priority talkgroup.

When a talkgroup is selected, monitoring of that priority talkgroup starts (if talkgroups are turned on). If that talkgroup has a scan list, then scanning of the groups on the scan list also starts. The user can turn scanning off for that scan list.

Call Interaction

When a talkgroup is being monitored and the associated scan list is being scanned, the user hears any calls made to the priority talkgroup and to any of the talkgroups on the list. The priority talkgroup has highest priority and overrides a call from a group on the list. The groups on the list all have equal priority and cannot override each other.

When a priority talkgroup call is in progress, the user does not hear any calls from any of the other groups on the list. The priority talkgroup is auto-joined (above all other ongoing PTT calls) whenever it becomes active. All other talkgroups will be auto-joined in order as they become active.

Nuisance Delete

Nuisance delete refers to temporarily placing a member of a scan list on the Nuisance Deleted Talkgroup List. The activity for a talkgroup on the Nuisance Deleted Talkgroup List is ignored. When the Talkgroup is removed from the Nuisance Deleted Talkgroup List, it is automatically placed back on the scan list.


3.3.3.5

Calling a Talkgroup

When and where to use:

Perform this procedure to call a Talkgroup.

Procedure:

- 1 From the **PSX PTT** screen, tap **Talkgroups** .
- 2 Tap the name of a talkgroup.

- 3 Press and hold the **PTT** button and start speaking after the "chirp".
- 4 Release the **PTT** button to listen.

The call remains in the `Waiting` state until a member joins the call. If no members join before the call times out, the session ends and a `No Activity` message displays. If the server cannot process the call, a `temporarily unavailable` message displays.

If at least one member joins before the call times out, an active session starts. The caller sees a `Talking` message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the PTT button, everyone sees an `OK to Talk` message. When any member presses and holds the PTT button, they see a `Talking` message and the other members see a message showing the name of the member talking.

- 5 Tap **End** to end the call.

3.3.3.5.1

Receiving a Talkgroup Call

When the phone is locked and a call is received, the receiver can hear the caller but cannot respond. The handheld must be unlocked and talkgroups selected to enable talking.

When the phone is not locked and a call is received, the screen does not automatically change but the caller is heard. To talk, talkgroups must be selected.

3.3.3.6

Methods of Dropping Out of Talkgroups Calls

To drop out of a talkgroup:

- Select a new talkgroup. This method applies to dropping out of calls from both the primary talkgroup and talkgroups on the scan list. See [Selecting a Talkgroup on page 38](#).
- Turn scanning off. This method applies to dropping out of calls from talkgroups on the scan list. See [Turning Scan On and Off on page 42](#).
- Place the talkgroup on the Nuisance Deleted list making the talkgroup temporarily inactive. This method applies to dropping out of calls from talkgroups on the scan list. See [Placing a Talkgroup on the Nuisance Deleted List on page 42](#).

3.3.3.7

Talkgroup Administration

Talkgroups enable handheld users to monitor and scan group traffic and place group calls across the system. Talkgroups are defined and managed on a WAVE Motorola Push-to-Talk (PTT) Server by a system administrator.

3.3.3.7.1


Creating a Talkgroup Scan List

When and where to use:

Only a Talkgroup can have a scan list. A scan list can contain both secure and non-secure groups.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.
- 2 Tap a Talkgroup.

A scan icon  next to the group name at the top indicates that there is a scan list for this Talkgroup. When the scan icon is not displayed, it indicates that there no scan list for this Talkgroup.

3 Next to the Talkgroup name, tap **Scan List** icon.



IMPORTANT:

- A Talkgroup can have only one scan list.
- There is a maximum of 10 scan lists.
- In a scan list, a maximum of 9 non-priority Talkgroups can be added.

4 Tap **Add TalkGroups** or the plus “+” button.

5 Check the check box next to each group to add to the list and tap **Done**.

6 To return to the **Talkgroups** pane, tap the backwards arrow. Do not tap the plus “+” icon.

3.3.3.7.2

Viewing a Talkgroup Scan List

When and where to use:

Perform this procedure to view a talkgroup scan list.

Procedure:

- 1 From the **PSX PTT** main screen, tap **TalkGroups**.
- 2 Tap the **Scan List** icon for the talkgroup.



NOTICE: If the talkgroup does not have a scan list, the **SCAN LIST** screen displays but does not show any talkgroups. If the talkgroup does have a scan list, the **SCAN LIST** screen displays and shows the talkgroups in the list.

