

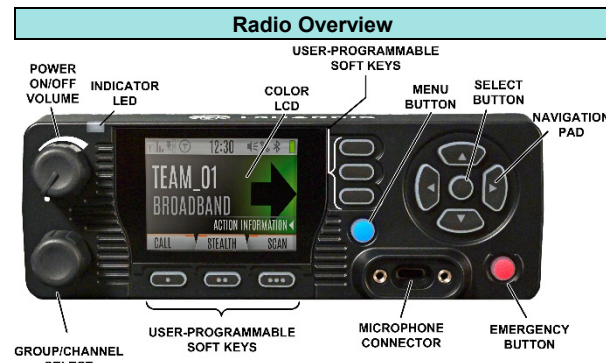
QUICK GUIDE

14221-1850-1020

July 2024



XL-85M Mobile Radio



Controls, Indicators, and Connectors	
Power On/Off Volume Knob	Turn clockwise to power on the radio and increase volume. Turn counter-clockwise to decrease volume and power off the radio. Minimum volume levels can be programmed into the radio to prevent missed calls due to a low volume setting.
Group/Channel Selection	Rotate to select the available groups or channels.
Microphone Connector	Connection for hand-held microphones and for programming cable.
Emergency Button	Press to declare an emergency. An Emergency Key Delay can be programmed in the radio. This delay defines the length of time the emergency button must be held before an emergency transmission is sent.

Controls, Indicators, and Connectors (Continued)	
Navigation Pad [Left, Right, Up, Down, and Select]	<p>Navigates menu items.</p> <p>In addition:</p> <ul style="list-style-type: none"> Press the left navigation button while on the main display to access Channel Information. Press the down navigation button while on the main display to display the functions assigned to programmable buttons. Press the up navigation button to display Missed Call info. Press the right navigation button to end or reject an I-Call. The Select button selects the currently highlighted menu item, like an Enter button. Press the Select button on main display to show programmable button labels.
12-Button Alpha-Numeric Keypad (KMM)	By default, used to enter text or numbers. Can be programmed for various functions.
Menu Button	From the Main Display, press this button to access the menu. While in a menu, press this button to return to the main display.
Indicator LED	<p>Indicates radio status:</p> <ul style="list-style-type: none"> Red = actively transmitting. Green = actively receiving. Orange = actively transmitting encrypted.
User-Programmable Soft Keys and Programmable Buttons	Programmable dynamic keys that have their current function labeled on the radio display beside each button.

Sample Main Front Display

*Radio can be programmed to display the System/Zone on the top line and Channel/Group below.

Radio Icons			
	Trunked Signal Strength		Bluetooth Enabled
	TX Power		Bluetooth Connected
	Receive Signal Strength		Encryption Enabled
	Channel Idle		Global Encryption
	Transmitting Encrypted		GPS Tracking
	Nuisance Channel		Monitor On
	Emergency		Type 99 Enabled
	Wi-Fi Clients Connected		Fire Speaker Mic Attached
	Receiving Data		OTAR Disabled
	Transmitting Data		OTAR Registered
	TX Disabled		Alert(s) Present

Radio Icons (Continued)			
	Transmit Power Level Low		OTAR Registering
	RX Only		OTAR Rekeying
	Noise Cancellation Enabled		Talkaround Enabled
	Speaker Muted		Transmit Power Level High
	Failsoft		VDOC
	RX Mail		Vote Scanning
	PTT Disabled		Scanning Enabled
	Tones Disabled		Conventional Site Unregistered
	Conventional Site Registered		Vehicular Repeater
	Remote Application Active		Vehicular Repeater Enabled
	GPS Antenna Detached		Wi-Fi Signal Strength Indicator
	Wi-Fi Network Connecting		Wi-Fi Network Connected
	IP Address Unassigned		Ethernet Link Down

Programming Caution

Do NOT power off the XL Mobile while software is being installed! Doing so can put the Control Head into an unusable state.

NOTICE!
THIS INFORMATION IS CONTROLLED BY THE U.S. DEPARTMENT OF COMMERCE EXPORT ADMINISTRATION REGULATIONS 15 CFR 730-774, EAR99. (EAR99.10.2023)

How to Use the Noise Cancellation Feature

- Verify **NOISE CANCELLATION** is enabled.
- Talk within two inches of primary microphone.
- Speak clearly, loudly, and with authority.
- Ensure the primary and secondary microphones are not covered.
- If necessary, it is o.k. to yell into the microphone. The radio can handle loud input levels.

Primary versus Secondary Microphone

The voice (primary) microphone is located on top front face of the mic and the noise (secondary) microphone is on the lower rear side. Do not obstruct either element during radio transmissions.



Primary Microphone

Secondary Microphone

For comprehensive operating instructions, refer to Operator's Manual 14221-1850-2040, available online at: <https://www.l3harris.com/all-capabilities/xl-onboard-series-mobile-p25-radios>.

About L3Harris Technologies

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space, and cyber domains.

Change Active Personality

1. Press the Menu button.
2. Navigate to the **UTILITY** menu.
3. Scroll up or down to highlight **PROGRAM** and press the Select button.
4. Scroll up or down to highlight the desired personality and press the Select button.
5. Press the **YES** soft key to confirm personality activation.
6. The radio displays **PLAN COMPLETE** followed by the name of the personality. Press the **OK** soft key.

Group Calls

Turn the Channel/Group knob to select the desired group/channel.

Or

A button on the control head or KMM can be programmed for Numeric Channel Entry to allow the user to manually enter the talkgroup/channel number.

