

AE/LZT 123 5271/1 R1A

Operator's Manual

JAGUAR 700P System/Scan Portable Radio



Table Of Contents

	<u>Page</u>
Safety Training Information	3
Operating Rules And Regulations	6
Operating Tips	7
User Interface	8
Basic Operation.....	13
Transmitting A Call In Trunked Mode	17
Receiving A Call In Trunked Mode	18
Conventional Operation	19
Alert Tones	20
Changing The Battery Pack	21

NOTICE!

The software contained in this device is copyrighted by Ericsson Inc. Unpublished rights are reserved under the copyright laws of the United States.

This manual is published by **Ericsson Inc.**, without any warranty. Improvements and changes to this manual necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made by **Ericsson Inc.**, at any time and without notice. Such changes will be incorporated into new editions of this manual. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of **Ericsson Inc.**

Copyright © 2000 Com-Net Ericsson Critical Radio Systems, Inc.
All rights reserved.

SAFETY TRAINING INFORMATION



Your Com-Net Ericsson radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only” meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only.” In addition, your Com-Net Ericsson radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1 – 1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3 – 1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave.



CAUTION

To ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.
- **DO NOT** transmit for more than 50% of total radio use time ("50% duty cycle"). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the "TX" light appears in the display. You can cause the radio to transmit by pressing the "PTT" button.
- **ALWAYS** use Com-Net Ericsson authorized accessories (antennas, batteries, belt clips, speaker/mics, etc). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded.
- **ALWAYS** keep the antenna at least 1 cm (0.4 inches) away from the body when transmitting to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your

transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of a RF exposure, and what to do to assure that this radio operates within the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Com-Net Ericsson radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

OPERATING RULES AND REGULATIONS

Two-way FM radio systems must be operated in accordance with the rules and regulations of the Federal Communications Commission (FCC). As an operator of two-way radio equipment, you must be thoroughly familiar with the rules that apply to your particular type of radio operation. Following these rules will help eliminate confusion and will assure the most efficient use of existing radio channels. This will provide a smooth operating radio network.

When using the radio, remember these rules:

1. It is a violation of FCC rules to interrupt any distress or emergency message. As the radio operates in much the same way as a telephone "party line", always listen and/or observe the absence of the "**BSY**" display to make sure that the line is clear before sending any messages. If someone is sending an emergency message, such as reporting a fire or asking for help in an accident, **KEEP OFF THE AIR!** Emergency calls have priority over all other messages.
2. Use of profane or obscene language is prohibited by Federal Law.
3. It is against the law to send false call letters or a false distress or emergency message.

4. The FCC requires that conversations be brief and confined to business. To save time, use coded messages whenever possible.
5. Using the radio to send personal messages (except in an emergency) is a violation of FCC rules. Send only those messages essential for the business operation.
6. It is against the Federal law to repeat or otherwise make known anything overheard on the radio. Conversations between others sharing your channel must be regarded as confidential.

OPERATING TIPS

The following conditions tend to reduce the effective range of two-way radios and should be avoided whenever possible.

- Operating the radio in low terrain areas or while under power lines or bridges.
- Operating the radio inside of a vehicle or inside metal or steel framed building unless using an outside antenna.

User Interface

This manual describes the basic functions and operation of the 700P System/Scan portable radio. For detailed information about the features and operation refer to the appropriate 700P Maintenance Manual or contact your System Administrator.

