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RF-7850M-HH MULTIBAND HANDHELD RADIO



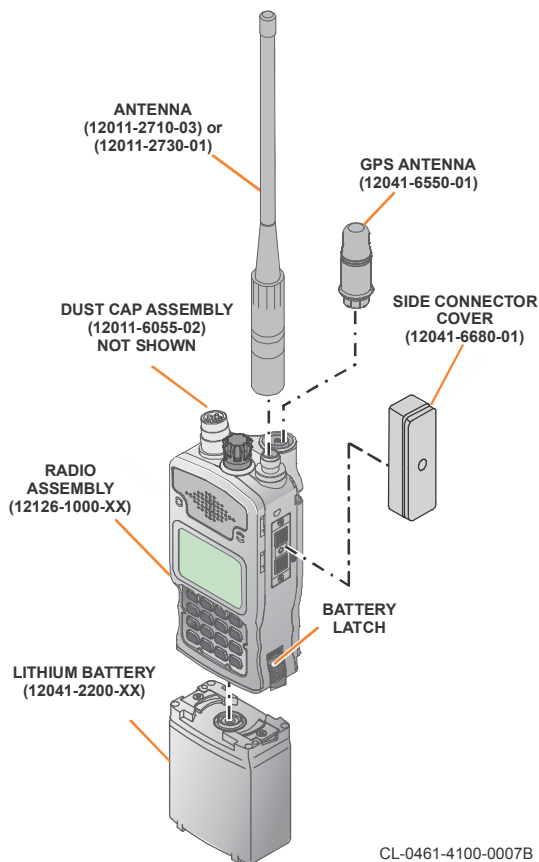
QUICK REFERENCE GUIDE

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SAFETY GUIDELINES

	WARNING - Do not crush, disassemble, reverse polarity or install incorrectly, incinerate, or mutilate the lithium-ion battery. Do not expose to fire or temperatures above 160 °F (71 °C). The battery can vent, rupture, or explode, releasing toxic material which may cause serious injury or death. In case material is released or spilled, evacuate and allow vapors to dissipate. Increase ventilation and do not inhale vapors. Notify safety personnel of release or spills.
	WARNING - Use only battery chargers approved by Harris, and never attempt to modify the battery or charger. Doing so may result in damage to the battery, the radio, or cause personal injury to the user.
	WARNING - RF shock could occur from coming into contact with the antenna while radio is transmitting.
	WARNING - The radio could be transmitting without activating the keyline via Push-To-Talk (PTT). This is possible in data communications and Internet Protocol (IP) connections. RF shock could occur from coming into contact with the antenna while radio is transmitting.
	WARNING - Do not dispose of lithium-ion batteries in uncontrolled trash.
	WARNING - A damaged lithium-ion battery that is exposed to water could cause a fire or explosion, causing serious injury. Batteries with cracked or damaged cases should be replaced immediately.
	WARNING - To avoid damage to hearing, ensure that the handset volume is at a comfortable level before using a handset.
	WARNING - Do not extend antennas or drive vehicles under low hanging power lines. Contact with power lines could result in serious injury or death.
	WARNING - Operating RF transmitting devices such as radios and cellular phones in or around fuel, weapons, or ordnance could cause serious injury or death. Follow all local directives and established safety procedures when operating any RF transmitting devices in these circumstances. Make sure guidelines specified in NAVSEA OP 3565 for Hazard of Electromagnetic Radiation to Ordnance (HERO), Hazard of Electromagnetic Radiation to Fuel (HERF), and Hazard of Electromagnetic Radiation to Personnel (HERP) are followed while operating this radio.
	CAUTION - ACID CONTAMINATES LITHIUM-ION BATTERIES. Every effort must be made to keep lithium-ion batteries isolated from lead-acid batteries because lead-acid batteries contain sulfuric acid. Do not use the same tools and materials such as screwdrivers, wrenches, hydrometers, and gloves for both types of batteries. Any trace of acid or acid fumes will permanently damage lithium-ion batteries on contact.

BASIC SETUP



CL-0461-4100-0007B

Before Communicating

Make sure RF-7850M-HH is programmed before use.

Use Communications Planning Application (CPA) for RF-7850M for programming. Some nets can be configured from the front panel keypad / display, or Web User Interface.

NOTE

Refer to RF-7850M-HH Operation Manual 10515-0461-4200 for additional information.

RF-7850M-HH

QUICK REFERENCE GUIDE

FIXED FREQUENCY


Operation Notes

R = Ready To Receive (Idle), Actively Receiving

T = Transmitting

CT = Cipher Text

PT = Plain Text

 = GPS Locked (Flashing if GPS is Searching)


 = Speaker on

 = Speaker off


 = Battery Level


 = Volume Level

>>> = More Soft keys

Press  (Circular Arrow [0 button]) to view next level screens.