When receiving a group call, the radio display toggles between the Unit Name and the Group Name of the transmitting radio. If either of those names is not programmed, the corresponding ID is displayed.

Emergency Operation

1. Press and hold the emergency button on the radio or the speaker microphone. The length of time you need to hold the button is programmable.
2. The emergency icon is displayed on the idle display.
3. The radio can be configured to go through transmit and receive cycles. Speak into the microphone while the radio is transmitting or press PTT to talk.

Exit emergency by power cycling the radio or selecting **EXIT EMERGENCY** from the **CALL** menu. If enabled via programming, clear an emergency by pressing the button programmed for Monitor/Clear and then the emergency button.

Enable Noise Cancellation

1. Press the Menu button. Navigate to the **UTILITY** menu.
2. Scroll up or down to highlight **AUDIO SETTINGS** and press the Select button.
3. Scroll up or down to highlight **NOISE CANCELLATION**. Toggle Noise Cancellation **ENABLED/DISABLED** using the Select button.

Individual Calls (Continued)

Receive an Individual Call

1. When receiving an Individual Call, the radio displays the calling radio's name or Unit ID. The radio will also display "Press ► to END/REJECT CALL."
2. Press PTT to respond or ► to END/REJECT the call. How long the radio remains in the Individual Call mode with no activity is programmable.
3. The radio rings and indicates a missed call if you do not respond. The ring sounds until you press PTT, view the missed call menu (▲), change channel/group/system, or power cycle the radio.
4. Press ► to end the call.

Scan Operation

Start/Stop Scan

A button can be programmed to start/stop scan. If a button is programmed for start/stop scan, other methods of starting and stopping scan are disabled.

Or

1. Press the Menu button. Navigate to the **SCAN** menu.
2. Scroll up or down to highlight **START SCAN/STOP SCAN**.
3. Press the Select button to start or stop scan. Press the **BACK** soft key to exit the scan menu.

Scan Configuration

1. Press the Menu button.
2. Navigate to the **SCAN** menu.
3. Scroll up or down to highlight **SCAN LISTS** and press the Select button.
4. Scroll up or down to highlight the desired scan list and press the Select button.
5. Highlight the desired group/channel and press the **OPTIONS** soft key.
6. Select **ADD CHAN/DELETE CHAN, SET PRI1, SET PRI2, REMOVE PRI, or NUISANCE/ADD BACK**. When a channel is not grayed out in the list, **DELETE CHAN** appears. When a channel/group is grayed out (not in list), **ADD CHAN** appears. Available options are based on radio programming.
7. Press the Select button to toggle selection.

Menu Navigation

Press the Menu button while on the main display to access the menu. When in a menu, press the Menu button to return to the main display. From a sub-menu, press the left or right navigation buttons to scroll through other menus (e.g., Scan, Security, etc.). Press the up or down navigation buttons to scroll through available options in a sub-menu. Press the Select button to choose, activate, or toggle the selected item.

Select Zone/System

A button on the control head or KMM can be programmed to scroll through available zones/systems.

Or

1. Press the Menu button.
2. Navigate to the **ZONE** menu. Scroll up or down to highlight the zone.
3. Press the **VIEW ZONE** soft key to view channels in the zone/system. Select the highlighted zone/system by pressing the Select button.

Individual Calls

Transmit an Individual Call

1. Press the Menu button.
2. Navigate to the **CALL** menu.
3. Scroll up or down to highlight **INDIVIDUAL CALL** and press the Select button.
4. Scroll up or down to highlight the unit to call and press the Select button, or select **KEYPAD** to manually enter the Unit ID.
5. Press PTT. When transmitting an Individual Call, the radio displays the called radio's name or Unit ID. If the radio is programmed for Acknowledged Individual Call, the radio displays "CALL QUEUED" until the callee answers or rejects the call.
6. After the callee answers, press PTT to respond. How long the radio remains in Individual Call mode with no activity is programmable.

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Status Messages

PTT DENIED	P25T & EDACS - The radio or talkgroup is not authorized to operate on the selected system and/or talkgroup.
CALL QUEUED	P25T & EDACS - The system has placed the call in a request queue.
SYSTEM BUSY	P25T & EDACS - The system is busy; no channels are currently available; the queue is full; or an individual call is being attempted to a radio that is currently transmitting.
SCANNING	Indicates the radio is scanning.
TX EMERGENCY	An emergency call is being transmitted.
RX EMERGENCY	An emergency call is being received.
WIDE AREA SCAN	P25T & EDACS - Indicates the radio has entered the Wide Area Scan mode to search for a new system.
INVALID TALKGROUP	P25T & EDACS - The current talkgroup is not valid for the current system.
INVALID UNIT	P25T & EDACS - The current unit is not valid for the current system.
REGISTERING	P25T - The radio is performing a registration on a P25 trunking site.
CTRL CHANNEL SCAN	P25T & EDACS - The Control Channel is lost and the radio has entered Control Channel Scan to search for the Control Channel (usually out of range indication).
BAND SCANNING	P25T - Only displayed if the P25T system is configured for "EnhancedCC" mode of operation. When the radio cannot find a Control Channel in the trunked frequency set or the list of discovered adjacencies, the radio performs a full spectrum frequency scan to find a new Control Channel.
MISSED CALL	P25 Modes & EDACS – Another user has tried to call or page this radio. The user can view who the caller was by pressing the ▲ key.
OTAR REKEY COMPLETE	OTAR Rekey operation completed successfully.