



### 3.2.4 Mute a Call

To mute a call:

1. During a call select **Option**.



2. Use the **Navigation** key to scroll to **Mute** and press **Select**.



3. The call will be muted.



4. To remove the call from mute, press the **Option** key, then select **Unmute**.



### 3.2.5 Transfer a Call

A call in progress can be transferred to another user. A procedure is described below.

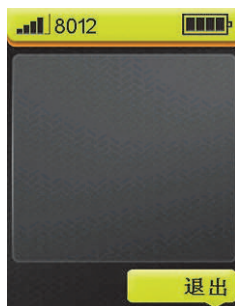
1. During a call, press **Option**.



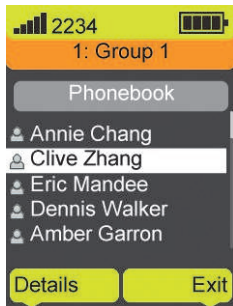
2. Scroll to **Transfer call** and press **Select**.



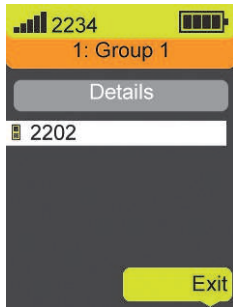
3. If you do not know the contact number, follow the substeps below, otherwise skip to the next step.
  - a) Press **Contacts**.



- b) Use the **Navigation** keys to select the contact, or use the keypad to enter part of the contact name, and press **Details** to view the number.



- c) Press **Exit** twice, then go to the next step.



4. Type the contact number using the keypad and press **Select**.



5. The call will be transferred.



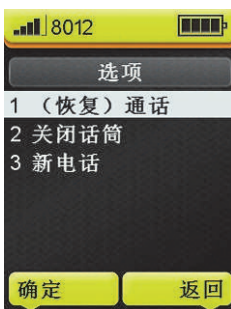
### 3.2.6 Call Waiting

The **Call Waiting** feature tells you if another caller is contacting when you are on a call. This feature is enabled at an Administrator level.

1. The MinePhone will display when another caller is contacting you during a call. Press **Answer** to accept the call and put the current caller on hold.



2. During a call you can press **Options** to access the following call waiting options:
  - End Call on Hold — Hang up the caller on hold
  - Swap — Revert the phone call to the caller on hold
  - Mute — Mute the current call.



3. Press **Hang up** to end the call.



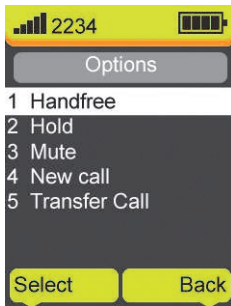
### 3.2.7 Handsfree

The MinePhone allows handsfree conversations during calls, using the speaker and bottom microphone. To activate handsfree operation:

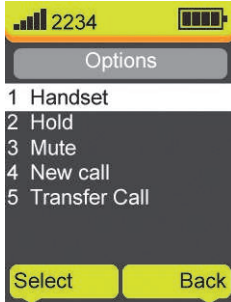
1. During a call, press the left softkey to select **Options**.



2. Select **Handfree**.



3. To switch back to handset mode, access the **Option** menu again and select **Handset**.





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# Chapter

# 4

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## Remote Speaker Microphone

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### Topics:

- [Attaching a Remote Speaker Microphone](#)
- [Using the RSM on PTT Calls](#)

A third party Remote Speaker Microphone (RSM) can be attached to the MinePhone, which enables PTT calls without holding the handset. The RSM can only be used on MinePhones deployed in the Hard Rock mining environment. MinePhones used in an Intrinsically Safe environment cannot use the RSM feature.

## 4.1 Attaching a Remote Speaker Microphone

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The procedure below describes attaching the RSM to the MinePhone.

1. Turn off the phone and loosen the screw holding the RSM cover.



2. Remove the cover.



3. Align the RSM plug to the MinePhone socket.



4. Use a flathead screwdriver to tighten the screw on the RSM jack to the MinePhone.





## 4.2 Using the RSM on PTT Calls

To make a Push to Talk call using the Remote Speaker Microphone:

1. Select the PTT group channel using the **Channel Up Channel Down** keys on the side of the handset. Make sure you and the recipient are on the same channel.



2. Press and hold the side button on the RSM. Wait for the short beep before speaking.



3. When you have finished speaking, release the side button on the RSM. This will allow you to hear recipients to talk back on the PTT group.

