# ASTRO® XTL™ 5000 Digital Mobile Radios with W5 Control Head

# Quick Reference Card

## Product Safety and RF Exposure Compliance

> ⚠ **Caution** — Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

### ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C99) to ensure compliance with RF energy exposure limits.



PAGE or SECURE or EMERGENCY — Page / ⊘ / Emer

POWER ON/OFF   MODE   PHONE   SCAN   CALL   SELECT

Mode / Vol / Mic / DIM HOME

HOME
VOLUME
PRIORITY/ NON-PRIORITY INDICATORS
DIRECT INDICATOR
HORN/ LIGHTS
MONITOR
DIRECT

## BASIC OPERATION

### Turning the Radio On and Off

Press the **PWR** button once.

### Setting the Volume and Squelch

1. Hold the **Vol** rocker switch down to increase or decrease volume as desired, then release. The display shows volume levels from **0** to **15**.
2. On conventional modes with Private-Line or Digital Private-Line, press **Mon** or remove the microphone from the hang-up clip to defeat the coded squelch.
3. Press **Mon** again, or replace the microphone on the hang-up clip to return to coded-squelch operation.
4. To adjust squelch level, hold **Mon** until a tone sounds.
5. Press the **Mode** rocker switch to select squelch level.
6. Press **HOME**.

### Changing Modes

Press the **Mode** rocker switch to select the desired mode

**OR**

Press **HOME** to access the preprogrammed Home mode.

### Transmittingt

1. Press and hold the microphone **PTT** button.
2. When the transmit light comes on solid and no alert tones sound (or a talk-permit tone or ID sidetone sounds), speak into the microphone in a normal voice.
3. State your FCC call sign at the beginning of each transmission.

## Transmitting (Conventional Modes)

1. Press **Dir** (Direct). The **Dir** indicator lights.
2. Press **Dir** again to return to repeater operation.

### Activating Scan

1. Press **Scan** to start a scan. If no activity exists, the display shows your selected mode. When a scanned channel or talkgroup becomes active, the display shows the active mode name. The **PRI** and **NPRI** indicators show priority.
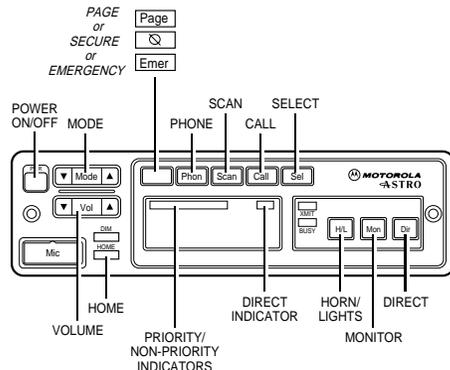2. Press **Scan** again to stop scanning.

### Programming a Scan List

1. Hold **Scan** until a tone sounds and the scan indicator blinks.
2. Press the **Mode** rocker switch to select the mode you want to program.
3. Press the **Sel** button as indicated in the table below to add or remove the displayed mode from the scan list.
4. Repeat the previous steps to continue editing the list.
5. Press **HOME** or **Scan** to exit.

| Press Sel | Mode | Indicator |
|-----------|------|-----------|
| One time | Non-Priority | **NPRI** lit |
| Two times | Second Priority | **PRI** lit |
| Three times | First Priority | **PRI** blinks |
| Four times | Delete from List | No indicator |

### Selecting Scan Mode Priority

1. Press the **Sel** button as indicated in the table above to designate up to two modes as priorities.
2. Press **HOME** or **Scan** to end scan list selection.

## Sending an Emergency Alarm or Call

Press the emergency actuator (**Emer** button, footswitch, hidden pushbutton) to begin an emergency transmission.

For conventional modes, a silent or non-silent emergency alarm data transmission is sent.

For trunked modes, emergency call (priority access to a voice channel), silent or non-silent emergency alarm, or emergency alarm and call is entered.

Depending on your radio's programming, one of the emergency sequences described in the table below occur.

| Alarm Type | Indications/Actions |
|---|---|
| Non-Silent | A tone sounds and the display flashes EMERGNCY. When acknowledged, four more tones sound and the display shows ACK RCVD, then the radio returns to normal operation. |
| Silent | The audio is muted and no display changes take place during the alarm.<br><br>Press the **PTT** button, or press and hold the emergency button to stop the emergency condition and unmute the radio. |
| Call (Trunked Modes only) | A tone sounds and the display flashes EMERGNCY.<br><br>Press the **PTT** button and talk.<br><br>After completing the call, press and hold the emergency actuator until a tone sounds to return to normal operation. |

| Alarm Type | Indications/Actions |
|---|---|
| Alarm and Call | After the display shows ACK RCVD (see Non-Silent Alarm above), the radio has priority voice-channel access.<br><br>Press the **PTT** button and talk.<br><br>After completing the call, press and hold the emergency actuator until a tone sounds to return to normal operation. |

## Sending a Status Transmission

1   Press **Sts**. The display shows the last acknowledged status or the first status name.

2   Press the **Mode** rocker switch to select other statuses.

3   Press **Sel** to send the transmission. The display flashes the selected status name until the dispatcher acknowledges, at which time alert tones sound and the display shows ACK RCVD. The radio then returns to normal operation.

## Sending a Direct-Entry Keyboard Status Transmission

Press the appropriate **Sts #** button that you wish to send. The associated indicator blinks until an acknowledgment is received, then it lights steadily.

## Sending a Direct-Entry Enhanced Private Conversation Call

1   Press **Sel** or the **PTT** button. A single tone sounds and the display changes to PLS WAIT, followed by telephone-type ringing if the receiving unit is in service.

