

3M™ Wireless Communication System Model XT-1



Fully  
Digital  
Wireless

**Communications**

Operating Instructions

**3M**

**3M Building and Commercial Services Division**  
3M™ Wireless Communication System Model XT-1

Operating Instructions

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# Overview

## Safety Information

### Safety Rules



Read, understand, and follow all safety information contained in these instructions prior to installation & operation of the 3M™ Wireless Communication System Model XT-1. Failure to follow all instructions listed could result in electrical shock, fire and/or other personal injury. Retain these instructions for future reference.

### Intended Use



The 3M™ Wireless Communication System Model XT-1 is intended for use to provide 2-way radio-frequency audio communication in quick service drive-through restaurants and convenience stores.

The system must be installed as specified in the 3M™ Wireless Communication System Model XT-1 Installation Instructions and operated as specified in 3M™ Wireless Communication System Model XT-1 Operating Instructions in quick service drive-through restaurants and convenience stores. It has not been evaluated for other uses or locations.


### Signal Words


Explanation of Signal Word Consequences	
 WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
 CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.
CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

### Product Safety Labels

Explanation of Product Safety Labels	
	Attention: Read accompanying documentation
	Warning: Risk of Electric Shock

## System Warnings

 <b>WARNING</b>
<p><b>To reduce the risks associated with hazardous voltage:</b></p> <ul style="list-style-type: none"><li>• Disconnect power to the receptacle before installing or removing the Base Station Power Supply. When removing receptacle cover screw, cover may fall across plug pins or receptacle may become displaced. Use only with duplex receptacle having center screw. Secure unit in place by receptacle cover screw.</li><li>• If power supply is supplied with a grounding pin, connect directly to a grounding receptacle – 3 prong.</li></ul> <p><b>To reduce the risks associated fire &amp; property damage:</b></p> <ul style="list-style-type: none"><li>• Do not open, crush, expose to heat above 200 °F or incinerate the battery.</li><li>• Always replace batteries, battery chargers and power supplies with 3M approved units acceptable for use in this system to avoid system function &amp; safety concerns.</li><li>• Do not modify this 3M™ Wireless Communication System Model XT-1. Install only 3M provided components. Use only 3M approved system replacement parts.</li></ul>

 <b>CAUTION</b>
<p><b>To reduce the risks associated with environmental contamination due to battery pack &amp; to lead in the solder:</b></p> <ul style="list-style-type: none"><li>• Dispose of batteries, power supplies, battery charger and base station in accordance with federal, state &amp; local requirements. If preferred, return these components to 3M Service Center for disposal.</li></ul>

## Other Conventions

### Important Notes and Notes

**Important Note:**

It is strongly recommended that you pay attention to information inside of an “Important Note:” box.

**Note:**

You may find information inside of a “Note:” box helpful.

## FCC and Industry Canada Information

**Note:**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Note:**

This Class A digital apparatus also complies with Canadian ICES-003.

**Note:**

This Product contains an intentional radiator operating at 2.4GHz.

FCC and IC Identifiers:

Headset:

FCCID : VJV-9008323

IC : 7330A-9008323

Base Station:

FCCID : VJV-9008251

IC : 7330A-9008251

**Note:**

Modifications to this device shall not be made without the written consent of 3M Company. Unauthorized modifications may void the authority granted under Federal Communication Rules and Industry Canada Rules permitting the operation of this device.



# Configuration

## Enter Configuration Mode

Configuration mode is a passcode-protected area that contains most of the configuration options for the base station system. Using the access provided for users it is possible to set up all of the functionality of the system.

To enter the configuration mode:

1. From the Run mode menu, press and hold **Mode**.
2. While continuing to hold **Mode**, enter your user passcode.
3. Release **Mode**. The display will show the user name and ID number (e.g., `User1 ID = 1`)

### Notes:

The default user password is 1234.

There are two levels of passcode: installers and users. Using a user's passcode permits you into the entire system menu.

## Navigating the Base Station Display

Once you are in the configuration mode, you can use the buttons on the base station display to update all configuration parameters.

### Interpreting Display Information

Depending upon what you are doing, or what you can do, text on the display screen is handled according to the following conventions:

`Static or Informational`

Static, informational, or non-editable text has no markings on it.

`<Editable, not selected>`

Editable items that are not currently-selected appear inside of outwardly-pointing pointers.

`>Editable, Selected<`

Editable items that are currently-selected appear inside if inwardly-pointing pointers.

`➔ Editable, in Edit Mode ←`

Editable items that are currently being edited have arrows pointing inwardly.

`[Variable, not Editable]`

Variable items that cannot be edited appear inside of square brackets. In some cases the item is editable, but only from a different location in the menu.

`{ information }`

An on-screen explanation of a key point or reminder appears within curved brackets.

## Buttons

Following is a brief description of the buttons on the display and their functions.

<p>Directional arrow (▶◀▼▲) buttons</p>	<p>You can use these buttons to scroll around when navigating the menus. When you are editing information, the up and right arrows scroll “up” (increment) and the down and left arrows scroll “down” (decrement) list of values.</p>
<p>Number/letter (0 – 9) buttons</p>	<p>You can use these buttons to specify exact numbers or letters in fields that permit them. Each time you press button, the result changes to the next available number or letter. For instance, pressing the 7 button three times creates a letter “t” (7-s-t). See <b>Service</b> button below for creating upper-case letters.</p>
<p><b>Mode (Exit)</b> button</p>	<p>In run mode, you must press and hold <b>Mode</b> while entering your passcode to enter user or installation service.</p> <p>In user and installation service modes, use the <b>Mode</b> button to exit from a current field that you are editing without saving any changes or to go upward (backward) in the configuration menus.</p>
<p><b>Enter (Select)</b> buttons (both buttons perform the exact same functions)</p>	<p>Use the <b>Enter</b> button to execute the current selection:</p> <p>Pressing <b>Enter</b> on a menu opens the menu and shows you its submenu items.</p> <p>Pressing <b>Enter</b> on an editable field switches you to edit mode so you can change the value in the field using the arrows and number/letter buttons where applicable.</p> <p>Pressing <b>Enter</b> while in edit mode saves the changes you have made and exits edit mode.</p>

<b>Service (Shift) button</b>	<p>Use the <b>Service</b> button to access upper-case letters or to initiate a service call to 3M or as a confirmation in some items.</p> <p>Pressing and holding the <b>Service</b> button while editing a field that permits alphabet letter entry (e.g., store address) shifts the letter to upper case.</p> <p>In run mode, press and hold the <b>Service</b> button, then enter your passcode to initiate an internet request for help from 3M. A 3M representative will call your store telephone number shortly after you initiate the request. Your base station must be connected to the internet for this function to work. If you press the <b>Service</b> button and do not enter a passcode, the base station will go to a Service screen used for installation and troubleshooting.</p>
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The directional arrows can be used for scrolling from one menu item to another or to scroll through available choices when editing fields.

## Connecting to the Ethernet Port

All of the procedures in this chapter assume that you are using the display to configure your base station(s). However it is also possible to configure the base station using a desktop or laptop computer. To do so, use the display to set the DSP configuration (see below), then connect the computer and the base station using a patch cable (to a router) or a crossover cable (directly to a computer).

### Network Setup

To configure the network:

- Enter the configuration mode (see above).
- Select **16 Network Setup**.
- Change the values for, **web server enabled**, **email enabled**, **IP address**, **subnet mask**, **default gateway**, and **Your E-Mail Address Suffix**. Your network administrator should be able to supply the values if you do not know them.

### Logging into the Base Station with a Computer

Once the base station is connected to (and correctly configured with) your Local Area Network, you can log into it from any other computer on the network and operate the station as you would from the local interface. You must know the IP Address of the base station and you must have password for one of the user accounts in the base station

To find out the base station's IP address:

1. Enter the configuration mode (see above).
2. Select **16 Network Setup**.
3. Look at the series of numbers and decimals after **IP Address**. (e.g., 133.75.123.27).

