ORBIT

OrSat™

AL-7103 MKII

Maritime Stabilized VSAT System

Technical Note

CCU Upgrade Procedures

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1 INTRODUCTION

1.1 Purpose

This document establishes the CCU upgrade procedures, for in-storage/spare CCU.

1.2 CCU Upgrade Checklist

Perform the Upgrade procedure as directed by the Routing Card, below.

1.3 Required Tools and Equipment

1. Philips screwdrivers set
2. Open wrench, 5/16"
3. Open wrench, 3/16"
4. Wrench key, 3/16"
5. Hot glue gun
6. Tie Wraps.

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CCU UPGRADE ROUTING CARD

Unit Details:

CCU: P/N: _____   S/N: _____   MOD VER: _____   S/W VER: _____

Operation / Task / Procedure	Refer to Section No.	Performed By:	Date
LAN cable replacement	2.1		
Ferrite bead installation	2.2		
Screen spacers replacement	2.3		
Software loading/update	2.4		
Post Upgrade Tests	2.5		

UPGRADE Performed By:

_____   _____
          Name   Date

Q.A. Approved By:

_____   _____
          Name   Date
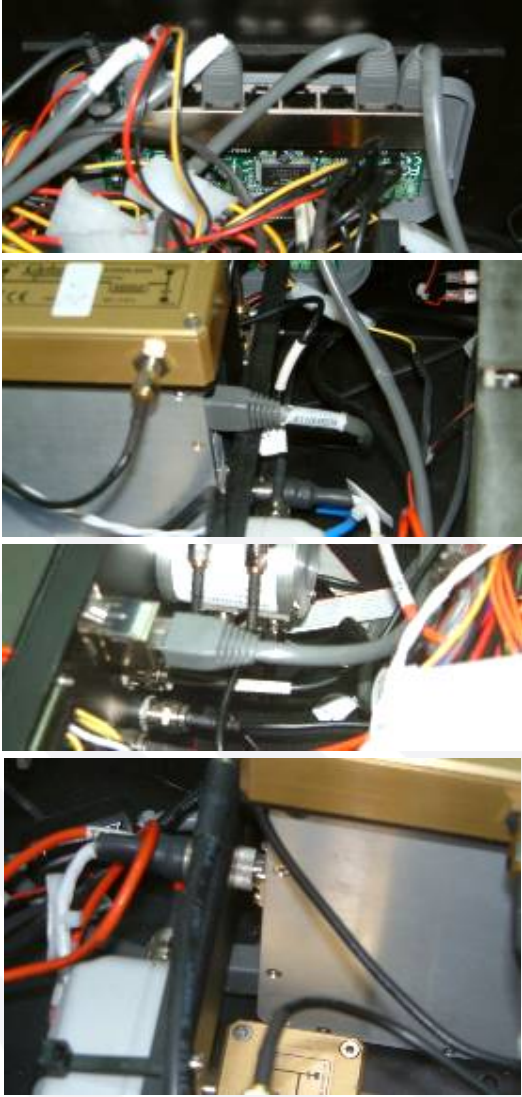
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2   CCU UPGRADE PROCEDURES

2.1   CCU LAN Cable Replacement Procedure

Step	Description	
1.	Remove seven screws securing the CCU's top cover.	

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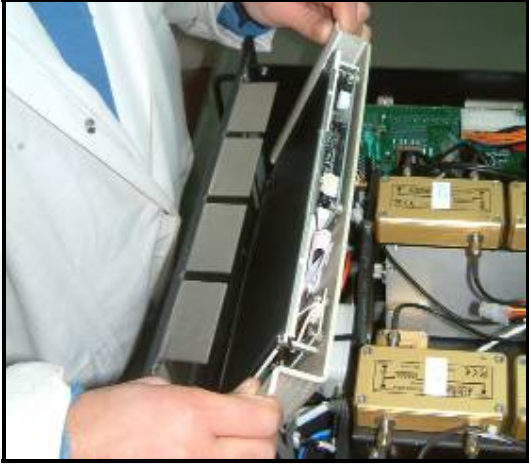| Step	Description	
2.	Remove the CCU top cover.	
3.	**FOR AL-7103-CCU-Single**: Remove the internal LAN Cable, connecting between the BDMX LAN connector and the rear-panel BDMX LAN connector. Install a new LAN cable (P/N E11000039) instead of the removed one.	