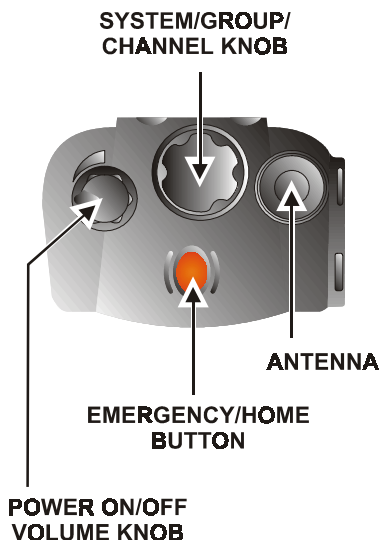


Figure 1: Top View

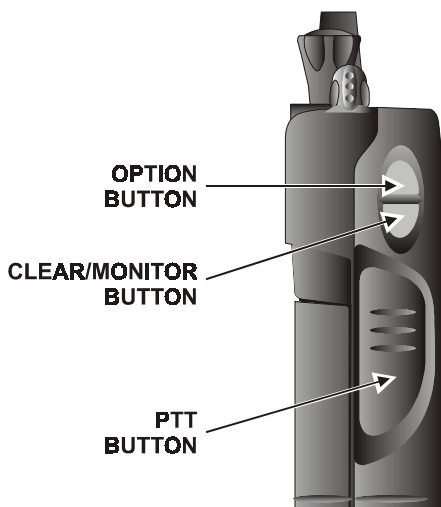


Figure 2: Side View

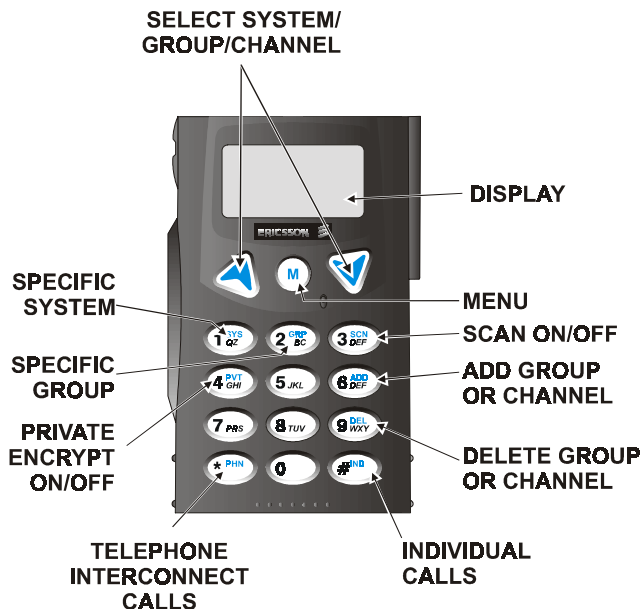


Figure 3: 700P System Keypad

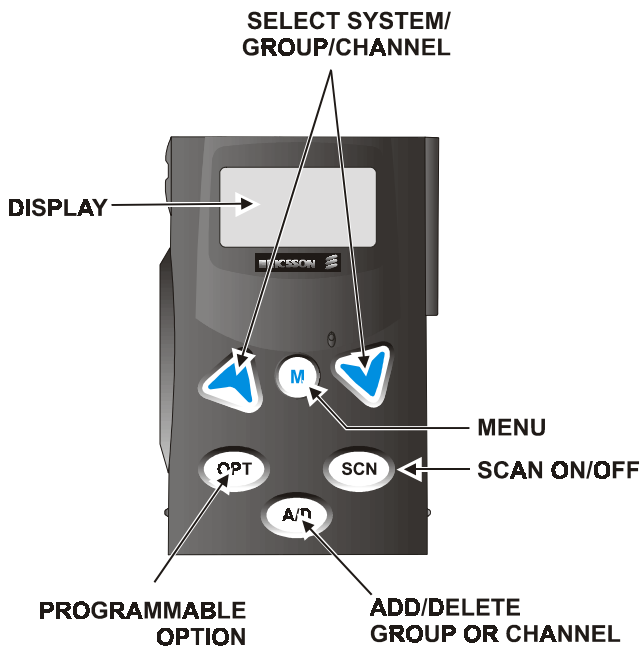


Figure 4: 700P Scan Keypad

Three Line Display

Icon Descriptions

 ON – transmitting or receiving Flashing – call queued	 ON – special call mode (individual or telephone)
 ON – during all radio transmissions	 ON – transmit at low power Off – transmit at high power
 On – auto power mode	 On – group or channel in scan list
 On – low battery	 On – priority 2 group or channel
 On – trunked system in Failsoft mode	 On – priority 1 group or channel
 On – transmit in encrypt mode Flashing – receiving an encrypted call	 On – Channel Guard enabled Off – Channel Guard disabled
 On – scan mode (rotates clockwise) Off – scan disabled	

Basic Operation

System Select – Method 1 (System)