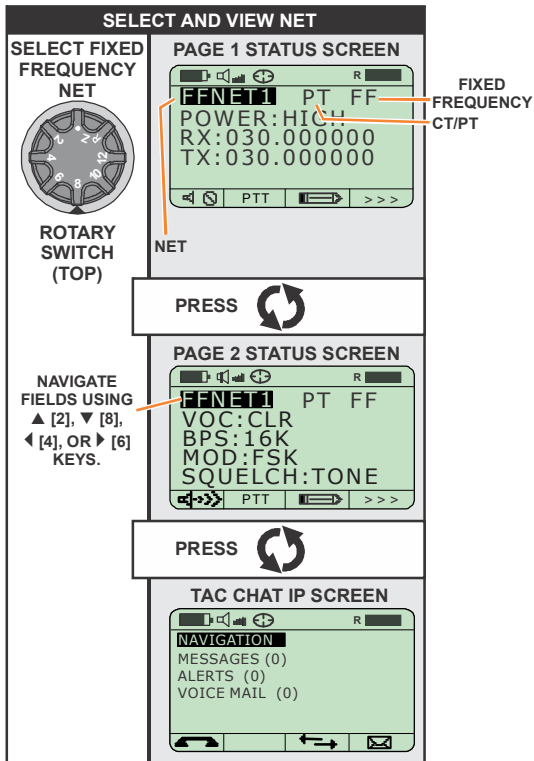
Programming Notes

 **> NET MANAGER >**
*** > TRANSEC >**
FIXED
FREQUENCY

 **> NET MANAGER >**
*** > (ALL OTHER**
SETTINGS FOR
NET)

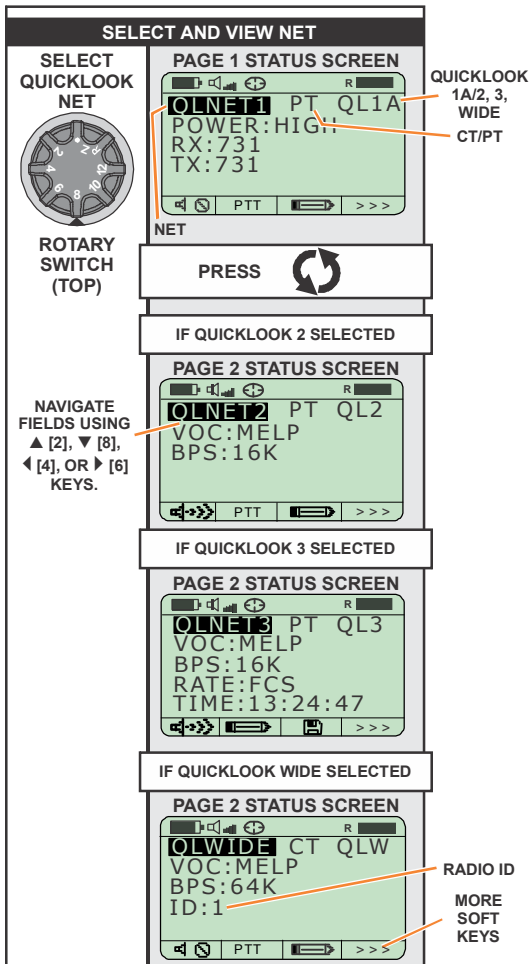
NOTE: * is net name or number. Select edit to modify via net manager for the current net.

Refer to 10515-0461-4200 for net setup related to sending files.



CL-0461-4100-0010B

QUICKLOOK 1A, 2, 3, AND WIDE



CL-0461-4100-0011B

Operation Notes

NOTE: Press [↺] (Circular Arrow [0 button]) to view next screen.

NOTE: Radio ID only displays on legacy MACA/MACA2 nets (Quicklook 1A/Wide only).

NOTE: Quicklook Wide only operates in 75 kHz bandwidth, can only be configured with channel access set to MACA2, and does not support separate RX and TX hopsets (one hopset is used).

NOTE: Tac Chat screen not shown.

Programming Notes

9 PGM WXYZ > NET MANAGER > * > TRANSEC > QUICKLOOK 1A, 2, 3, OR WIDE

9 PGM WXYZ > TRANSEC > ECCM MANAGER > HOPSET/ LOCKSET

9 PGM WXYZ > NET MANAGER > * > (ALL OTHER SETTINGS FOR NET)

NOTE: * is net name or number. Select edit to modify via net manager for the current net.

Refer to 10515-0461-4200 for net setup related to sending files.

DUAL PUSH-TO-TALK (PTT) OPERATION

Operation Notes

NOTE: Press [↻]
(Circular Arrow [0] button)
to view next screen.