To find out your user password:

1. Enter the configuration mode (see page 11).
2. Select **13 Change Passcodes** > **Change User Passcodes**.
3. Look at the passcode following your user number (e.g., “User 5.”)

To log into the base station:

- Using a web browser, type in the IP address of the base station in the browser’s Address bar, then press **Enter**.
- Type in your user name and password. Do NOT type the space between User and the user number (e.g., type “User5” instead of “User 5”).

**Notes:**

The default user name is “User1”; the password is 1234.

## Change Basic Volume Settings

**Note:**

All volume settings should be adjusted during normal or peak business hours. Adjusting them during slow times will likely produce volume settings that are too low.

**Note:**

Inbound and outbound are always defined from the perspective of the headset.

### Inbound Microphone Volume

Changing the inbound microphone volume affects the sound volume coming from the customer order point microphone.

To turn up or down the inbound microphone:

1. Enter the configuration mode, see page 11.
2. Select a new value for **01 Drivethru Volume** > **Inbound Mic volume**. The range is 0 (silent) to 20 (maximum).

### Outbound Talk Volume

Changing the outbound talk volume affects the volume of the speaker at the customer order point.

**Note:**

To avoid feedback, set the outbound talk volume as low as possible.

To change the outbound talk volume:

1. Enter the configuration mode, see page 11.
2. Select a new value for **01 Drivethru Volume** > **Outbound Talk volume**. The range is 0 (silent) to 20 (maximum).

### Vehicle Alert Volume

Changing the vehicle alert volume affects the volume of the vehicle alert signal on the headsets.

To change the vehicle alert volume:

1. Enter the configuration mode, see page 11.
2. Select a new value for **01 Drivethru Volume** > **Vehicle Alert Volume**. The range is 0 (silent) to 20 (maximum).

### Outbound Greeter Message Volume

Changing the outbound greeter message volume affects the sound volume of the custom greeting messages and the system internal greetings (“Store Closed” and “Please Pull Ahead”).

To turn up or down the greeter message volume:

1. Enter the configuration mode, see page 11.
2. Select a new value for **01 Drivethru Volume** > **Greeter Message Volume**. The range is 0 (silent) to 20 (maximum).

### Change the Monitor Volume

The monitor is an additional speaker that can be used to monitor drive thru communication without a headset, typically in the kitchen. If the monitor has a volume control built into it, you can use it to control the overall volume level of the speaker. To be more specific about which elements you want to control, follow the instructions in the following sections.

#### Inbound Listen

Changing the inbound listen volume affects how loudly the monitor plays the inbound (customer order point) communication. You can also disable the monitor playing inbound sounds.

To change the inbound listen monitoring settings:

1. Enter the configuration mode, see page 11.
2. Select **02 Monitor Volume**.
3. To enable or disable the monitor playing the inbound sounds, change the value for **Inbound Listen: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **Inbound Listen: Volume**. The range is 0 (silent) to 20 (maximum).

#### Outbound Talk

Changing the outbound talk volume affects how loudly the monitor plays the outbound (order taker) communication. You can also disable the monitor playing outbound talk.

**Note:**

To avoid feedback and echo, set the outbound talk volume as low as possible.

To change the outbound talk monitoring settings:

1. Enter the configuration mode, see page 11.
2. Select **02 Monitor Volume**.
3. To enable or disable the monitor playing the outbound talk, change the value for **Outbound Talk: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **Outbound Talk: Volume**. The range is 0 (silent) to 20 (maximum).

### Vehicle Present

Changing the vehicle present volume affects how loudly the monitor plays the vehicle present tone. You can also disable the monitor playing the vehicle present tone.

To change the vehicle present monitoring settings:

1. Enter the configuration mode, see page 11.
2. Select **02 Monitor Volume**.
3. To enable or disable the monitor playing the vehicle present tone, change the value for **Vehicle Present: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **Vehicle Present: Volume**. The range is 0 (silent) to 20 (maximum).

### Vehicle Approach

Some sites are equipped with a vehicle approach detector, which alerts you when a vehicle enters the parking lot or drive through approach lane. If your site is equipped with the detector, you can change the volume at which the tone is played on the monitor. Also, if you do not wish to hear the tone, you can disable it.

To change the vehicle approach monitoring settings:

1. Enter the configuration mode, see page 11.
2. Select **02 Monitor Volume**.
3. To enable or disable the monitor from playing the vehicle approach tone, change the value for **Vehicle Approach: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **Vehicle Approach: Volume**. The range is 0 (silent) to 20 (maximum).

### Page Messages

*Paging* is headset-to-headset communications. Changing the page message volume affects how loudly the monitor plays internal paging messages. You can also disable the monitor playing internal paging messages.

**Note:**  
To avoid feedback and echo, set the volume as low as possible.

To change the page message volume monitoring settings:

1. Enter the user service mode, see page 11.
2. Select **02 Monitor Volume**.
3. To enable or disable the monitor playing internal paging messages, change the value for **PAGE Messages: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **PAGE Messages: Volume**. The range is 0 (silent) to 20 (maximum).

### Greeter Messages

Changing the greeter message volume affects how loudly the monitor plays the greeter messages. You can also disable the monitor playing the greeter messages.

To change the greeter message volume monitoring settings:

1. Enter the configuration mode, see page 11.

2. Select **02 Monitor Volume**.
3. To enable or disable the monitor playing greeter messages, change the value for **Greeter Messages: Enable** to **ON** or **OFF**.
4. To change the volume level, select a new value for **Greeter Messages: Volume**. The range is 0 (silent) to 20 (maximum).

## Change the Night Volume

You can assign a standard reduction in the volume level of the customer order point speaker for night hours when lower volume is typically required. With the night volume set, the system automatically adjusts the volume during night hours, then back to normal during the day.

To change the night volume setting:

1. Enter the configuration mode, see page 11.
2. Select a new value for **03 Night Volume > Reduce DriveThru Volume At Night By**. The range is 0 to the current day volume level.

### Notes:

Night Volume is never higher than Day Volume.

Night volume reduction is a subtracted value, not the resulting level; therefore, if it is the same as the day volume level, the speaker will turn off at night.

You cannot change the day outbound talk volume on this screen, only the reduction amount identified above.

## Registering Headsets

Each headset must be registered to a base station before it can be used. Once registered, it should not need to be registered again unless it is intentionally removed.

### Add Headsets

Each headset has a unique identification number. The number is imprinted on the headset and broadcast to the base station whenever it is turned on.

### Notes:

One headset should not be registered to more than one base station at any given site, whether or not the bases are interconnected.

Remove the headset from the existing base station before adding it to a different one.

In dual-lane installations, all headsets are registered to Base #1.

To register a headset:

1. Enter the base station configuration mode, see page 11.
2. Select **04 Registration > 1 Add New Headsets**.
3. Power on the headset when prompted.
4. Wait up to two minutes for **{Headset xxxxxxxx Has Been Registered!}** to appear at the bottom of the display.
5. Repeat step 3 for additional headsets.

6. Press **Mode** when finished.

### Remove Headsets

Perform the following steps to un-register a lost, destroyed, or otherwise removed headset from the system, including a headset that is sent back to 3M for repair. The headset would have to be registered again at a later date.

1. Enter the base station configuration mode, see page 11.
2. Select **04 Registration > 2 Remove Headsets**.
3. Scroll to the number of the headset you want to un-register.
4. Press **Enter**.

**Note:**

If you do not know or have access to the number of the headset to be un-registered, identify the headsets that you want to remain in service and un-register any that remain on the list.

### List All Headsets

To see a list of the registered headsets:

1. Enter the base station configuration mode, see page 11.
2. Select **04 Registration > 3 List All Headsets**.

### Resetting Inactive Days

For any headset, you can manually reset its number of inactive days to zero (see “Change Self Monitoring” on page 24 for information about the inactive days timer).

To reset the inactive days:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **08 Headset Setup > Currently Editing Headset**.
3. Press **◀** or **▶** if necessary to scroll to the headset ID number for the headset you want to reset.
4. Select **<CLEAR>**.