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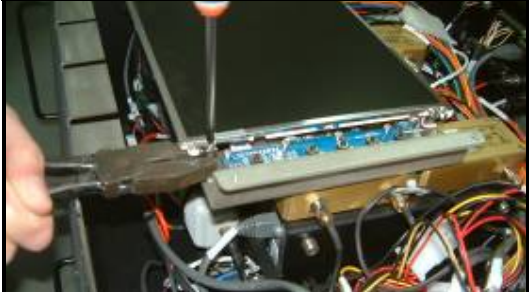| Step	Description	
4.	**FOR AL-7103-CCU-Dual**: Remove three internal LAN Cables, connecting between LAN switch and the: • BDMX 1 LAN connector • BDMX 2 LAN connector • Rear-panel LAN connector. Install new LAN cables (P/N E11000039) instead of the removed one.	

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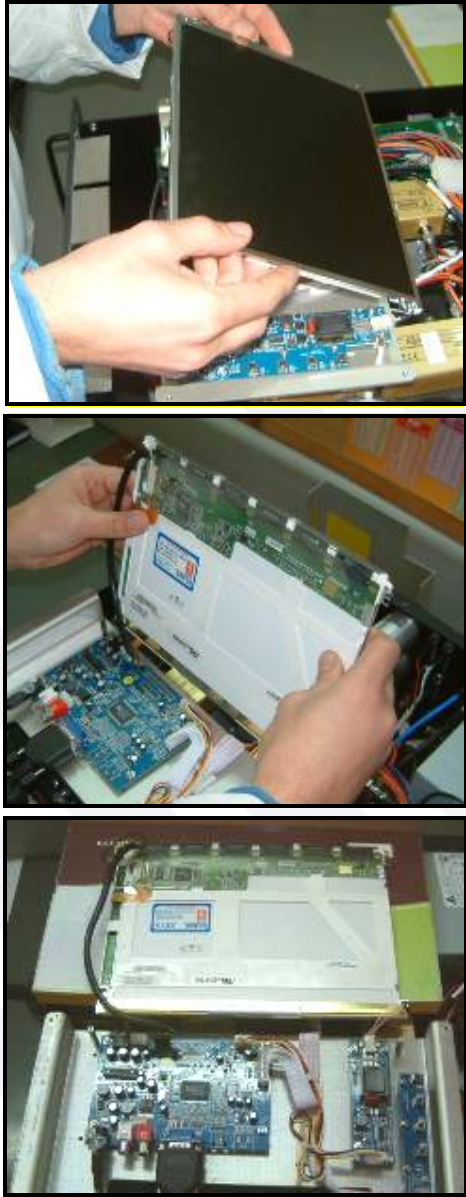
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Step	Description	
5.	**FOR AL-7103-CCU-Single:** Remove the external LAN Cable (Jumper), connecting between the rear-panel BDMX LAN connector and the LAN connector. Install a new LAN cable (P/N E11000038) instead of the removed one.	
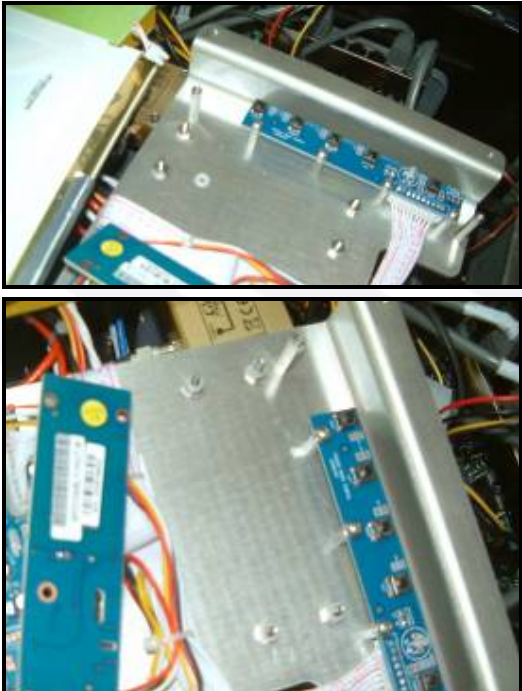
2.2 Ferrite Bead Installation
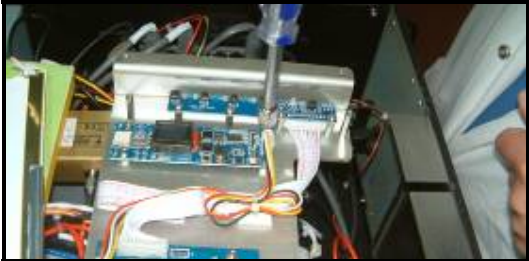
Step	Description	
1.	Open the ferrite bead (P/N E11000086).	
2.	Install the ferrite bead on the CCU display (VGA) cable, as close as possible to the LCD.. Close the bead and secure it with a tie-wrap.	