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# Chapter 5

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## Other Phone Functions

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**Topics:**

- [Keypad Lock](#)
- [Managing Messages](#)
- [Viewing Network Details](#)
- [Locator App](#)

This chapter describes configuring the keypad lock, viewing text messages and viewing network settings.

## 5.1 Keypad Lock

The MinePhone keypad can be manually locked and unlocked by pressing and holding the # key for 2 seconds. .

The keypad and **PTT** key can also be configured to auto lock after 60 seconds. .

1. Press **Menu** on the **Home** screen, scroll to the **Settings** option and press **Select**.



2. **Auto Lock Key** will be highlighted. Press **Select**.



3. Scroll to select one of the three menu options and press **Select**.

- **Keypad Auto Lock:** The keypad will auto lock after 60 seconds, but the **PTT** button will still function
- **Keypad & PTT Auto Lock:** The keypad and **PTT** button will auto lock after 60 seconds
- **Disable:** All auto lock options are disabled.





4. When the keypad and **PTT** button are locked, padlock icon is displayed on the top right of the screen.





## 5.2 Managing Messages

Selecting **Menu > Messages** will display the options for text messages as described below.



Message folder	Description	Picture
<b>Inbox</b>	Up to 100 received messages are contained in the <b>Inbox</b> folder.	
<b>Outbox</b>	Up to 100 sent messages are contained in the <b>Outbox</b> .	

Message folder	Description	Picture
<b>Draft</b>	Up to 10 saved messages that are not sent are stored in <b>Draft</b> folder.	
<b>Status</b>	Displays the number of messages in the <b>Inbox</b> , <b>Outbox</b> and <b>Draft</b> .	

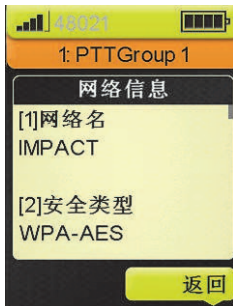
### Message Options

Each message folder selection has options for modifying or sending a message.

Message Option	Function
<b>Read</b>	Open the message to read.
<b>Edit</b>	Edit the selected message.
<b>Send</b>	Send the selected message.
<b>Delete</b>	Delete the selected message.
<b>Reply</b>	Reply to the received message.
<b>Forward</b>	Message is forwarded to another contact.
<b>Delete All</b>	Delete all messages in the folder.
<b>Call Back</b>	Call the message sender.

## 5.3 Viewing Network Details

Network details can be viewed by selecting **Menu** > **Network** > **Network Info** . Use the **Navigation** keys to scroll down the screen to view the details.




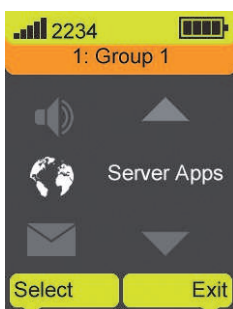
This screen contains useful troubleshooting information that may be requested by Technical Support personnel. It contains the following information:

- **SSID**
- **Security Type**
- **IP Address**
- **Subnet Mask**
- **Gateway IP Address**
- **DNS Address**
- **TFTP Server (IP Address)**
- **SIP Server (IP Address)**
- **MAC Address**
- **Control Port**

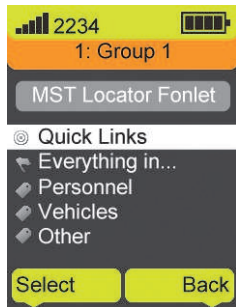
## 5.4 Locator App

The Locator app can be used to check the current zone in which a selected entity is located, or to see all entities in a selected zone. If activated, the app can be accessed in **Menu > Server Apps > Locator** .

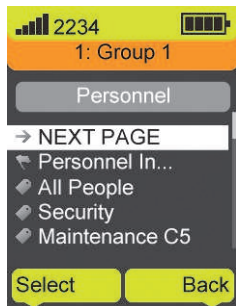
 **Note:** This feature is only available if operating the phone with the **MST ImPact Communications Appliance (ICA)** version 1.4 or greater.



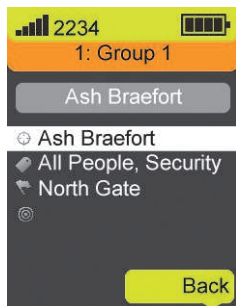
On the Locator menu, the **Everything in...** shows all entities in a specific zone, or a specific entity type can be selected.