3.3.3.7.3

Editing a Talkgroup Scan List

Prerequisites: A Talkgroup that has a scan list.

When and where to use:

Perform this procedure to edit a talkgroup scan list.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.
- 2 Tap the talkgroup **SCAN LIST** icon you want to edit.
- 3 Perform one of the following actions:

If...	Then...
If you want to delete Talkgroups to remove from the scan list,	a Tap the “X” next to the group name. The group is deleted.
If you want to add Talkgroups to the scan list,	a From the SCAN LIST pane, tap Add TalkGroups .

If...	Then...
	<p>b From the ADD TO LIST pane, select the check box to add a talkgroup.</p> <p>c Tap Done.</p>

3.3.3.8

Turning Scan On and Off

When and where to use:

Perform this procedure to turn scanning on to auto-join calls from the talkgroups in the scan list or to turn scanning off. When scanning is off, primary talkgroup calls are still automatically joined.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.
- 2 Tap a talkgroup.
- 3 Tap the **Scan** icon.

Tapping the icon toggles the scanning state between on and off. Scanning is on when the icon is bright. Scanning is off when the icon is dim .

3.3.3.9

Placing a Talkgroup on the Nuisance Deleted List

Prerequisites: The prerequisites are:

- Scanning is on.
- The Primary Talkgroup is not active.
- A Talkgroup that is a member of a scan list is currently active.

When and where to use: This procedure is also referred to as a Nuisance Delete. A member of the scan list is made temporarily inactive. Activity on the specified talkgroup is ignored. The specified talkgroup can be added back to the scan list. This procedure is only for a member of the scan list and not for the primary talkgroup.

Procedure:

- 1 From the **PSX PTT** screen, tap **TalkGroups**.

The **TalkGroups** screen displays, showing the active member of the scan list at the top.

- 2 Tap the **Nuisance Delete** icon.

The talkgroup is designated as a Nuisance Delete Talkgroup and is not scanned when the scan list is scanned.

3.3.3.10

Placing a Nuisance Deleted Talkgroup Back on the Scan List

Prerequisites: To restore a Nuisance Deleted Talkgroup back to the scan list perform one of the following:


- Toggle scanning off and on.
- Toggle Talkgroup monitoring off and on.
- Exit the application.

- Shut down the handheld.
- Manually restore the Talkgroup to the scan list by performing the following procedure.

When and where to use:

Perform this procedure to place a Nuisance Deleted Talkgroup back on the scan list.

Procedure:

- 1 From the **PSX PTT** screen, tap **Talkgroups** .

The **TalkGroups** screen displays.

- 2 Tap the scan list icon for the Primary Talkgroup containing the scan list with the Nuisance Deleted Talkgroup.

The **SCAN LIST** pane displays the Talkgroups on the scan list and the **Nuisance Deleted TalkGroups** pane displays the Nuisance Deleted Talkgroups. This example shows Police Command as a Nuisance Deleted Talkgroup.

- 3 Tap the **+** for the Nuisance Deleted Talkgroup.

The group is added back to the list and the SCAN LIST screen is updated and remains displayed.

3.3.4

Initiating a Broadcast Group

Prerequisites: The broadcast group member using the handheld is enabled to start a broadcast group call.

When and where to use:

Perform this procedure to call a broadcast group. A system administrator determines the members of a broadcast group, which members can start a broadcast group call, and which members can talk after a call is started. All members in a broadcast group can listen but not all are allowed to talk. Broadcast calls are always non-secure. When a broadcast group session is started, all active sessions for all group members are terminated.

Procedure:

- 1 From the **PSX PTT** screen, tap **Contacts** .

- 2 Scroll up and down or use the **Search** icon and verify the broadcast group is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.

Broadcast Groups will be prioritized and shown at the top of **Groups**.

- 3 Tap a broadcast group.

The **Initiating Broadcast** message displays.

- 4 Tap **Cancel** or **Proceed**.

- 5 Press and hold the **PTT** button and start speaking after the "chirp".

- 6 Release the **PTT** button to listen.

The caller sees a *Talking* message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, members that are enabled to talk see an *OK to Talk* message. When any talk-enabled member presses and holds the **PTT** button, they see a *Talking* message and the other members see a message showing the name of the member talking.