### Checking Headset Software Revision

To check the software revision number for a headset:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **08 Headset Setup > Currently Editing Headset**.
3. Press **◀** or **▶** if necessary to scroll through the headsets. The software version appears next to the headset ID number.

### Change Noise Reduction Level

There are several ways to improve the sound quality at the headset using the following settings.

#### Inbound Microphone Noise Reduction Level

The inbound microphone noise reduction level setting reduces background noise to make it easier to hear speech at the customer order point.

Perform the following steps to increase or decrease the noise reduction level.

1. Enter the base station configuration mode, see page 11.

2. Make a new selection for **05 Noise Reduction > Inbound Mic Noise Reduction Level**. Options are **Off, Min, Low, Med, Hi,** and **Max**. You may need to experiment for a setting that works best for your ambient noise environment.

### Acoustic Echo Canceller

Perform the following procedure if there is a delayed repetition (echo) of the outbound sound:

1. Enter the base station configuration mode, see page 11.
2. Make a new selection for **05 Noise Reduction > Acoustic Echo Canceller**. Options are **Min, Low, Med,** and **Max**. You may need to experiment for a setting that works best for your ambient noise environment and staff.

### Set System Date and Time

Perform the following procedure to set the system time and date.

1. Enter the base station configuration mode, see page 11.
2. Change the date and time values for **06 Set Time & Date** in the **Time** and **Date** fields as required. Use the arrows to scroll from one field to the next and type new values over the existing data in the formats shown in parentheses:
  - **HH** = Hours (01 to 24, e.g., 6:00 pm is 18)
  - **MM** = Minutes (01 to 60)
  - **SS** = Seconds (01 to 60)
  - **MMM** = Month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, or Dec)
  - **DD** = day (01 to 31)
  - **Year** = Last two digits of the year (00 to 99, **20** is fixed and cannot be changed)

### Change Global Settings

Global settings are an assortment of options that you must choose based upon the basic configuration of your system.

#### Text and Audio Prompts Language

You can choose between English, Spanish, and French language for all text and audio prompts, which is essentially all of the factory prerecorded information coming from the base station and all of the printed text on the display.

**Note:**

Changing the text and audio prompt language will also change the language of the headset messages.

Perform the following procedure to change the text and audio prompts:

1. Enter the base station configuration mode, see page 11.
2. Change the value for **07 Global Settings > Text & Audio Prompts Language** to **English, Español,** or **Francais**.

#### Drive Thru Audio Duplex Mode

The system can function using half duplex or full duplex modes. Choosing between the two modes is based upon the desired operation.

**Note:**

In half duplex installations, all latching order taking modes and hands free mode are disabled.

Perform the following procedure to change the drive through audio mode:

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > DriveThru Audio Duplex Mode to Full or Half.
  - In *half-duplex* systems, when the order taker is speaking, it is impossible to hear any speech coming from the customer order point.
  - In *full-duplex* systems, the order taker can speak and hear speech coming from the customer order point at the same time.

**Page Channel Heard by Order Taker**

You can enable or disable the order taker from being able to hear any paging while speaking to a customer over the customer order point. This may prevent interference with the order taking process.

Perform the following procedure to enable or disable the order taker hearing pages while talking:

1. Enter the base station configuration mode, see page 11.
2. Select 07 Global Settings.
3. To enable or disable the monitor playing the outbound talk, change the value for PAGE Channel Heard by Order Taker: to NO or YES.

**Number of Base Stations at this Site**

When there are two base stations used together (tandem, dual, or side-by-side drive thrus) they must be configured to work together.

Perform the following procedure to enable the two stations to work together:

1. On the base first station:
  - Enter the base station configuration mode, see page 11.
  - Change the value for 07 Global Settings > Number of BaseStations at This Site to 2.
  - Press **Enter** to implement the change.
  - On the first base station, stations, change the value for 07 Global Settings > Lane Number of This Base Station to 1.
2. On the second base station:
  - Enter the base station configuration mode, see page 11.
  - Change the value for 07 Global Settings > Number of BaseStations at This Site to 2.
  - Press **Enter** to implement the change.
  - On the second base station, stations, change the value for 07 Global Settings > Lane Number of This Base Station to 2.

**Store is Now Closed Prompt**

Perform the following procedure to enable or disable the automatic store closed prompt to let customers know in your absence that the store is closed:

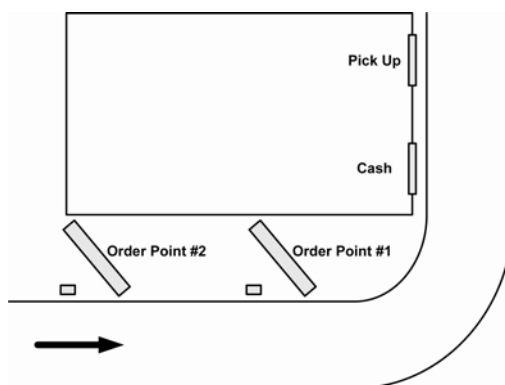
**Note:**

Make sure that you disable the automatic store closed prompt in stores that are open 24 hours.

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > "Store is Now Closed" Prompt? to Yes or No.

**Pull Ahead Prompt**

You can let customers know to pull ahead when they are at order point #2 in a tandem drive thru when it is out-of-service.



Perform the following procedure on Base #2 to enable or disable the automatic pull ahead for Order Point #2:

1. Enter the base station user service mode, see page 11.
2. Change the value for 07 Global Settings > "Pull Ahead" Prompt (Tandem Only)? to Yes or No.

**Customer Order Point Prompt Language**

Perform the following procedure to select the language(s) of the store closed and pull ahead prompts. The prompts can be spoken in English, Spanish, French, or repeated in multiple languages:

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > Order Point Prompts in English? to Yes or No.
3. Press **Enter** to implement the change or press **Mode** to abandon the change and leave the option at its previous setting.
4. Change the value for 07 Global Settings > Order Point Prompts in Spanish? to Yes or No.
5. Press **Enter** to implement the change or press **Mode** to abandon the change and leave the option at its previous setting.
6. Change the value for 07 Global Settings > Order Point Prompts in French? to Yes or No.

**Order Point TALK with No Vehicle**

Perform the following procedure to permit or prevent the order taker to talk to the order point when no vehicle is detected.

1. Enter the base station user service mode, see page 11.

2. Change the value for 07 Global Settings > Order Point TALK With No Vehicle? to Yes or No.

### Order Takers and Page Messages in Cross Lane Mode

In systems with two customer order points, in cross lane mode, you must specify the number of order takers you will be using to make sure that non-order takers can hear orders being taken on one or both lanes. Similarly, you must specify whether you want page messages to be heard by all headsets or only within each lane.

Perform the following procedure to specify the number of order takers in cross lane mode.

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > Order Takers in CROSS Lane Mode? to 1 or 2.
  - If you select 1, non-order takers will hear the orders from lanes 1 and 2.
  - If you select 2, non-order takers will hear only the orders on the lane for which the headset is configured.

Perform the following procedure to enable or disable paging to be heard by operators on both lanes.

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > PAGE Messages Can Cross Lanes? to YES or NO.

### Detector Type

Because there are two basic types of vehicle detector, pulse and presence, you must specify which type you have in the base station.

1. Enter the base station configuration mode, see page 11.
2. Change the value for 07 Global Settings > Vehicle Detector#1 to Presence or Pulse.

**Note:**

Vehicle detector#1 is always the order point.

3. For presence type detectors, specify a value for Vehicle Detector #X Minimum (Seconds). Setting a higher number will increase the customer's wait time, but decrease false detections that could be caused by cars driving over the detector without stopping.

**Notes:**

When the pulse setting is used, each call must be ended by pressing the page button on the headset.

If you are using a vehicle detector board, the presence or pulse setting should match the dip switch setting on the board.

If the vehicle detector is set to delay (via its own dip switches) and you set a delay in the base station, the delays are additive: you could end up with a longer than expected total delay.