Once an entity type is selected, a page of groups and entities is displayed. The **Personnel/Vehicles/Other in...** option will show all entities of that type in a selected zone, or scroll down to select an group/entity on that page. Use the **NEXT PAGE / PREVIOUS PAGE** options to move through the pages.



Once an entity is selected, their name, group(s), and current zone will be displayed.





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# Chapter

# 6

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## Call Logs

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**Topics:**




- [Viewing Call Logs](#)





This chapter describes how to use call logs on the MinePhone.

## 6.1 Viewing Call Logs

Call logs can be accessed by selecting **Menu > Call Log** . A list of call log options are displayed and described below.



Call Log Menu	Description	Picture
All Calls	Lists all call types.	
Missed Call	Lists the last 20 missed calls.	
Received	Lists the last 20 calls received.	

Call Log Menu	Description	Picture
<b>Dialled</b>	Lists the last 20 dialled calls.	
<b>Emergency Sent</b>	Lists the last 20 emergency calls sent from the handset.	
<b>Emergency Received</b>	Lists the last 20 emergency calls received.	
<b>Duration</b>	Lists the total duration of all calls.	



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# Appendix

## A

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### Troubleshooting Guide

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Problem	Cause	Solution
MinePhone does not turn on.	Handset is not charged.	Charge the handset in the supplied charging dock.
	The MinePhone's internal electronics are damaged.	Return to a MST support centre to be repaired. MinePhones are not field serviceable and must be serviced in a workshop by technicians certified to repair Intrinsically Safe devices.
Battery is not charging.	The charger's power adaptor is not energised.	Check charger is plugged into an active power source.
	Internal battery is at the end of its life cycle.	Please contact an MST support centre for repair.
	The battery has failed.	Please contact an MST support centre for repair.
Battery operation time is shorter than expected.	Battery operation time will be shorter depending on phone settings and the amount of talk time.	Battery operation time can be increased by reducing backlight time and brightness.
No indicator light on the charging dock when charging the phone.	Charging dock is not plugged into the power adaptor or switched on.	Check the charger is plugged into a power adaptor that is switched on.
Phone takes more than 3 hours to charge.	Battery failure.	Please contact an MST support centre for repair.
No sound.	Volume setting is low or turned off.	Adjust the volume settings.
MinePhone cannot connect to the network.	Phone is not configured correctly.	Please consult your network administrator or MST System Engineer.
The MinePhone does not dial when making a call.	<b>Call</b> button was not pressed.	Make sure you press the <b>Call</b> button  after entering the phone number.
Poor audio quality during a call.	Poor network signal strength.	Stand in closer proximity to a wireless access point or improve the wireless network coverage.



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# Appendix

## B

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### MP70 MinePhone Specification

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#### Physical

Dimensions	150mm (W) x 75mm (D) x 35mm (H)
Weight	250g
Display	240 x 320 Colour TFT
Battery (internal)	1100mAh
Battery life	4 hours talktime 48 hours standby time
Transmit Power	+17dBm
Enclosure Ingress Protection (IP) rating	IP54

#### Network Protocols

- TCP / UDP / IP, IPV4, DNS ARP, Static IP, DHCP
- Caller ID
- Real Time Transfer Protocol (RTP). RFC 1889 / RFC 1890
- Session Description Protocol (SDP) RFC 2327
- Session Announcement Protocol (SAP)
- Session Initiation Protocol (SIP) RFC 3621, 3624 & 3515 V2
- Call control & text messaging (RFC 3261 & DPRFC 2321)
- DTMF RFC 2833
- Software updates by TFTP

#### WLAN and Voice Communications

Transmitter	Wi-Fi 802.11b/g
Antenna Type	Internal
Operating Channels	Wi-Fi — 1-11 PTT — 32 channels available
Wireless Security	WEP (64/128 bit encryption) WPA WPA2
Voice Features	G.711 (A-Law & u-Law 64kbps) G.729A (8kbps)

	Acoustic echo cancellation Background noise cancellation Jitter buffer control (default 80ms, max 320ms)
Voice Communication	Voice-over-IP (P2P, PBX, PTT) IEEE 802.11 b/g SIP support
Telephony features	Call forwarding Caller ID Call waiting Call mute Re-dial (last 20 calls) Hot-key dialling Text messaging (stores up to 100 messages) Multiple ring tones Phone book (up to 200 records) Power saving mode Speaker volume control Vibrating alert
Specific features	32 Push to talk (PTT) channels Emergency "man down" override External headset (non I.S. versions only)

### Regulatory Compliance

IEC	Exia IECEx TSA 10.0023X
MSHA	Exia 23-A100006-0
FCC Statement	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



**Note:**

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.



