

CONFIDENTIAL

DRAFT

COBHAM
Defence Communications



POCKET GUIDE

The information contained in this document is proprietary to Cobham DC Ltd unless stated otherwise and is made available in confidence; it must not be used or disclosed without the express written permission of Cobham DC Ltd. This document may not be either copied or stored in whole or in part in any form without the express written consent of Cobham DC Ltd, which may be given by contract. This document is a design document for the purposes of the Copyright, Designs and Patents Act 1988.

© Cobham DC Ltd. All rights reserved. This is an unpublished work created November 2007

DRAFT

DRAFT



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: #####

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

© Cobham DC Ltd. All rights reserved. This is an unpublished work created November 2007

DRAFT

DRAFT

CONTENTS



1. OVERVIEW
2. EAGLE RADIO DIAGRAM
3. RADIO ON/OFF AND VOLUME
4. MENU OPTIONS
5. STATUS MENU
6. CONFIGURATION MENU OPTIONS
7. CONFIGURATION MENU GROUP OPTIONS
8. PTT MENU (SECONDARY PTT)
9. BATTERIES
10. REMOTE ACTIVATION

COBHAM
Defence Communications



SEE MAIN OPERATOR GUIDE FOR MORE DETAILED INFORMATION INCLUDING HEALTH & SAFETY

© Cobham DC Ltd. All rights reserved. This is an unpublished work created November 2007

DRAFT



OVERVIEW



The Eagle Close Combat Radio is a Frequency Hopping Networked Radio incorporating 128 bit AES Encryption.

The radio can be used in individual, group or multiple group scenarios. This functionality may be set/changed by the designated commander. Eagle radio may also be connected to a COBHAM Intercom system allowing Eagle users to communicate with crew and vehicle mounted radio systems. In addition a Manpack Combat Net Radio (CNR's) can be connected to the Eagle radio, expanding the communications network for eagle users.

Eagle Radio may be configured in one of two operating modes:

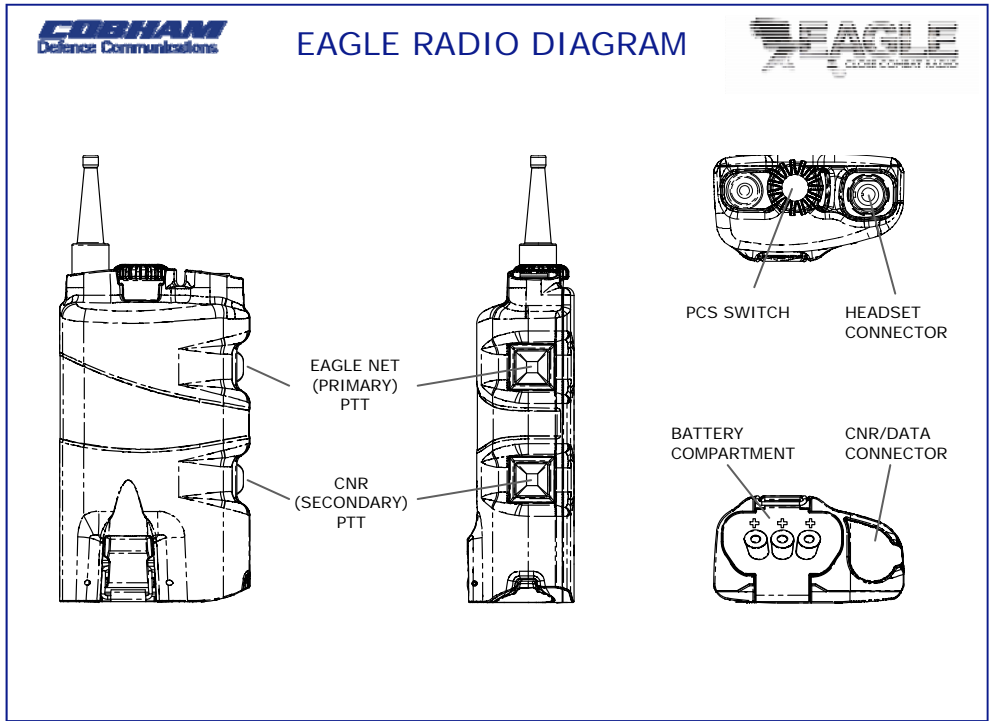
1. Soldier mode
2. Commander Mode

These modes determine the functionality of the radio providing users with specific functionality dependant upon there role.

All functions are accessed and configured using aural menus through the headset once a unit is turned on.


Note: When the Radio is turned on a WARNING TONE will sound every 4 seconds through the headset if no group/network is detected. This same tone will occur if a radio ever leaves a group/network it has previously been part of.