## Order Taking Modes Setup

Perform the following procedure to enable or disable some of the seven different order taking modes from appearing on the Run Menu:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **09 O.T. Modes Setup**.
3. Change the value for each of the following options to **Yes** or **No**:
  - **Manual Listen/Push To Talk**
  - **Manual Listen/Manual Latching Talk**
  - **Auto Listen/Push To Talk**
  - **Auto Listen/Manual Latching Talk**
  - **Hands Free**
  - **Outside**
  - **Always On (Bypass Vehicle Detector)**  
(Press ▲ or ▼ to scroll up and down the list)

**Note:**

Order taking modes are described in the Operation section.

## Change Site Scheduling

The site schedule is the calendar of store open and closing times.

**Note:**

All timekeeping is done using a 24 hour clock (e.g., 6:00 p.m. appears as 18:00).

### Regular Site Schedule

The regular site schedule is the opening and closing times for each day of the week and the times assigned as “Day” and “Night,” which determine when the day and night volume settings change.

Perform the following procedure to set the regular site schedule:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **10 Site Scheduling > Regular Site Schedule**.
3. Change the value for each day of the week and each of the four defined fields (**Open**, **Day**, **Night**, and **Close**).  
(Press ▲, ▼, ◀, and ▶ to scroll up and down the list).

### Holiday/Exception Schedule

The holiday/exception schedule can be used to identify up to 12 days in the year on which the store schedule is different than it would have been otherwise. The holiday/exception schedule should be updated at least once a year to ensure it conforms to the current year’s calendar.

Perform the following procedure to set the holiday/exception schedule:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **10 Site Scheduling > Holiday/Exception Schedule**.
3. For each day that needs a non-typical schedule, enter the three-letter month and two digit date under **Date**, then change the open and close times on the line to the right of the date.  
(Press ▲, ▼, ◀, and ▶ to scroll through the fields.)

## Change Site Information

Site information is useful for warranty registration and to support service calls. This information is most useful when the system has an internet connection. Tech Services can use it to identify and contact the store when it receives a service request. All information is entered free-format using the numeric keypad. To type upper case letters, use the Shift key.

Perform the following procedure to change the site information:

1. Enter the base station configuration mode, see page 11.
2. Navigate to **11 Site Information**.
3. For each field that needs to be modified, enter the appropriate data. (Press **▲**, **▼**, **◀**, and **▶** to scroll through the fields.)

## Change Self Monitoring

Self-monitoring is a function available for all systems where the base station is continuously connected to a store Ethernet connection. The base station keeps track of all of the headsets in the system, looking for periods of extended non-use that may indicate a headset problem that needs attention.

Perform the following procedure to enable and configure self monitoring:

1. Enter the configuration mode, see page 11.
2. Select **12 Self Monitoring**.
3. To enable or disable self monitoring, change the value for **Self Monitoring Enabled?** to **Yes** or **No**.
4. If self monitoring is enabled:
  - Select a value for **Number of Inactive Days Allowed**. The range is 7 to 255. The number represents how many days of inactivity must pass for any given headset before the system interprets the absence as a problem and forwards the information to 3M.
  - Select a value for **Resend Error Reports**. Your choices are **Never**, **Every Day**, **Every Week**, or **Every Month**. This is the frequency that the base station will attempt to resend the error message until the error condition is corrected.

## Change Passcodes

User and installer passcodes can be individualized for better security control against unauthorized changes. The system has a default user and a default installer passcode pre-installed. Check your documentation for those passcodes.

### User Passcodes

If you enter a user passcode, you have full access to the Change User Passcodes menu. You can change or delete any passcode.

Perform the following procedure to set up and/or change user passcodes:

1. Enter the configuration mode, see page 11.
2. Select **13 Change Passcodes > Change User Passcodes**.
3. Identify the user number you want to change, then press **▲**, **▼**, **◀**, and **▶** as necessary to scroll to the desired passcode.
4. Enter a new four-digit passcode in place of the old passcode.
5. Press **Enter** to implement the change or press **Mode** to abandon the change and leave the passcode at its previous setting.

## Two Base Station Setup

In any installation where there are two base stations (tandem, side-by-side, or dual drive thrus), register all headsets to Base Station #1. This ensures that changes to split and cross lane mode and the order taking mode are synchronized between the two base stations. The difference between split lane and cross lane modes in this situation is:

- Split lane mode is intended for a drive thru with two order takers. Each order taker hears beeps only for the lane for which the headset is configured: beeps from the other lane will not be heard.
- Cross lane mode is intended for a drive thru with one order taker who will hear beeps for both lanes on one headset. You can configure the system to permit non-order takers to hear orders and pages from one or both sides. See “Order Takers and Page Messages in Cross Lane Mode,” page 22.

## Installer Setup

Installer setup is a special group of setup options typically only used by the installer or in case of complete system restoration or backup.

### Load Installation Settings

Installation settings are a complete set of configuration data that the installer can save after the initial installation configuration is completed. It is essentially a backup save point in case configuration settings are inadvertently changed in ways that are not easy to identify or correct.

To load the installation settings:

**Important Note:**

By performing this procedure you will be erasing the current configuration and reloading the configuration that was last saved, likely when the system was first installed.

1. Enter the configuration mode, see page 11.
2. Select **14 Installer Setup**.
3. Change the value for **Load Installation Settings** to **Yes**.

### Save Installation Settings

**Note:**

This function is only available to installers.

Perform the following procedure to save the current configuration into permanent memory over the existing installation settings.

**Important Note:**

By performing this procedure you will be erasing the existing saved installation settings, making it impossible to revert to the settings that were saved after installation.

1. Enter the configuration mode, see page 11.
2. Select **14 Installer Setup**.
3. Change the value for **Save Installation Settings** to **Yes**.

## Factory Setup (Restore Factory Defaults)

Perform the following procedure to restore all of the configuration settings to the factory default settings. This procedure should be performed only if the current configuration and the saved installation settings are unusable.

### **Important Note:**

By performing this procedure you will reset the system to the initial configuration, making it impossible to revert to the settings that were saved after installation.

1. Enter the configuration mode, see page 11.
2. Select **15 Factory Setup**.
3. Change the value of **Restore All Factory Settings** to **Yes**.

## Create and Load Templates

You can save an entire base station configuration as a file on a PC and use the file as a template for other base stations. You must be using a PC to use templates.

## Reboot System

Perform the following procedure to cleanly power down, then power up without unplugging the system:

1. Enter the configuration mode, see page 11.
2. Select **16 Reboot System**.
3. Change the value of **Power Cycle Complete System** to **Yes**.
4. Press **Service**.

## Check the Revision Levels

Perform the following procedure to view the revision levels and serial numbers of your base station:

1. Enter the configuration mode, see page 11.
2. Select **17 Revision Levels**.

## Activate the Backup Intercom

Many systems include a wired backup intercom system that can be used if the main wireless system cannot be used. If your system has a backup intercom system, perform the following steps to activate it:

- Remove the base station cover.
- Press and latch the two switches named “BACKUP INTERCOM.”

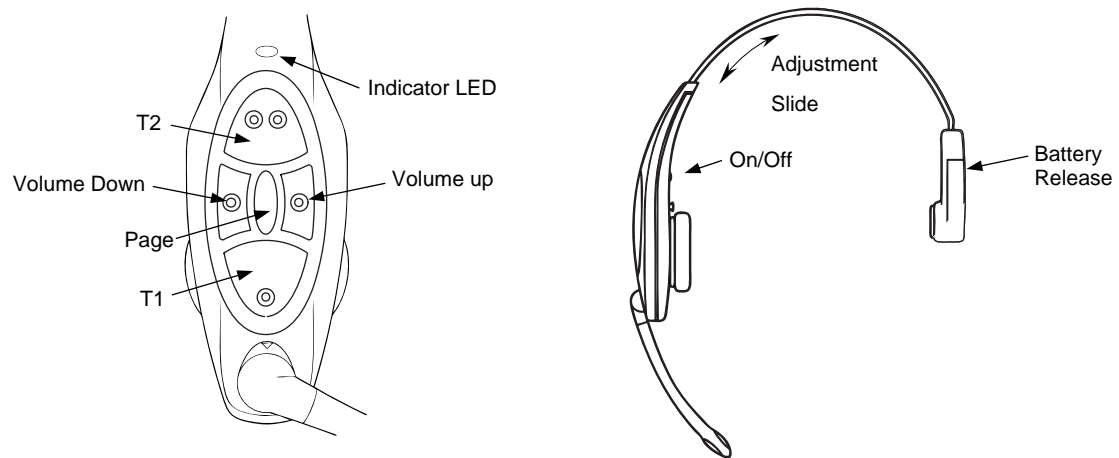
# Operation

## Headsets

### Overview

This chapter provides instructions for using headsets with an 3M™ Wireless Communication System Model XT-1 after the system has been installed, configured, and powered on.