Programming Notes

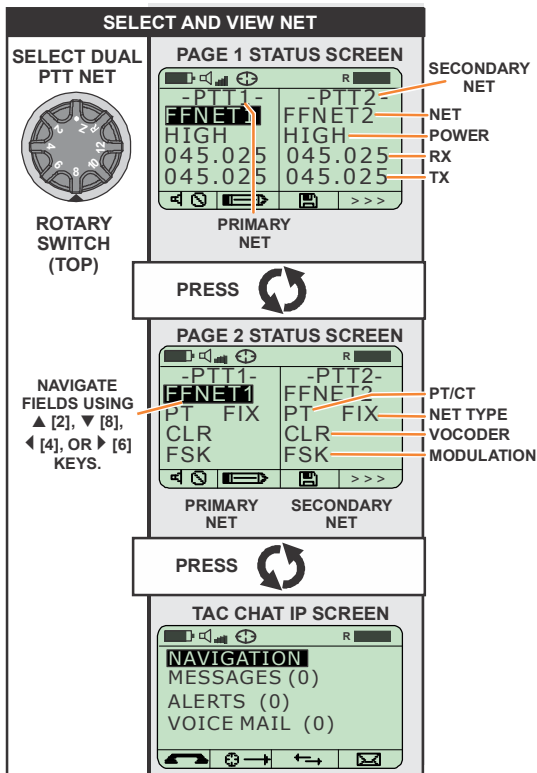
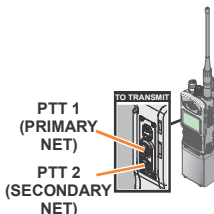
9 PGM
WXYZ

> NET MANAGER >
* (PRIMARY NET) >
SECONDARY NET
ID > * (SECONDARY
NET)

9 PGM
WXYZ

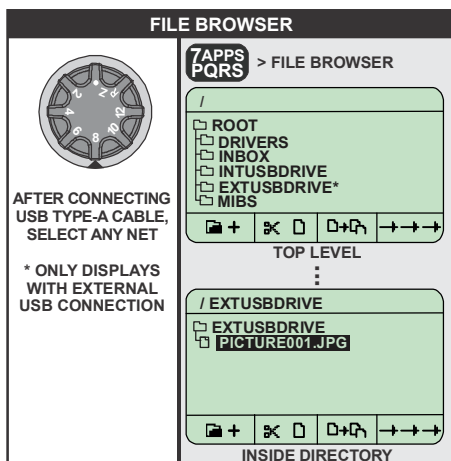
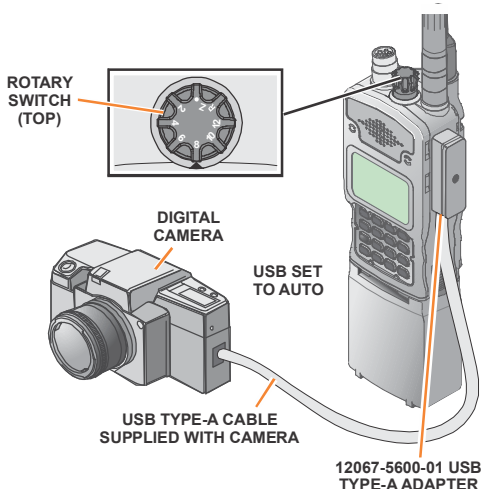
> NET MANAGER >
* (OTHER NET
SETTINGS AS
DESIRED)

NOTE: * is net name or
number.



CL-0461-4100-0014B

CAMERA CONNECTION



CL-0461-4100-0004B

Operation Notes

Connect a USB Type-A cable.

Select any net.

External USB port with picture files will be recognized.

Programming Notes

7APPS PQRS > FILE BROWSER > EXTUSBDRIVE

RF-7850M-HH

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WEB USER INTERFACE (WEB UI)

Operation Notes

Requires RF-7850AP-SW101 Web User Interface option for full functionality.

Open browser, navigate to [https:// 192.168.1.1](https://192.168.1.1) (default address of a zeroized radio).

Enter user level and password.

Select application from web interface home screen

Refer to 10515-0461-4200 for information on using a USB connection with RNDIS.

Programming Notes

9 PGM WXYZ > MISC > ANC. CONNECTOR MODE > ON OR AUTO

9 PGM WXYZ > IP CONFIGURATION > ADDRESS TYPE > DYNAMIC* OR STATIC

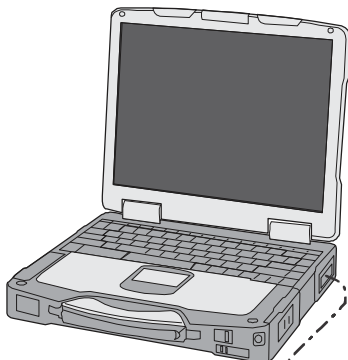
9 PGM WXYZ > IP CONFIGURATION > ETHERNET > ENABLED