- 7 Tap **End** to end the call.

3.3.4.1

Receiving a Broadcast Group Call

This information applies to a locked or unlocked handheld.

When a call is received, the **Private PTT In-Session** screen automatically displays and indicates that it is a group call. The receiver can hear the caller and can talk to the caller. When the call ends, the original screen is displayed.

The caller sees a *Talking* message. The called group sees the name or the PTT number of the caller and the number of members in the group. The caller is the only one who can speak at the beginning of the call. When the caller releases the **PTT** button, members that are enabled to talk see an *OK to Talk* message. When any talk-enabled member presses and holds the **PTT** button, they see a *Talking* message and the other members see a message showing the name of the member talking.

Chapter 4

Push-To-Talk Application Administration

This chapter covers operation and administration for the Push-to-Talk (PTT) application.

- [Push-To-Talk Settings on page 45](#)
- [Push-To-Talk Audio on page 46](#)
- [Administration of Personal Contacts on page 47](#)
- [Administration of Personal Groups on page 49](#)
- [Private PTT History List on page 51](#)

4.1

Push-To-Talk Settings

The PTT Settings screen allows the user to view, modify, or update system settings.

PTT Service

View and change the Push-to-Talk (PTT) service state.

Account

This display provides access to view and control the user account.

Replace PTT Certificate

View and replace existing RSA certificate loaded on the PTT client. A PTT Secure Password is required.

About PTT

This display provides the release and version identification of the PTT application.

End User License Agreement

End User License Agreement will be read only, after user accepts the agreement.

4.1.1

Displaying and Changing PTT Settings





Prerequisites: Ensure the PTT application is running on the handheld.

When and where to use:

Perform this procedure to display and change Push-to-Talk (PTT) settings.

Procedure:

- 1 From the **PTT Application** screen, tap one of the following: .

- **Contacts** 
 - **Private PTT History** 
 - **Talkgroups** 
- 2 Tap **Menu** .
 - 3 From the drop-down menu, select **Settings**.
 - 4 To change a setting, tap a setting name and select a new value. To view information, tap the name of the information.

4.2

Push-To-Talk Audio

The audio for Push-To-Talk (PTT) can be routed to several different outputs and the volume is controllable for each output. PTT audio can route to the following outputs:

- Handheld speaker
- Handheld earpiece
- Wired headset with or without built-in microphone and PTT
 - Handheld microphone is used if the headset has no microphone.
 - PTT functionality available on wired headset.
- Remote Speaker Microphone
- Bluetooth devices



NOTICE: To be selected and used, Bluetooth devices must have been previously mated to the handheld using the Android and handheld manufacturer procedure. The PTT application does not provide a mating procedure for Bluetooth devices.

The audio volume for each output is individually controlled. When PTT is being used (alerts, listening to a call, and more), the volume is automatically set to the last level set in PTT.

When the operator uses other functions of the phone, the volume resets to the previous non-PTT level.

PTT Audio Output Selection

Tapping an output status icon displays a volume and choice screen. This screen shows the volume setting (length of the slider line), allows the volume to be changed (using the slider), shows the current output of the audio (underlined icon), and allows the audio output to be changed (tapping a selection icon).

The following figures show an example screen for volume and choice screens available for audio routing on the device. The exact display shown on the screen depends on the audio output selected.

Figure 6: Volume and Earpiece on the Device

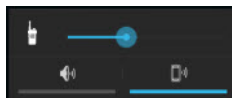


Figure 7: Volume and Attached Earpiece on the Device

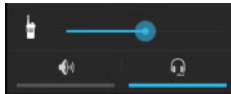
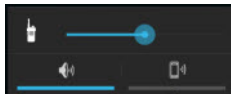






Figure 8: Volume and Speakerphone on the Device



Tap a selection icon to select the audio output:

- Tap  to route audio to the speakerphone.
- Tap  to route audio to the normal handheld speaker/earpiece.
- Tap  to route audio to the headset.
- Tap  to route audio to a Bluetooth device.

PTT Audio Output Volume

Before a call has started, the hard-button on the handheld controls the volume for the PTT Alert tone. After a call has started, the hard-button on the handheld controls the PTT voice audio volume.

Controlling of the PTT voice audio volume is either by the hard-button on the handset, or adjusting the volume slider in the volume and choice screen. The volume slider in a volume and choice screen only controls the voice volume and does not control the Alert tone volume. The Android operating system volume controls do NOT control the PTT voice audio volumes.