1. Press  to access system list.
2. Enter system id number from keypad.
3. Press  to select desired system.

System Select – Method 2

1. Rotate System/Group/Channel knob.

If this knob is not programmed for systems:

2. Press the   buttons to change systems.

Group Select – Method 1 (System)

1. Press  to access group list.
2. Press   to scroll through the list of groups.
3. Press  to select desired group.

Group Select – Method 2

1. Rotate System/Group/Channel knob.

If this knob is not programmed for groups:

2. Press the   buttons to change groups.

Channel Select

1. Rotate System/Group/Channel knob.

If this knob is not programmed for channels:

2. Press the   buttons to change channels.

Modify Scan List (System)

1. Press  to toggle scan OFF and verify  is **not** displayed..
2. Select group or channel.
3. Press  once to remove group or channel from list.
4. Press  once to add as a normal group or channel.
Press  twice to add as a Priority 2 group.
Press  three times to add as a Priority 1 group.
5. Press  to re-start scanning.

Nuisance Delete

A channel can temporarily be deleted from the scan list, if it is not the currently selected channel

1. Turn Scan ON.
2. When the radio receives a call on the channel, press the . The channel is removed from the scan list until the radio is power cycled.

Modify Scan List (Scan)

1. Press **SCN** to toggle scan OFF and verify  is **not** displayed.
2. Select group or channel.
3. Press **A/D** once to remove group or channel from the list.
4. Press **A/D** once to add as a normal group or channel.
Press **A/D** twice to add as a Priority 2 group.
Press **A/D** three times to add as a Priority 1 group.
5. Press **SCN** to re-start scanning.

Backlight On/Off

1. Press **M** to access the menu.
2. Press   to scroll through menu until "BCKLGHT" appears.
3. Press **M** to select Backlight menu.
4. Press   to toggle backlight ON and OFF.
5. Press **M** to select new setting.

Contrast Adjust

1. Press  to access the menu.
2. Press   to scroll through menu until "CONTRAST" appears.
3. Press  to select Contrast menu.
4. Press   to adjust contrast setting from 1 - 4.
5. Press  to select new contrast setting.

Declaring An Emergency

1. Press and hold the red Emergency/Home button (the length of time is programmable; check with the system administrator).
2. ***TXEMER*** flashes in the display until the emergency is cleared.
3. Press PTT and  and  momentarily turns on.
4. Release PTT when the transmission is complete.

Locking/Unlocking Keypad

1. Press  button.
2. Within 1 second, press the Option button on the side of the radio.

Transmitting A Call In Trunked Mode

Group Call

1. Select desired group.
2. Press Push-To-Talk button.
3. The  and  icons will appear.

Individual Call (System)

1. Press  to access the individual call list.
2. The  icon will appear.
3. Press   to scroll through individual call list or Enter LID from keypad.
4. When the desired ID appears in the display press the Push-To-Talk button.
5. The  and  icons will appear.

Phone Call (System)

1. Press  to access the phone call list.
2. The  icon will appear.
3. Press   to scroll through phone call list or Enter number from keypad.
4. When the desired phone number appears in the display press the Push-To-Talk button.
5. The  and  icons will appear.

Receiving A Call In Trunked Mode

Group Call

1. Select a group or Turn scan ON and make sure group is in scan list.
2. The group name or "GR xxxxx" will appear to indicate a call.

Phone Calls

1. When the call is received, the receive audio sounds and the display reads: ***PHONE***
2. Respond by pressing PTT. If you do not respond, radio will continue to ring to indicate an incoming call.

Individual Calls

1. When the call is received, the receive audio sounds and the display reads : **ID xxxxx**
INDV
2. Respond by pressing PTT. If you do not respond, radio will ring to indicate an incoming call.
3. If the call is cleared with no response, the radio will store **Who Has Called** and display:
WHC
4. Press the  key to display the ID.
5. Press the Push-To-Talk button to return the call or Press the Clear/Monitor button to clear the ***WHC***.

Conventional Operation

Receiving A Call

1. Select desired conventional system and channel or Turn scan ON and make sure desired channel is in scan list.
2. When the radio receives a call, the radio will unmute and the channel name will appear in the display.