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2.3　Screen Spacers Installation

Step	Description	
1.	Remove four screws securing the screen assembly to the CCU front panel.	
2.	Carefully tilt and pull the screen assembly outwards, and place it on top of the CCU modules. Verify that the screen assembly cables are not pulled or damaged.	
3.	Remove four screws securing the screen to the screen assembly. Use a plier to prevent stand-offs rotation.	

Step	Description	
4.	Carefully tilt the screen 180 degrees and place it on a protective surface, to prevent scratches and damage to the screen.	
5.	Remove four nuts, lock washers and washers securing the Power Supply card to the screen assembly.	

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Step	Description	
6.	Un-glue and disconnect the high voltage harness from the power supply card connector.	
7.	Remove four nuts and screws secured to the screen assembly. Install longer 4-40, 1/2" Screws instead of the removed ones.	
8.	Install four 4-40 flat washers (P/N 2253-N104-30) [Spacers] on the screws.	

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Step	Description	
9.	Fasten four nuts, lock washers and washers securing the Power Supply card to the screen assembly.	
10.	Connect the high voltage harness to the poer supply card connector. Use a glue gun to apply hot glue on the connector.	
11.	Install the screen and the screen assembly. Perform steps (1) thru (4) in a reverse logical order.	

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| Step	Description	
12.	Install the CCU top cover. Fasten the screws securing the cover to the chassis.	

2.4　CCU Software Update Procedure

To update the CCU software, using the MtsDockCE utility residing on the CCU, perform the following procedure:

1. Copy the update file that has been received from ORBIT (by mail or on a CD) into a memory stick ("disk on-key"). Note that it is a zip-format file!

2. Connect the memory stick into the CCU's USB connector.

3. Minimize or close the **MtsLinkCE** software.

4. Invoke the **MtsDockCE** application by selecting the shortcut on the CCU's desktop. The following screen is displayed:

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5. For Single CCU: At the **MtsDock** menu, select the **ThisHost** drop-menu, and then select the **Put MtsLink…** option.