### Component Identification and Description



- **Adjustment Slide:** Push or pull to adjust for a comfortable fit.
- **Indicator LED:** Indicates operating status of the headset. See Indicator Light Modes below.
- **T1 and T2 (Talk:buttons):** Connect you to the order point.
  - When there are two order points, T1 connects to order point 1 and T2 connects to order point 2.
  - When there is only one order point, T1 and T2 both connect to the order point.
  - If you are in Manual Latching or Hands Free modes, the talk button establishes you as the order taker; and while you are the order taker, the talk button is an order point mute button (each tap turns mute on or off to the order point).
- **On/Off:** Turns the headset on and off. Hold for 3 seconds to turn off.
- **Volume:** The up button increases volume, the down button decreases volume.
- **Page:** Has several functions related to in-store communication:
  - Talk to all headsets on the same lane (or both lanes depending upon the configuration), but not to the order point. Press and hold the page button during normal operation to communicate with other headsets. There is an option in Global settings to allow the order taker to hear or not to hear page messages.
  - Release the order-taker. If the order taker taps the page button, he or she is no longer the order taker. The next person to press a talk button becomes the order taker.

- Enter page monitor mode, which permits you to hear only pages and not any order taking activity. Starting with the power off on the headset, press and hold the page button while turning it on to enable page monitor mode.
- **Battery Release:** Slide up to remove the battery.

### Indicator Light Modes

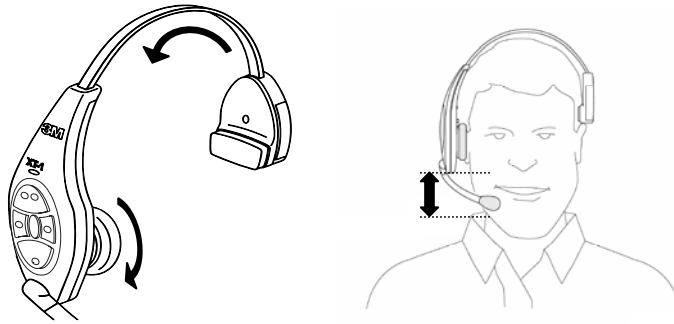
Use the table below to understand the meaning of the indicator light on the headset:

Indicator	Mode Description
Off (no light)	Indicates power is off. It will turn off automatically if it fails to register within two minutes or if the battery dies.
Solid Green	Headset is signed on, standby, Lane 1.
Solid Amber	Headset is signed on, standby, Lane 2.
Solid Red	Headset is in transmit mode.
Flashing Green (changed from flashing amber)	Headset has not registered, but found an open base to which it will try to register.
Flashing Green (immediately after power on)	Headset is registered but has not yet synchronized or signed on to the base station.
Flashing Amber	Headset is not registered and has not found a base station.
Steadily Flashing Red	Headset is the active order taker, but the microphone is muted.
Single Red Flash (changed from flashing green)	Headset has successfully synchronized and signed on with a base station ("Lane 1" or "Lane 2" will also be heard in the earpiece).
Alternating Flashing Green and Amber	Page Monitor Mode.

### Fitting the Headset

Make the following adjustments to the headset to make it comfortable, less likely to fall off, and easy for you to hear and speak clearly:

1. Rotate the ear cup and ear pad so that the indicator on the ear cup is aligned to the back of your head.
2. Adjust the size of the headband until the ear pad rests against one ear and the battery side pad rests just above the other ear.
3. Rotate the microphone boom up or down so its tip is in line with the corner of your mouth. Do not bend the boom.



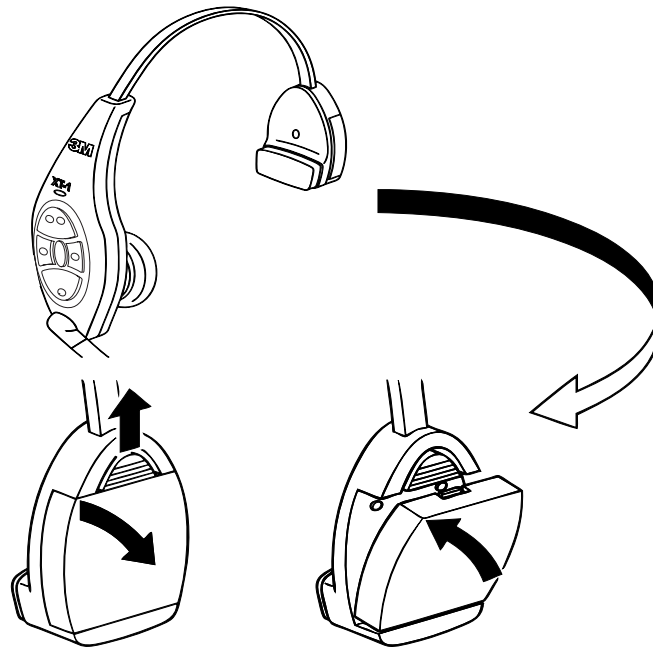
### Replace the Battery

It is important to have fully charged batteries in the headset. When a battery is low, the system plays a “change battery now” message in the headset every 15 seconds.

**Note:**

When installing a battery, make sure it is fully charged. It is important to remember that an *unused* 3M™ Wireless Communication System Model XT-1 battery loses five percent of its charge per week. If a battery has not been used for several weeks, make sure to charge it prior to use.

1. Slide and hold the battery release.
2. Remove the discharged battery from the battery housing.
3. Insert a **fully charged battery** in the housing with the notch facing the battery release. Make sure the battery is fully inserted (battery release clicks).



### Out of Range

In addition to “Change Battery Now” you may also hear a message for “Out of Range.” If you hear this in your headset, you need to move closer to the Base Station. You will know you are in range when you hear the message “Lane 1” or “Lane 2.”

### Cleaning

For good health and hygiene, you should clean the headsets regularly. Here are some guidelines:

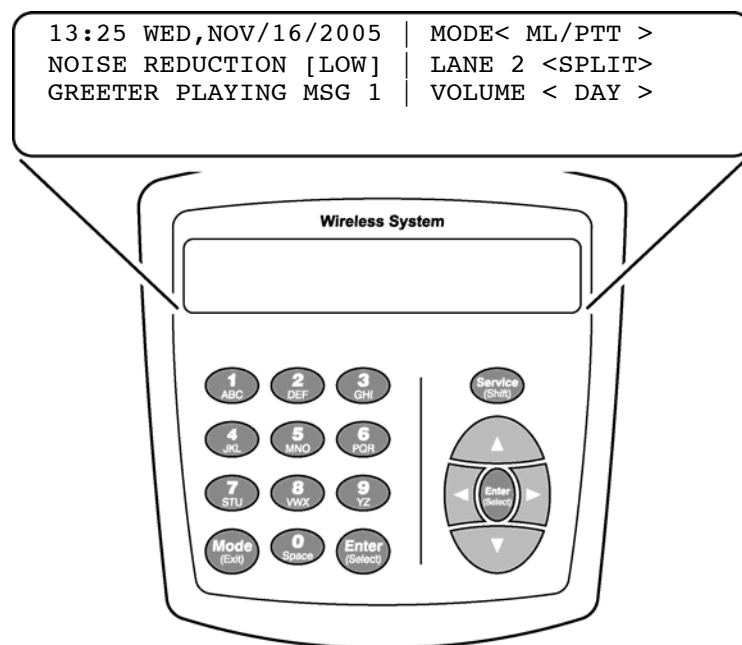
- Check the headsets every day. If they are dirty, clean them. Even if they don't look dirty, every headset should be cleaned on a regular schedule.
- Before cleaning, remove the soft foam ear pad and microphone windscreen. If used.
- Use a soft cloth and mild cleaning solution to wipe the surfaces clean. We recommend using a 3M™ 504/7065 Cleaning Wipe or a 3M™ High Performance Cloth lightly dampened with 3M™ Food Service Degreaser, 7L, (70-0708-3996-7).
- Remove stubborn particles from switches and clear plugged speaker holes with a soft toothbrush.
- Gently clear plugged holes in the microphone tip with a wooden toothpick.
- Do NOT soak the headset or immerse it in water; you might damage the electronics.
- Do NOT bend the battery contact or microphone boom.