Sending A Call

1. Select desired system and channel.
2. Ensure the channel is not busy by pressing the **Monitor/Clear** button momentarily. If you hear audio or if the  icon is on, the channel is busy.
3. When you are sure the channel is not busy, press the Push-To-Talk button and speak into the microphone.

Alert Tones

Name	Tone	Description
Call Originate (B)	one short mid-pitched	<i>OK to talk after pressing the push-to-talk button</i>
Call Queued (T)	one high-pitched	<i>call in a queue for processing</i>
Autokey (T)	one mid-pitched	<i>queued call received channel assignment</i>
System Busy (T)	three low-pitched	<i>system busy or unable to complete call</i>
Call Denied (T)	one low-pitched	<i>radio is not authorized on the system or group</i>
Carrier Control Timer (B)	five high-pitched / one long low-pitched	<i>PTT depressed for maximum length of time</i>
Low Battery (B)	one low-pitched / one short mid-pitched	<i>low battery</i>
Low Battery Alert (B)	one low-pitched	<i>after PTT - battery too low to transmit</i>

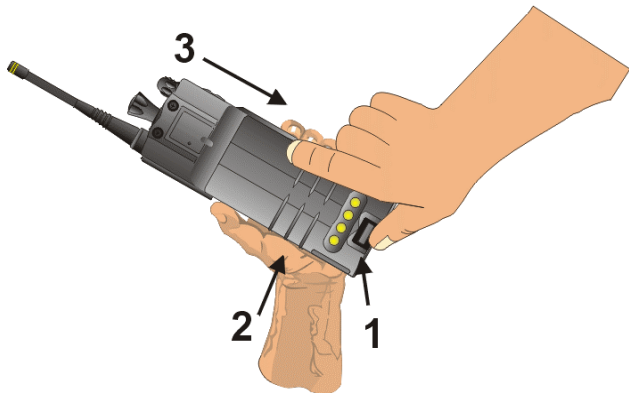
(T) = trunked mode only (B) = both trunked and conventional modes

Changing The Battery Pack

Removing The Battery Pack

Make sure the power to the radio is turned OFF.

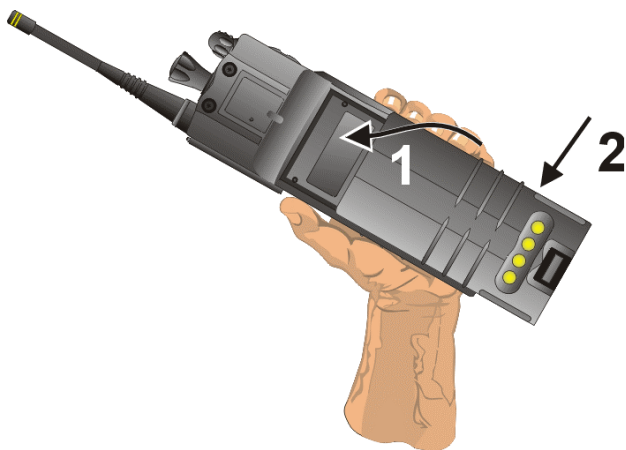
1. Press the latch at the bottom of the battery pack.
2. Lift the battery pack from the bottom.
3. Remove the battery pack from the radio.



Attaching The Battery Pack

Make sure the power to the radio is turned OFF.

1. Align the tab on the top of the battery pack with the slot at the top of the battery cavity.
2. Push the battery pack down to attach the battery to the radio.
3. Verify that the battery pack is properly latched to the radio.



NICKEL-CADMIUM BATTERY WARRANTY

A. Com-Net Ericsson Critical Radio Systems, Inc. (hereinafter "Seller") warrants to the original purchaser for use (hereinafter "Buyer") that nickel-cadmium batteries supplied by Seller shall be free from defects in material and workmanship, and shall conform to its published specifications for a period of twelve (12) months from the date of purchase.

B. For purposes of this warranty, batteries shall be deemed defective if (1) the battery capacity is less than 80% of rated capacity, or (2) the battery develops leakage.

C. If any battery fails to meet the foregoing warranty, Seller shall correct the failure by issuing a replacement battery upon receipt of the defective battery at an Authorized Service Center (ASC). To obtain the name and address of an ASC, ask your salesperson, consult the Yellow Pages, or call the number printed at the bottom of this page.