DRAFT




© Cobham DC Ltd. All rights reserved. This is an unpublished work created November 2007


DRAFT

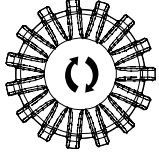


RADIO ON/OFF AND VOLUME




PRESS & HOLD
TO POWER
ON OR OFF






"VOLUME ADJUSTMENT"

ROTATE



PRESS



The PCS (Primary Control Switch) is the interface that allows the user to adjust the functionality of Eagle Radio. Pressing and holding the PCS switch will power the Eagle ON or OFF.


The Radio has two modes: "**OPERATIONAL MODE**" & "**MENU MODE**." After being switched on the unit enters "**OPERATIONAL MODE**".

Once the unit is powered on, an aural acknowledgement will be heard through the headset "**RADIO ON**" this is followed by a warning tone if the radio is not connected to a group, this warning tone is also an indication of the units volume level. Once in operational mode the volume may be adjusted at any time by rotating the PCS.


Operational Mode - This is the normal working mode assuming the radio is configured and ready for use, the radio will return to **Operational Mode** automatically from the end of any menu selection or if no selection is made.


Menu Mode - Used to select and set up advanced functions, to select menu mode press the PCS once the unit is "ON". Menu options are described in pages 4-8.

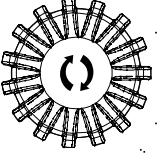
DRAFT





MENU OPTIONS





 "MENU MODE"





"STATUS"  1


"GROUP"  2

"VOX"  3

"CONFIGURE"  4


"PTT"  5

 ROTATE


 PRESS

| | |
|-----------------------|---|
| 1. STATUS | Provides user with an overview of radio status, for details refer to page 5. |
| 2. GROUP | Informs the user of the group they are connected to. For details refer to page 7 |
| 3. VOX | Enables VOX . If VOX is selected as of then the primary Push To Talk switch (PTT) is used for keying the radio. |
| 4. CONFIGURATION MENU | Configuration menu options, for details refer to page 6. |
| 5. PTT | Secondary PTT configuration Menu option, for details refer to page 8. |


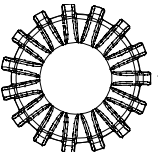
DRAFT




STATUS MENU




"MENU MODE"






"STATUS" 1




"EXTENDED STATUS" 2




 ROTATE
 PRESS


| | |
|-----------------------|--|
| 1. BATTERY CONDITION. | Indicates the battery working condition. |
| CURRENT GROUP | Indicates the current group setting. e.g. "Group 01". |
| 2. UNIT NUMBER. | Indicates the current unit number (if assigned by a group). |
| Current user type | Indicates the user type: SOLDIER or COMMANDER. Several of the radio functions are only accessible when set to COMMANDER. |
| VOX STATUS | Indicates the VOX status ON or OFF. If VOX is off then user must press the primary PTT to communicate. |

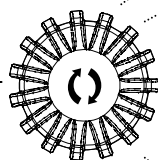
DRAFT





CONFIGURATION MENU OPTIONS





"CONFIGURE" 





"USER"  1


"NETLINK"  2



"MONITOR"  3

"GROUP"  4

"REMOTE ACTIVATION"  5


"LANGUAGE"  6

"CNR"  7


 ROTATE
 PRESS

| | |
|----------------------------|--|
| 1.USER | Change user type either RESET, SOLDIER or COMMANDER. |
| 2.NETLINK | Enable the Netlink function. If on is selected the user can monitor a second group. |
| 3.MONITOR | Enable the monitor only function. If on is selected, the user can only monitor radio traffic and cannot transmit. |
| 4.GROUP | Allows the user to change and create groups. For details refer to page 7. |
| 5.REMOTE ACTIVATION | Enables the remote activation unit. For details refer to page 10. |
| 6.LANGUAGE | Enables the user to select alternative programmed languages, only if another language option is included. |
| 7.CNR | Configures the function of the secondary PTT. If a CNR is connected then this menu option is available. For details refer to page 8. |

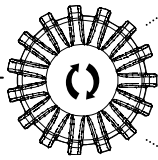
DRAFT





CONFIGURATION MENU- GROUP OPTIONS





"Group"