The PTT application stores the volume setting for each output separately. When an output is selected, the last setting for that output is used.

4.3

Administration of Personal Contacts

Users define personal contacts and save them in the PTT Contacts list in the device. This section provides the administration of adding, editing, making, and synchronizing your contact list.

4.3.1

Adding a Personal Contact



Prerequisites: You must have the name of the contact, Push-to-Talk email address, and Push-to-Talk number of the contact. Obtain this information from your system administrator.

When and where to use: Perform this procedure to add a personal contact.

Procedure:

- 1 From the **WAVE Private** main screen, tap **Contacts**




- 2 From the **Bottom Action** bar, tap **Add Contact** .
The add contact screen displays.
- 3 In the **PTT Contact** field, type the user PTT email address (example: sample@ptt.net).
- 4 In the **Name** field, type the name of the contact. Last name first and first name last.
- 5 In the **PTT** field, type the PTT number.
 **NOTICE:** The PTT ID must be "xxx-xxx-xxxx" and between 3-16 digits.
- 6 Optional: Tap **Portrait** icon and follow the instructions to add a photo.
- 7 Optional: Tap **More field** to update additional fields as required.
- 8 Tap **Done**.
New contact is created and syncing to the server.

4.3.2 Editing or Deleting a Personal Contact

When and where to use: Perform this procedure to edit or delete a personal contact. Do not use this procedure with contacts added by the system administrator.

Procedure:

- 1 From the **WAVE PTT** main screen, tap **Contacts** .
- 2 Tap on the name of the contact.
- 3 Perform one of the following actions:


If...	Then...
If editing contact information,	From the drop-down Menu , tap Edit and update the appropriate fields.
If deleting the contact,	From the drop-down Menu , tap Delete → OK . The contact is deleted

- 4 Tap **Done**.

4.3.3 Making a Contact a Favorite

When and where to use: Perform this procedure to make a contact a favorite. You can perform this procedure with both personal contacts and contacts added by the system administrator.

Procedure:

- 1 From the **WAVE Private** screen, tap **Contacts** .
- 2 Tap the contact name.

- 3 Tap the **Star** icon.

The Contact is added to the **Favorite Contacts** list.

4.3.4

Turning Push-to-Talk Contacts and Groups Synchronization On and Off

When and where to use:

Perform this procedure to synchronize the PTT contacts and groups to the Android people list. Synchronizing can be automatic by leaving synchronization turned on.



NOTICE: Synchronization does not add Android information to the PTT contacts and groups.

Procedure:

- 1 From the device **Home** screen, tap the **All Apps** button.
- 2 Tap **Settings** → **Accounts** → **Push-To-Talk**.
- 3 Perform one of the following:
 - For automatic synchronization, in the **Contact** pane, check the checkbox.
 - To turn off automatic synchronization, from the **Contact** pane, uncheck the checkbox.
 - To manually sync, from the drop-down menu tap **Sync now**.

4.4

Administration of Personal Groups

Handheld users define Personal Groups and save them in the Push-To-Talk (PTT) Contacts list in the handheld. One or more PTT contacts can be added to the group, even if the contact is Offline. The handheld user who defined the Personal Group is the only one who can initiate a PTT call to that group. Group members can receive the PTT group call and group members can talk during the call, but group members cannot initiate a new PTT call to the group.

The handheld user can modify the Personal Group (rename, add/remove members, and more) at any time, except during a call.

The status of the Personal Group is determined by the status of the members. The Personal Group status is:

- Available if at least one member of the group is available.
- Offline if all the group members are offline.

4.4.1

Adding a Personal Group

When and where to use:


Perform this procedure to add a personal group in multi-select mode.

Procedure:

- 1 From the **WAVE PTT** main screen, tap **Contacts**





- 2 Tap .
- 3 From the **Individuals** pane, check the contact check box to add to the group.
Contacts can be added to the group even if the status of the contact is Offline. Use the **Search** icon to find contacts.
- 4 Tap **Save** icon.
The **PTT Group** screen displays.
- 5 In the **Group's name** field, type the group name. The length of the group name is limited to 21 characters.
- 6 To add additional contacts, tap the plus (+) icon and check the contact checkbox.
- 7 To remove contacts, tap the **X** by each name.
- 8 Tap **Done**.
New group is created and status shows synching to the server.