## Base Station Setup

Most of the base station configuration is performed during installation by the installer or by a manager. The setup options listed in this section are only those that can be performed without entering the passcode-protected areas of the base station.

The following procedures are all performed at the base station using the base station keypad. The base station must be turned on (plugged in) and in Run Mode without a security passcode entered.

The following diagram shows how the display on the base station looks in Run Mode.



### Navigating in the Base Station in Run Mode

To navigate the base station in Run mode you only need to use **Enter**, **Mode**, and the directional arrow buttons: up ▲, down ▼, left ◀, and right ▶. The remaining buttons function only in manager or installer configuration modes.

### Change Order Taking Mode

There are seven order taking modes, which offer different combinations of speaking, listening, automatic standby, vehicle detector, and order point modes.

Perform the following procedure to switch to a different order taker mode:

1. Press ▼ until the **Mode** selection is highlighted.
2. Press **Enter**.
3. Press ▼, ▲, ▶, or ◀ to select a new order taker mode. Your choices are **ML/PTT**, **ML/MLT**, **AL/PTT**, **AL/MLT**, **Hands Free**, **Outside**, and **Always On**. See "Explanation of Order Taking Modes," and "Which Order Taking Mode to Select" below.

**Note:**  
 Your system may be configured with fewer order taking mode options than the number described in this section. You must enter User configuration (passcode required) to enable or disable individual order taking modes.

### Explanation of Order Taking Modes

The following table shows how each order taking mode affects components and settings in the system. The paragraphs that follow the table explain the meaning of information in the table.

Order Taking Mode	Listen	Talk	Vehicle Detector	Automatic Standby	Order Point
<i>ML/PTT</i>	Manual	Push to Talk	Presence	On	Used
<i>ML/MLT</i>	Manual	Manual Latching	Presence	On	Used
<i>AL/PTT</i>	Automatic	Push to Talk	Presence	On	Used
<i>AL/MLT</i>	Automatic	Manual Latching	Presence	On	Used
<i>Hands Free</i>	Automatic	Automatic	Presence	On	Used
<i>Outside</i>	Manual	Manual Latching	Ignored	Off	Not Used
<i>Always On</i>	Always on	Manual Latching	Ignored	Off	Used

#### Listen: Auto, Manual, and Always On

In *Manual Listen (ML)*, the operator must press the talk lane button to turn on the order point microphone (to hear the customer order). The order point microphone will remain on until the vehicle leaves.

In *Automatic Listen (AL)*, the order point microphone turns on and stays on whenever a vehicle is detected. The order point microphone will remain on until the vehicle leaves.

In *Always On*, the order point speaker is always on so the customer can always be heard regardless of whether a vehicle is detected at the order point. *Always On* is a special failure mode that is useful if the vehicle detector cannot be used.

#### Talk: Manual Latching, Push to Talk, Automatic

In *Manual Latching Talk (MLT)*, the operator must press and release the talk lane button to “latch” or lock the headset microphone in the on position. The operator can continue to speak hands free until the talk button is pressed and released again. When *Automatic Standby* is on (see below), the microphone will also be turned off when the vehicle is no longer detected.

In *Push to Talk (PTT)*, the operator must press and hold the talk button while speaking into the headset microphone. Releasing the button turns off the microphone.

In *Hands Free*, the headset microphone is on whenever the order point vehicle detector detects a vehicle. Because *Automatic Standby* (see below) is also on when *Hands Free* is On, the microphone is turned off when the vehicle is no longer detected.

**Automatic Standby: On and Off**

When Automatic Standby is on, the order taker's microphone and the order point microphone turn off when the vehicle is no longer detected.

**Vehicle Detector: Presence or Ignored**

When the vehicle detector is on (in presence mode), a car entering the order point is sensed and the ordering system reacts according to the order taking mode. When the vehicle detector is off (ignored), Automatic Listen, Automatic Talk, and Automatic Standby are unavailable. Only *Outside* or *Always On* order taking modes are recommended when the vehicle detector cannot be used.

**Order Point: Used or Not Used**

When the order point is used, customers can order using any of the typical order taking modes, with the exception of the Outside mode (see below for explanation).

**Which Order Taking Mode to Select**

Each order taking mode is designed for a specific purpose so you do not need to manually select the modes for the individual components and potentially end up with a non-working configuration.

*ML/PTT*, *ML/MLT*, *AL/PTT*, *AL/MLT*, and *Hands free* should be selected for typical ordering configurations where all of the drive thru employees are inside of the building and all of the equipment is working properly. The choices between them tend to vary according to the number of people available, how many duties they must perform simultaneously, and possibly employee preferences.

If you plan to have the order taker standing outside with a headset, *Outside* mode is the best choice. The order point speaker, microphone, and vehicle detector are disabled. This allows hands free communication to staff inside the store for order entry and/or special requests.

If the vehicle detector is not functioning properly, *Always On* mode is the best choice. The microphone at the order point is on continuously, regardless of the status of the vehicle detector. Typically, when a vehicle detector fails, it reports the presence of a vehicle continuously, which functions as (bookmark).

**Change Lane Mode**

Perform the following procedure to select the lane mode that is appropriate for your current situation. Descriptions for the two modes follow the procedure.

1. Press ▼ until the **Lane X** selection is highlighted (where X is the lane number, 1 or 2).
2. Press **Enter**.
3. Press ▼ or ▲ to select between the two possible lane modes: **CROSS** and **SPLIT**.
4. Press **Enter** to implement the change or press **Mode** to abandon the change and leave the previous lane mode in effect.

**Split Lane**

*Split Lane* mode is the preferred mode for heavy volume because it essentially separates the communications between the two base stations.

- Operators will only hear a signal from the order point last used: single repeating beep from order point 1 or a double repeating beep from order point 2.

- The headset buttons T1 and T2 communicate only with order point 1 and order point 2, respectively.
- For paging, pressing the page button on a lane 1 headset is only heard by other lane 1 headsets. Likewise pressing the page button on a lane 2 headset is only heard by other lane 2 headset.

**Notes:**

A headset becomes a “lane 1” or “lane 2” headset by momentarily pressing and releasing the T1 or T2 button.

You can configure the base stations to permit paging to be heard by both lanes. Refer to configuration section of the manager’s guide.

### **Cross Lane**

*Cross Lane* mode is the preferred mode for lighter volume or whenever one order taker needs to answer both order points: essentially, the two order points cross over.

- Operators will hear signals from both order points: single repeating beep from order point 1 or a double repeating beep from order point 2.
- The headset buttons T1 and T2 communicate only with order point 1 and order point 2, respectively.
- For paging, pressing the page button is heard by all headsets.

### **Change Volume Mode**

If you have night volume reduction in use on your system, the volume change happens automatically at the set “Day” and “Night” times. However, you can change the volume mode manually without changing the day or night time setting.