D. Replacement batteries shall be warranted only for the remaining unexpired warranty period of the original battery. This warranty becomes void if:

- (1) The battery has been subjected to any kind of misuse, detrimental exposure, or has been involved in an accident.
- (2) The battery is used in equipment or service other than the radio equipment for which it is specified.

E. The preceding paragraphs set forth the exclusive remedies for claims (except as to title) based upon defects in or non-conformity of any battery, whether the claim is in contract, warranty, tort (including negligence), strict liability or otherwise, and however instituted. Upon the expiration of the warranty period, all such liability shall terminate. The foregoing warranties are exclusive and in lieu of all other warranties, whether oral, written, expressed, implied or statutory. NO IMPLIED OR STATUTORY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR EXEMPLARY DAMAGES.

This warranty applies only within the United States.

WARRANTY

A. Com-Net Ericsson Critical Radio Systems, Inc. (hereinafter "Seller") warrants to the original purchaser for use (hereinafter "Buyer") that Equipment manufactured by Seller shall be free from defects in material, workmanship and title, and shall conform to its published specifications. With respect to any Equipment not manufactured by Seller (except for integral parts of Seller's Equipment to which the warranties set forth above shall apply). Seller gives no warranty, and only the warranty, if any, given by the manufacturer shall apply. Batteries are excluded from this warranty but are warranted under a separate Nickel-Cadmium Battery Warranty.

B. Seller's obligations set forth in Paragraph C below shall apply only to failures to meet the above warranties (except as to title) occurring within the following periods of time from date of sale to the Buyer and are conditioned on Buyer's giving written notice to Seller within thirty (30) days of such occurrence:

1. for fuses, incandescent lamps, vacuum tubes and non-rechargeable batteries, operable on arrival only.
2. for parts and accessories (except as noted in B.1) sold by Seller's Service Parts Operation, ninety (90) days.
3. for all other Equipment of Seller's manufacture, one (1) year.

C. If any Equipment fails to meet the foregoing warranties, Seller shall correct the failure at its option (i) by repairing any defective or damaged part or parts thereof, or (ii) by making available at Seller's factory any necessary repaired or replacement parts. Any repaired or replacement part furnished hereunder shall be warranted for the remainder of the warranty period of the Equipment in which it is installed. Where such failure cannot be corrected by Seller's reasonable efforts, the parties will negotiate an equitable adjustment in price. Labor to perform warranty service will be provided at no charge during the warranty period only for the Equipment covered under Paragraph B.3. To be eligible for no-charge labor, service must be performed by an Authorized Service Center (ASC) or other Servicer approved for these purposes either at its place of business during normal business hours, for mobile or personal equipment, or at the Buyer's location, for fixed location equipment. Service on fixed location equipment more than thirty (30) miles from the Service Center or other approved Servicer's place of business will include a charge for transportation.

D. Seller's obligations under Paragraph C shall not apply to any Equipment, or part thereof, which (i) has been modified or otherwise altered other than pursuant to Seller's written instructions or written approval or, (ii) is normally consumed in operation or, (iii) has a normal life inherently shorter than the warranty periods specified in Paragraph B, or (iv) is not properly stored, installed, used, maintained or repaired, or, (v) has been subjected to any other kind of misuse or detrimental exposure, or has been involved in an accident.

E. The preceding paragraphs set forth the exclusive remedies for claims (except as to title) based upon defects in or nonconformity of the Equipment, whether the claim is in contract, warranty, tort (including negligence), strict liability or otherwise, and however instituted. Upon the expiration of the warranty period, all such liability shall terminate. The foregoing warranties are exclusive and in lieu of all other warranties, whether oral, written, expressed, implied or statutory. NO IMPLIED OR STATUTORY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. IN NO EVENT SHALL THE SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR EXEMPLARY DAMAGES.

This warranty applies only within the United States.

NOTES

NOTES

NOTES

Com-Net Ericsson Critical Radio Systems, Inc.

P.O. Box 2000

Lynchburg, Virginia 24501

1-800-528-7711 (Outside USA, 804-592-7711)

AE/LZT 123 5271/1 R1A

Printed in U.S.A.