2   If the receiving unit answers, press the **PTT** button to identify yourself and proceed with your call.

**OR**

If the called unit does not respond, press **Sel** or the **PTT** button again to leave a Call Alert page message and your ID.
A single tone followed by four tones sounds if the called unit acknowledges the page.

## Initiating a Call Alert Page

1   Press the **Page** button.

2   Follow the instructions for initiating a Private Conversation to select a unit ID.

3   Press **Sel** or the **PTT** button to send a Call Alert page to the displayed ID,

**OR**

To send a Call Alert page following an Enhanced Private Conversation attempt, follow the instructions for sending a direct-entry Enhanced Private Conversation call.

## Answering a Call Alert Page

Four tones sound and PAGE RCV flashes on the display. The tone and display repeat every five seconds.

1   Press the **PTT** button,

**OR**

Initiate an Enhanced Private Conversation call to the caller.

## Selecting a Zone/Mode (Optional)

1  Press the Zone Up ▲ button or Zone Down ▼ button to scroll to the desired zone.

2  Press the **Mode** rocker switch to select the mode.

## Selecting a Home Zone/Home Mode

Press the **HOME** button.

## Selecting Secure Mode

Press and release the ⬭ button. The ⬭ indicator lights up.

## Selecting an Encryption Key

1  Press and hold the ⬭ button until a tone sounds.

2  Press the **Mode** rocker switch to scroll to `KEY SEL`.

3  Press **Sel** to enter the Key Selection Menu.

4  Press the **Mode** rocker switch to select the desired key.

5  Press **Sel** to select the key.

6  Press **HOME** or the **PTT** button to quit.

## Selecting a Key Index

1  Press and hold the ⬭ button until a tone sounds.

2  Press the **Mode** rocker switch to scroll to `INDX SEL`.

3  Press **Sel** to enter the Index Selection Menu.

4  Press the **Mode** rocker switch to select the desired index.

5  Press **Sel** to select the index.

6  Press **HOME** or the **PTT** button to quit.

## Erasing an Encryption Key

1  Press and hold the ⬭ button until a tone sounds.

2  Press the **Mode** rocker switch to scroll to `ERASE KY`.

3  Press **Sel** to enter the Key Erase Menu.

4  Press the **Mode** rocker switch to select the desired index.

5  Press **Sel** to select the index.

6  Press **HOME** or the **PTT** button to quit.

## DISPLAY AND LIGHT INDICATORS

| Display/Light | Meaning |
|---|---|
| **BUSY** light on | The conventional mode in the display has activity on it, or selected trunked system is currently busy. Wait for callback. |
| **XMIT** light on | Indicates you are transmitting. |
| **Dir** indicator lit | Radio is in direct (mobile-to-mobile) operation. |
| **PRI**, **NPRI** indicators lit | The display shows the mode in the scan list with the indicated priority level. |
| `P` displayed | Telephone dialing pause. Press **Sel** to continue the dialing. |
| `NO ACK` displayed | Unit being called with the Enhanced Private Conversation or Call Alert Page feature is not in service, or emergency alarm or status/message transmission is not acknowledged by dispatcher. |
| `NO ANSWR` displayed | Unit being called with Enhanced Private Conversation or Call Alert Page does not respond, but is operational. |
| `EMERGNCY` displayed | Radio is in emergency alarm or call state. |
| `NO EMERG` displayed | A mode incapable of emergency transmission has been selected. |
| `OUT RNG` displayed | Radio is out of range of the trunking system. |

## ALERT TONES

| Type of Tone | Name | Explanation |
|---|---|---|
| 1 Low-Pitched Tone | Invalid Key Alert | Feature button pressed is not valid in selected mode, or a Call Alert or emergency alarm was not acknowledged. |
| 1 High-Pitched Tone | Central Acknowledge or Valid Key | Central controller has received request for Call Alert or emergency alarm transmission. You pressed a valid key. |
| 4 High-Pitched Tones | Dispatcher or Mobile Unit Acknowledge | Dispatcher is acknowledging your emergency transmission. Mobile unit has received your Call Alert. |
| 5 High-Pitched Tones | | The above two acknowledge tones, heard in tandem. |
| 2 High-Pitched Tones | Private Conversation | You have an incoming call. Press **Call**, then the **PTT** button, then talk. |
| 4 High-Pitched Tones every 6 seconds | Call Alert Page | Call Alert page has been received. |
| Phone-Type Busy Tone (when pressing the **PTT** button) | System Busy | All system radio channels in use. Release the **PTT** button, and wait for callback. |

## ALERT TONES (Continued)

| Type of Tone | Name | Explanation |
|---|---|---|
| 3 Short High-Tones (after requesting a busy channel) upon pressing the **PTT** button) | Automatic Call Back or Talk Permit | Channel is available for previously requested transmission. System is accepting your transmission. |
| Low-Pitched Tone (upon pressing the **PTT** button during Transmit) (Operation Error) | Talk Prohibit/ Out-of-Range or Time-Out Timer or Illegal Mode | Out of trunked radio system range or system is out of service. Present transmission will soon be disabled. You have entered a mode where normal system traffic will be missed, or you attempted something that is not allowed. (See examples below.) |
| High-Pitched Tone every 10 seconds in unmuted receive condition | Failsoft | System central controller failure. The radio reverts from trunked operation to operation similar to a conventional repeater. Others may share the channel. |

**Examples:** Not exiting phone mode after a call (radio cannot receive fleet or subfleet calls), transmitting in receive-only conventional mode, trying to select a dynamic mode when no dynamic ID assignment has been made.