Perform the following procedure to change between night and day or day and night volume:

1. Press ▼ until the **Volume** selection is highlighted.
2. Press **Enter**.
3. Use the arrows to select between **DAY** and **NIGHT**.
4. Press **Enter** to implement the change or press **Mode** to abandon the change and leave the previous setting in effect.

# Maintenance

## Headset

### Replacing the Ear and Headband Pads

To replace the ear pad, remove the worn/damaged ear pad from the ear cup and replace it with a new pad.



To replace the headband pad, remove the worn/damaged pad by peeling it from the back of the battery housing. Remove protective backing from new pad and press it into place on the back of the battery housing.

## Battery Charger

### Location

The battery charger should be placed on a flat surface such as a desktop or table in a clean, dry environment.

### Cleaning the Contacts

If the indicators fail to light during charger operation, clean the contacts using a water-moistened cotton swab.

## Batteries

### Care, Handling and Storage

- Avoid dropping batteries.
- Do not carry batteries in your pockets or leave them in hot, damp or dirty places.
- Clean the battery contacts periodically using a water-moistened swab.
- Be careful not to short the battery contacts together.
- Do not set the batteries contact-side down on a bare metal countertop.

### Low Battery Message

When the battery voltage is too low, the headset sounds a “change battery now” message at fifteen-second intervals to alert the operator to install a fully charged battery. The “change battery now” message continues for two minutes after which the headset turns off automatically to prevent damage to the batteries.

### Charging Batteries

To charge a battery, insert the battery in one of the charging slots.

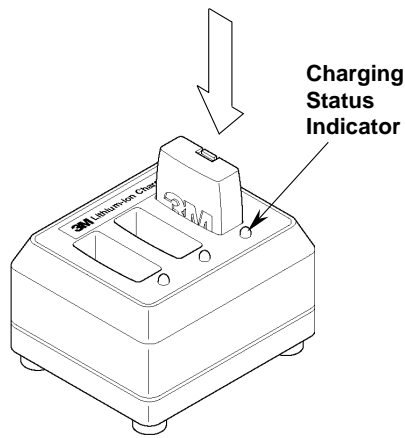
- The indicator lights RED to indicate the battery is charging.
- The indicator lights GREEN to indicate the battery is charged.

**Note:**

Discharged batteries require 3 ½ hours to charge.

**Note:**

When the GREEN indicator lights, the battery is approximately 80% charged. An additional 1/2 hour of charging is required to achieve maximum charge.



### Disposing of Batteries

To help protect the environment and conform to regulations, 3M™ Wireless Communication System Model XT-1 rechargeable batteries must be returned to 3M at the end of their useful life. Contact your 3M representative for additional instructions.

### Making Sure Batteries are Ready for Use

Follow these tips to make sure batteries are always ready for use:

- Have an extra battery for each headset. This helps ensure that a fully charged battery is always available.
- Recharge a low battery as soon as it is removed from the headset. When a battery is low, repeat messages are heard in the headset for 2 minutes, and then the headset shuts off.
- Keep the battery and charger contacts clean. Use a cotton swab and approved cleaner in accordance with manufacturer’s instructions to clean the contact surfaces.

- Remember that a battery recharge takes approximately 3 ½ hours.
- Avoid removing and reinserting batteries while they are charging (charging status indicator is RED).
- Remember that batteries discharge fastest during Talk and Page operation. Avoid unnecessary communications.
- Always use the On/Off switch to power off the headset before removing the battery.

### **Important Information about 3M™ Wireless Communication System Model XT-1 Rechargeable Batteries**

Keep the following information in mind as you operate the system and as you establish operating procedures:

- Each 3M™ Wireless Communication System Model XT-1 battery contains an internal protective device to prevent unsafe discharge rates. But, as with any battery, avoid shorting across the battery contacts with metal items. Never carry a battery in a pocket or place it in a drawer where it can accidentally be shorted by keys, coins etc.
- Have adequate charging capacity for the number of headsets in your system. One 3-slot battery charger will handle up to three headsets. Use of more than three headsets requires a 6-slot battery charger.
- Batteries perform best at moderate temperatures. Extremes of heat and cold reduce their performance.
- An unused 3M™ Wireless Communication System Model XT-1 battery loses five percent of its charge per week. Batteries that have not been used for several weeks should be recharged before use.

The four-character date code stamped on each 3M battery (wwyy) refers to the week and the year the battery was manufactured. Batteries are generally usable for two years beyond that date. Batteries used more often will need replacement sooner.



**Do not open, crush, expose to heat above 200 °F or incinerate the battery.**



# Troubleshooting

## Headset Indicator Lights

The following table describes the operating modes of the headsets according to the indicator lights. Use it as a troubleshooting reference.

Indicator	Mode Description
Off (no light)	Indicates power is off. It will turn off automatically if it fails to register within two minutes or if the battery dies.
Solid Green	Headset is signed on, standby, Lane 1.
Solid Amber	Headset is signed on, standby, Lane 2.
Solid Red	Headset is in transmit mode.
Flashing Green (changed from flashing amber)	Headset has not registered, but found an open base to which it will try to register.
Flashing Green (immediately after power on)	Headset is registered but has not yet synchronized or signed on to the base station.
Flashing Amber	Headset is not registered and has not found a base station.
Steadily Flashing Red	Headset is the active order taker, but the microphone is muted.
Single Red Flash (changed from flashing green)	Headset has successfully synchronized and signed on with a base station ("Lane 1" or "Lane 2" will also be heard in the earpiece).
Alternating Flashing Green and Amber	Page Monitor Mode.

## General Troubleshooting

Problem	Possible Cause	Solution
No communications. All headsets have green LED is flashing.	The base station has no power.	Make sure the power transformer is plugged into the wall outlet and into the base station power receptacle. If the LCD display does not come on, check for power at the wall outlet.
	Headsets are not registered to Base Station.	Register headsets
	The Base Station is defective.	Call for authorized service.
A single headset has green LED flashing	Headset is not registered to base station.	Register the headset.
	Defective headset.	If the other headsets register OK, the single headset needs repair.
No vehicle alert tone in all headsets.	No power to the external vehicle detector.	Plug the vehicle detector into power outlet or replace the detector fuse.
	Vehicle detector is "locked up."	Remove power to vehicle detector for a few seconds to reset the detector.
	The base station alert tone volume is set too low.	Adjust alert tone volume.

Problem	Possible Cause	Solution
	System is in Always On order taking mode.	Change the talking mode.
All headsets will not go into Standby (silence) when the vehicle leaves the menu sign.	This is normal when a pulse (air switch) type of vehicle detector is used.	Press the Page switch to silence the menu microphone.
	There is a large metal object near the loop in the driveway (if a loop is used).	Remove the object.
	The Loop detector is "locked up."	Unplug the loop detector from the AC outlet and plug it back in to reset the detector.
	Defective vehicle detector.	Call for authorized service.
	System is in Always On order taking mode.	Change the talking mode.
Audio on all headsets cuts out or is interrupted.	The Backup Intercom is on (the switch is engaged).	Disengage the Backup Intercom switch on the base station.
	Loose or frayed wiring.	Call for authorized service.
	Poor location of Base Station antennae (behind large metal objects, too far from work area, etc.).	Relocate the Base Station, or antennae.
Inbound audio cuts out (but outbound audio is okay)	The AEC level is too high.	Reduce the AEC level.
	The headset is too close to loud ambient noise.	Move the headset away from sources of loud ambient noise.
No Talk or listen from the menu sign when using the backup wired intercom. The 3M™ Wireless Communication System Model XT-1 works OK.	The backup switch on the base station is not in the correct position.	Turn the backup switch ON.
	No power to the backup intercom.	Turn the backup intercom on or plug in its power transformer.
	The volume controls are set too low on the backup intercom.	Turn the volume controls up.
	Defective backup intercom or wiring.	Call for authorized service.
No Talk or Page to other headsets from a single headset, or Talk or Page buttons require excessive pressure to operate.	Worn or defective Talk or Page switch.	Call for authorized service.
	Defective headset.	
Low Talk volume on a single headset.	The holes in front of the microphone are plugged with dirt or grease.	Call for authorized service.
	Operator is not positioning the microphone correctly.	Adjust/reposition the headset microphone(s).
	Defective headset.	Call for authorized service.
	Volume setting on headset is too low.	Power off and power on headset to reset volume level.
Louder Talk volume or feedback from a single headset.	Volume setting on headset is too high.	Power off and power on headset to reset volume level.
	The holes in back of the microphone are plugged with dirt or grease.	Call for authorized service.
The "hands free" function does not work.	The system is operating in half duplex mode.	Hands Free is disabled in half duplex mode.
	Hands free order taking mode not selected.	Select hands free order taking mode in the base station.
No vehicle alert tone in headset.	Backup switch not completely pressed (i.e., one of the other two buttons is pressed).	Press the other button into the correct location.
Headset(s) amber LED flashing.	Headset(s) not registered.	Register the headset(s).