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# Appendix

## C

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### Acronyms

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Acronym	Meaning
AP	Access Point
DHCP	Dynamic Host Configuration Protocol
ICA	ImPact Communication Appliance
MAC	Media Access Control
MST	Mine Site Technologies
NTP	Network Time Protocol
PTT	Push To Talk
P2P	Peer to Peer
RSM	Remote Speaker Microphone
RSSI	Received Signal Strength Indicator
RTP	Real Transport Protocol
SIP	Session Initiation Protocol
SSID	Service Set Identifier
WEP	Wired Equivalent Privacy
WPA	Wi-Fi Protected Access



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## Appendix

# D

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## Hardware Warranty

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Mine Site Technologies provide a 12 month warranty for hardware supplied to the original purchaser. Mine Site Technologies warrants that the hardware supplied will be free from material defects in workmanship and materials from the date of original purchase.

Mine Site Technologies will repair or replace the defective hardware during the warranty period at no charge to the original owner. Such repair or replacement will be rendered by Mine Site Technologies. Mine Site Technologies may at its sole discretion replace the defective hardware (or any part thereof) with a reconditioned product or parts that Mine Site Technologies determines is substantially equivalent (or superior) to the defective hardware. Repaired or replacement hardware will be warranted for the remainder of the original warranty period from the date of original purchase. All hardware (or part thereof) that is replaced by Mine Site Technologies shall become the property of Mine Site Technologies upon replacement.



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# Appendix

# E

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## Firmware End User License Agreement

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IMPORTANT: PLEASE READ CAREFULLY BEFORE USING THIS EQUIPMENT.

Mine Site Technologies End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Mine Site Technologies. Mine Site Technologies (MST) firmware may include associated software components, media, printed materials and electronic documentation. By installing, copying or otherwise using MST firmware, you agree to be bound by the terms of this EULA. This license agreement represents the entire agreement concerning the program between you and Mine Site Technologies, and it supersedes any prior proposal, representation or understanding between the parties. If you do not agree to the terms of this EULA, do not install or use the software.

### 1. GRANT OF LICENSE

The MST firmware is licensed as follows:

#### (a) Installation and Use

Mine Site Technologies grants you the right to install and use copies of the MST firmware on associated MST hardware.

#### (b) Backup Copies

You may also make copies of the MST firmware if necessary for backup and archival purposes.

### 2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

#### (a) Maintenance of Copyright Notices

You must not remove or alter any copyright notices on any and all copies of the MST firmware.

#### (b) Distribution

You may not distribute copies of MST firmware to third parties.

#### (c) Prohibition on Reverse Engineering, Decompilation, and Disassembly

You may not reverse engineer, decompile, or disassemble the MST firmware.

#### (d) Rental

You may not rent, lease, or lend MST firmware.

#### (e) Support Services

Mine Site Technologies may provide you with support services related to the MST firmware. Any supplemental activation codes provided to you shall be considered part of the MST firmware and subject to the terms and conditions of this EULA.

#### (f) Compliance with Applicable Laws

You must comply with all applicable laws regarding use of the MST firmware.

### **3. TERMINATION**

Without prejudice to any other rights, Mine Site Technologies may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the MST firmware in your possession.

### **4. COPYRIGHT**

All title, including but not limited to copyrights, in and to the MST firmware and any copies thereof are owned by Mine Site Technologies. All title and intellectual property rights in and to the content which may be accessed through use of the MST firmware is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content. All rights not expressly granted are reserved by Mine Site Technologies.

### **5. NO WARRANTIES**

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### **6. LIMITATION OF LIABILITY**

In no event shall Mine Site Technologies be liable for any damages (including, without limitation, lost profits, business interruption, or lost information) rising out of 'authorised users' use of or inability to use the MST firmware, even if Mine Site Technologies has been advised of the possibility of such damages. In no event will Mine Site Technologies be liable for loss of data or for indirect, special, incidental, consequential (including lost profit), or other damages based in contract, tort or otherwise. Mine Site Technologies shall have no liability with respect to the content of the MST firmware or any part thereof, including but not limited to errors or omissions contained therein, libel, infringements of rights of publicity, privacy, trademark rights, business interruption, personal injury, loss of privacy, moral rights or the disclosure of confidential information.