9 PGM WXYZ > USB MODE > AUTO OR HOST

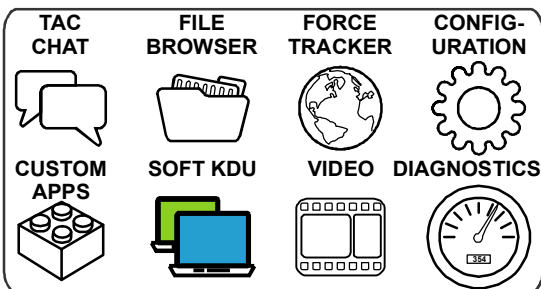
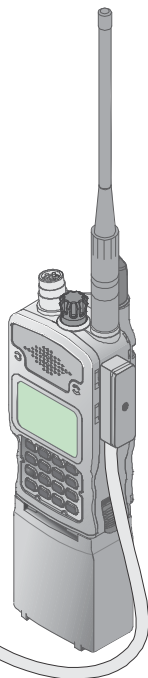
* Dynamic requires Dynamic Host Configuration Protocol (DHCP) server on network. Static requires Internet Protocol (IP) addresses.

Refer to 10515-0461-4200 for wireless IP route configuration and application instructions.

PERSONAL COMPUTER

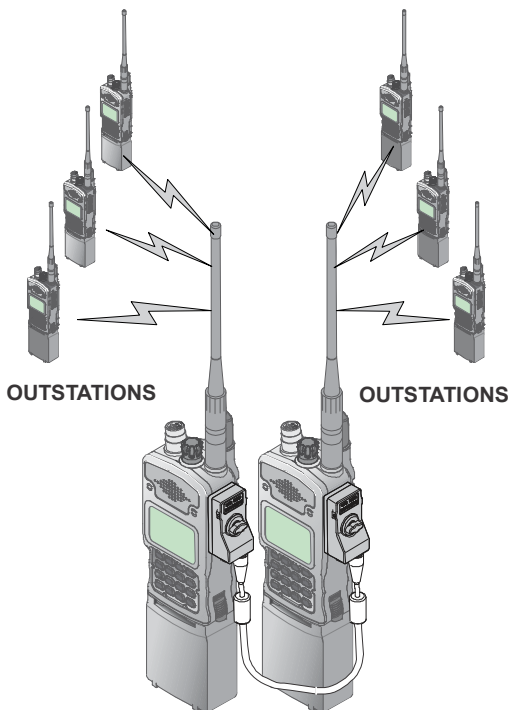


ETHERNET CABLE
(12067-5220-01)



CL-0461-4100-0015

SIMPLE RETRANSMIT NET (FF OR QL)



**BLACK REPEATER RADIOS CONNECTED USING
RETRANSMISSION CABLE 12067-5250-01.**

CL-0461-4100-0016A

Programming Notes

Only one radio per net can be set as the repeater station.

Black repeater is used for range extension only. Keys are not loaded during programming.

The black repeater radio is set for simple retransmit mode and can be unattended. The radio does not decrypt information, but passes it along encrypted from its source.

Refer to operation manual (10515-0461-4200) for details.

Table 1. Symbol Cross Reference

















Function	Symbol
Abort, Cancel, No	
Add	
All, Select All	 
Auto	 
Call	
Canned Message	
Cancel, Abort, No	
Configure	
Clear, Erase	
Clear All	
Copy	
Control the cursor position	
Cursor Left	
Cursor Right	

Table 1. Symbol Cross Reference (Continued)















Function	Symbol
Delete, Backspace	
Delete, Message	
Deselect All (Clear)	
Done, Set, Yes	
Edit, Type	
End	
Erase, Clear	
Forward Message	
GPS	
Information, Details	
Insert Mode	
Last (Redial)	
If, Line Feed	
Local Coverage Mode (CWR)	

Table 1. Symbol Cross Reference (Continued)















Function	Symbol
Lock	
Login	
Logout	
Manual Selection	
Make Directory (MKDIR)	
More	
Move	
Message, msg	
No, Abort, Cancel	
Overwrite Mode	
Pause	
Play, Start	
PTT	
Registration	

Table 1. Symbol Cross Reference (Continued)






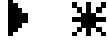




















Function	Symbol
Rename	
Reply	
Replay Last Message	
Reset	
Retry	
Run All Bite	
Run Digital Bite	
Save	
Scan	
Select, Paste for Copy/Move	
Send	
Set, Done, Yes	
Space	
Speaker On	

Table 1. Symbol Cross Reference (Continued)

Function	Symbol
Speaker Off	
Start	
Status, Show information about transfer progress	
Stop	
Symbol	
Tab	
Time	
Type, Edit	
Unlock	
Users	
UTC	UTC
Yes, Done, Set	
Zero, Zeroize	

NOTES:



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