### Battery and Battery Charger Troubleshooting

Problem	Possible Cause	Solution
No lights come on when a battery is inserted into charger.	Dirty contacts on battery or charger.	Clean contacts on battery and charger.
	No power to charger.	Make sure power transformer is plugged into charger and a "live" outlet.
	Defective battery.	Try a known good battery.
	Defective charger.	Call for authorized service.
Short battery life.	Worn out batteries.	Replace battery.
	Wrong type of power transformer used for charger.	Make sure power transformer is marked "Secondary Voltage 14 VAC."
The green light on the charger never comes on.	Defective battery.	Replace the battery.



# Appendix: Base Station Specifications

## Physical

Parameter	Specification or Requirement
Dimensions (l x w x d)	20 in. x 11½ in. x 2 in. (51 cm x 29 cm x 5 cm)

## Electrical

Parameter	Specification or Requirement
Input Power	120 VAC, 50/60 Hz, 15A Standard 3-prong outlet required (station includes AC adapter)
Radio Frequency	2.4 GHz ISM
Speaker outputs	5W

## Functional

Parameter	Specification or Requirement
Maximum number of order points per base station	1
Maximum number of headsets per base station	more than 15
Maximum number of vehicle detectors per base station	3
Maximum number of greeter modules per base station	1
Maximum number of timer vehicle detector modules per base station	3



# Appendix: Greeter Module

## Greeter Setup

The greeter module is an accessory that stores prerecorded messages and plays them back when vehicles arrive.

You can record a series of messages then select or combine them to convey standard messages and reduce time and errors.

### Enter the Greeter Configuration Menu

All of the greeter settings are located in a top-level “Greeter Setup” configuration menu.

Perform the following procedure to enter the greeter configuration menu:

1. Enter the base station configuration mode, see page 11.
2. Press and release **Mode** until the **Greeter Setup** menu appears.

### Play Greeter Message

Perform the following procedure to listen to the current greeter messages:

1. Enter the greeter configuration menu, see above.
2. Select **1 Play Greeter Messages**. The currently-selected message plays on the headsets.
3. Press **Service** to stop playing when finished.

### Select Specific Greeter Messages

You can store up to four different greeter messages, then select one or more of them to be played at any given time. Perform the following procedure to enable specific greeter messages:

1. Enter the greeter configuration menu, see above.
2. Select **1 Play Greeter Messages**.
3. Change the value of the desired message (1-4) to **ON** or **OFF**.
4. Return to step 3 if you want to change additional messages.

### Change Playback Mode

Perform the following procedure to change the greeter playback mode.

1. Enter the greeter configuration menu, see above.
2. Select **1 Play Greeter Messages > Playback**.
3. Change the value of the playback setting. Your choices are:
  - **ALTERNATING**—A different message plays for each vehicle that pulls up to the customer order point. Multiple messages must be selected.
  - **PLAY ONCE**—All messages selected play once for every vehicle that pulls up to the customer order point.
  - **REPEATEDLY**—All messages selected play continuously until the order taker starts to speak.

Perform the following procedure to record (store) a new greeter message:

#### Notes:

If you store a new greeter message in an occupied slot, the old greeter message will be permanently erased.

Each recorded message can be no more than 15 seconds long.

1. Put on a working headset with the power on.
2. At the base station, enter the greeter configuration menu, see page 45.
3. Select **2 Record Greeter Messages > Record Message >X<** where “x” represents the greeting number you want to record.
4. Scroll to **Record**.
5. Press and hold the Page button on the headset.
6. Press and release **Service** on the base station and speak the message you want to record.
7. When finished, press and release **Service**, then release the page button.
8. To hear the new greeting played back, scroll to **Playback** and press **Service**.

**Note:**

Instead of recording a live greeting from a headset, you can use a message that was prerecorded and saved on a media recording/playback device, such as a CD or MP3 player or on the hard drive on a computer. Connect the device to the AUX AUDIO IN jack on the bottom of the base station, and use the device’s controls to start and stop the playback by using the base station’s Service button.

### Change Playback Delay Time

Playback delay time is the number of seconds between when the vehicle detector detects a vehicle and when the greeter begins to playback the message.

Perform the following procedure to change the playback delay time:

1. Enter the greeter configuration menu, see page 45.
2. Navigate to **3 Greeter Setup > Playback After Delay Of >XX< Seconds** where “xx” represents the current number of seconds.
3. Change the number of seconds to a new value. The range is 0 to 15 seconds.

### Set Greeter Playback through Headsets

You have the choice of allowing the greeting to be played through the headset in addition to being played to the customer at the order point.

Perform the following procedure to enable or disable playback through headsets:

1. Enter the greeter configuration menu, see page 45.
2. Change the value for **3 Greeter Setup > Playback To The Headsets?** to **YES** or **NO**. Selecting YES means the greeting will play on the headsets as well as the order point. Selecting NO means it will only be heard at the order point (and the monitor if selected below).

### Set Playback through Monitor

You have the choice of allowing the greeting to be played through the monitoring speaker in addition to being played to the customer at the ordering point.

Perform the following procedure to enable or disable playback through the monitor:

1. Enter the greeter configuration menu, see page 45.

2. Change the value for 3 Greeter Setup > Playback To The Monitor? to YES or NO. Selecting YES means the greeting will play on the monitor as well as the order point. Selecting NO means it will only be heard at the order point (and the headsets if selected above).

### Turn on Tone to Headsets During Greeter Playback

If the greeting is not playing over the headsets, a continuous tone can be played while the customer is hearing the greeting. This permits the order taker to know when the greeting is playing and when it has stopped.

To enable or disable the tone during greeter playback:

1. Enter the greeter configuration menu, see page 45.
2. Change the value for 3 Greeter Setup > Tone To Headsets During Playback? to YES or NO. Selecting YES means the tone will play on the headsets. Selecting NO means it will not play on the headsets.

### Turn on Restaurant Closed Playback Message

You can assign a standard message to be played to customers during hours when the restaurant is closed. The clock and store hours must be set correctly, and the actual message must be recorded, then it can be set to activate automatically whenever the restaurant is closed.

To turn on the restaurant closed playback message:

**Notes:**

Make sure that the clock setting and store hours are correct before enabling the restaurant closed message playback.

1. Enter the greeter configuration menu, see page 45.
2. Change the value for 3 Greeter Setup > Restaurant Closed Playback Message to 1, 2, 3, 4, or OFF. Selecting 1, 2, 3, or 4 means the corresponding message will play when the store is closed. Selecting OFF means a message will never be played.

**Note:**

When you have a restaurant closed playback message, “CLS” will appear in the numbered slot (1, 2, 3, or 4) for the number you select.

### Turn on External Detector Playback Message

If an external detector is used and connected to the EXT\_MSG trigger pin on the base station circuit board, you can assign a message to be played back whenever the external detector is activated.

To turn on the external detector playback message:

1. Enter the greeter configuration menu, see page 45.
2. Change the value for 3 Greeter Setup > External Playback Message to 1, 2, 3, 4, or OFF. Selecting 1, 2, 3, or 4 means the corresponding message will play when the external detector is activated. Selecting OFF means a message will never be played.



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