"CREATE GROUP"  1

"CLOSE GROUP"  2

"EXPAND GROUP"  3


"OPEN GROUP"  4

 ROTATE


 PRESS

| | |
|-----------------------|---|
| 1.CREATE GROUP | A new group will be created, all radios within range may join this group. Once a group is created SECURE GROUP prevents any other new users from accessing the group using AES (Advanced Encryption Standard) encryption. |
| 2.CLOSE GROUP | Once a group is formed, CLOSE GROUP prevents other users from joining the group. |
| 3.EXPAND GROUP | When selected a CLOSED or SECURE group will be 'opened' for ten seconds to allow new users to join the group. |
| 4.OPEN GROUP | This function will open a CLOSED group indefinitely so new users can join the group as required. |


DRAFT

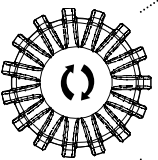



PTT MENU (SECONDARY PTT)





"PTT"








"CNR"  1


"INTERCOM"  2

"RADIO A"  3

"RADIO B"  4

"RADIO C"  5

 ROTATE

 PRESS

| | |
|-------------|--|
| 1. CNR | "CNR" allows Eagle users to access a CNR for long range communication. The CNR must be physically connected to the Eagle radio or connected to another Eagle Radio in the same group and 'shared' as a NETWORK CNR (see page 6). |
| 2. INTERCOM | "INTERCOM" allows cross communication outside the Eagle Net. CCR's (close combat radios) can communicate across the intercom channel of an Intercom System. |
| 3. RADIO A | "RADIO A" allows Eagle users to access a radio outside the Eagle Net for long range communication. This is achieved through a Cobham Intercom System. |
| 4. RADIO B | "RADIO B" allows Eagle users to access a radio outside the Eagle Net for long range communication. This is achieved through a Cobham Intercom System. |
| 5. RADIO C | "RADIO C" allows Eagle users to access a radio outside the Eagle Net for long range communication. This is achieved through a Cobham Intercom System. |

DRAFT



BATTERIES

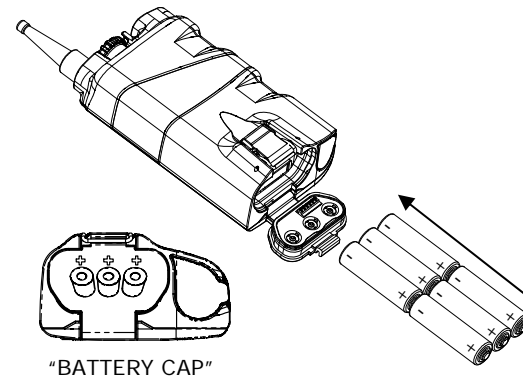


The Eagle Radio uses 6 x 'AA' (LR6) Batteries to power the unit.

Primary or Secondary battery types may be used, however secondary batteries can only be charged outside the unit with separate equipment.

Insert the batteries as shown using the guide on the battery cap (base of the radio when closed). Take care to ensure all batteries are positioned with the **correct polarity** before closing the battery compartment.

Should the Eagle be connected to an external power source via the CNR/DATA Connector then the radio will automatically switch to external power until disconnected.



"BATTERY CAP"

DRAFT



REMOTE ACTIVATION

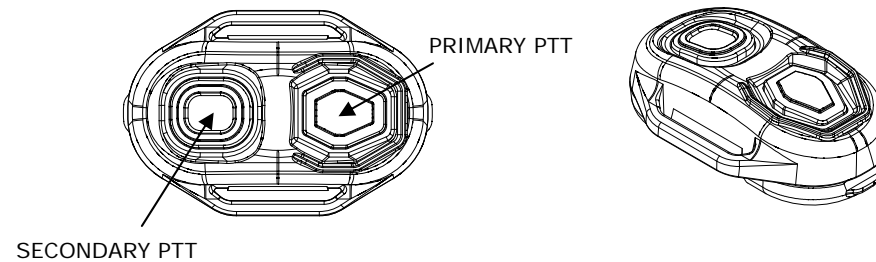


The Remote Activation Unit (RAU) is a handheld wireless device replicating the 2 PTT buttons on the Radio.

When "Remote Activation" is enabled on in the "CONFIGURE" menu, the **Primary** & **Secondary** PTT's may be remotely operated from the 'RAU'.

The RAU can be attached to the users weapon if required with the supplied elasticated strap or cradle mount allowing attachment to a weapons MIL-STD-1913 (Picatinny) Rails.

Remote Activation Unit



DRAFT



FOR FURTHER INFORMATION PLEASE CONTACT:

The Customer Support Manager
COBHAM Defence Communications,
Haslingden Road,
Blackburn,
Lancashire,
BB1 2EE,
UK

Tel: +44 (0) 1254 292010

Fax: +44 (0) 1254 292035

E-mail: support@cobhamdc.com

Website: www.cobhamdcweb.com

© Cobham DC Ltd. All rights reserved. This is an unpublished work created November 2007

DRAFT