4.4.2

Deleting a Personal Group

When and where to use:

Perform this procedure to delete a personal group.

Procedure:

- 1 From the **WAVE PTT** main screen, tap **Contacts** .
- 2 Scroll up and down or use the **Search** icon and verify the group is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.
- 3 Tap on the name of the group you want to delete. Do not tap the icon.
- 4 From the drop-down menu, tap **Delete**.


4.4.3

Editing a Personal Group

When and where to use:

Perform this procedure to edit a personal group.

Procedure:

- 1 From the **WAVE PTT** main screen, tap **Contacts** .
- 2 Scroll up and down or use the **Search** icon and verify the group is available. You can search for and view your contact lists in a variety of ways by using the options found on the **Search contacts** screen. You can search **All**, **Favorites**, **Individuals**, **Groups**, or **Available** contacts.
- 3 Tap on the name of the group you want to edit. Do not tap the icon.
- 4 From the drop-down menu, tap **Edit**.
- 5 Make the edits and tap **Done**.

4.5

Private PTT History List

The **PTT History** screen provides a history of recent barge (one-to-one), alert, Personal Group, and Temporary Group calls. The history includes outgoing, received, and missed calls. Talkgroup and Broadcast Group calls are not logged. The log contains a maximum of 500 entries, with the newer entries replacing the oldest. PTT History can be filtered to show only missed, only outgoing, or only incoming.



Each entry in the **PTT History** screen includes the following information:

- Name of received or missed, outgoing, or incoming contact or group
- Current availability status of the contact or group
- Icon showing incoming or out going call or alert
- If applicable, an icon indicating a group call
- Date of the call/alert or number of days since the call/alert

The **History Detail** screen shows details for the calls and alerts for one one contact or group. To view

details, tap the **Avatar**  of the contact or group in the **Contacts**  screen.

Each entry in the **Recent** section includes the following information:

- Current availability status of the contact or group
- Incoming or outgoing and whether it is a session or an alert
- Date stamp including time, day of the week, and date

4.5.1


Viewing History List

When and where to use:

Perform this procedure to view session logs for one-to-one private calls.


Procedure:

1







From the **PSX PTT** screen, tap **PTT History**  icon.



NOTICE: Incoming calls from Personal Groups and Temporary Groups appear in gray. These groups can not be called from the Session Log.

2 Scroll up and down to view log entries or from the drop-down menu  select the following for specific log entries:

- **Show missed only**
- **Show outgoing only**
- **Show incoming only**
- **Clear History**

- 3 To make a private or alert call from the **PTT History**  screen, tap the contact name 
or  to start a call.
- 4 To view detailed log entries for only one entry, tap the **Avatar**  of the individual contact or group in the **PTT History** screen.
- 5 To make a call from the **History Detail** screen, complete one of the following actions:
 - Tap **Alert**  icon to start an alert call. See [Making a One-to-One Alert Call on page 33](#) for additional information.
 - Tap **Start PTT Session**  to display the **PSX PTT** screen to make a call. See [Making a One-to-One Barge \(Private\) Call on page 32](#) for additional information.

Chapter 5

Troubleshooting of Unexpected Conditions

This chapter describes troubleshooting scenarios of the PSX Push-to-Talk (PTT) application. The following table shows unexpected conditions and the recommended actions.

Table 3: Registration Behaviors

Behavior	Resolution
Unable to turn PTT Service switch ON or OFF	If you receive this message, PTT service offline, your PTT Service may have stopped. Contact your system administrator for resolution.
PTT Service is ON but the client is not available	If you receive this message, PTT service offline, you might have a problem with your data connection. Ensure that your device is not set to Airplane mode and you are connected to a 4G LTE network or over Wi-Fi. Sign in again later.
PTT Service is OFF and an error code is available	If you receive this message, PTT service offline, you might have a problem with your PTT service. Ensure that your device is not set to Airplane mode and you are connected to a 4G LTE network or over Wi-Fi. If an unrecoverable errors (exit codes) are available, contact your system administrator and provide the exit codes for resolution.
PTT application freezes	In rare cases, the PTT application may suddenly stop working or freeze. If this happens, close the application and then open it again. Steps to do this vary by device, but you can typically close an application by going to the Settings in your phone and using the app manager. For device-specific instructions, please refer to the User Guide for your phone.

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