6. For Dual CCU: At the **MtsDock** menu, select the **ThisHost** drop-menu, and then select the **Put MTSVLink…** option.
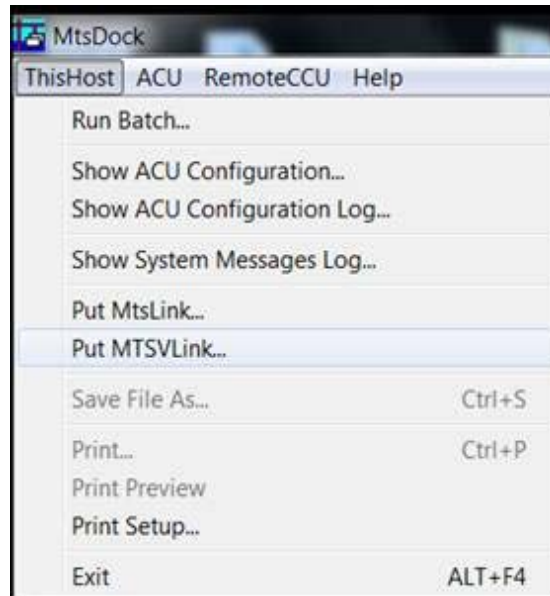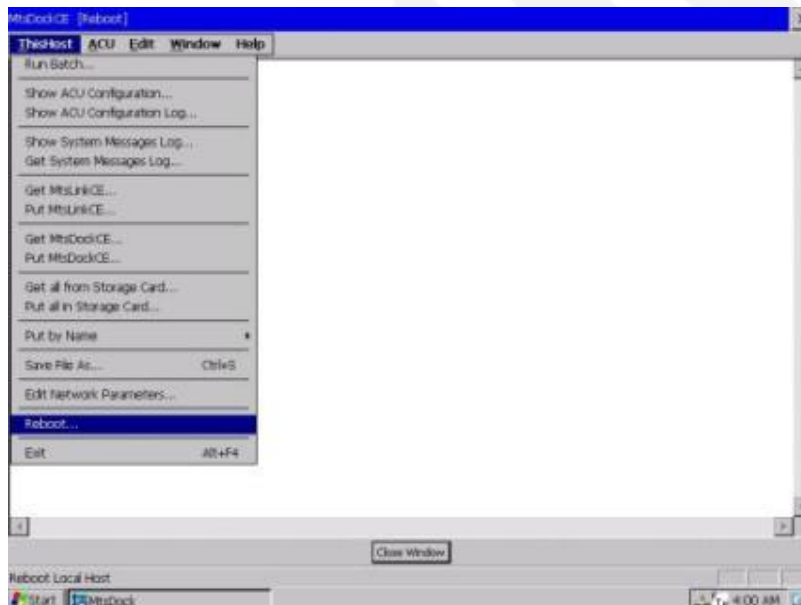

7. A Browse window appears, requesting the location of the update file. Select the update file on the memory stick.
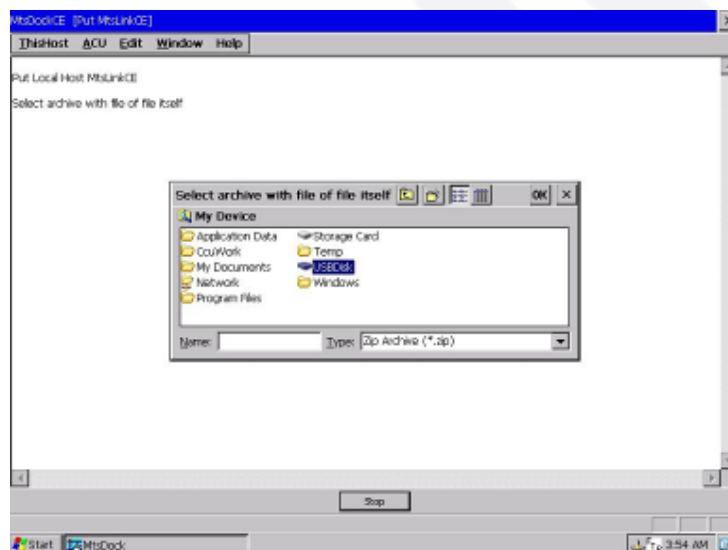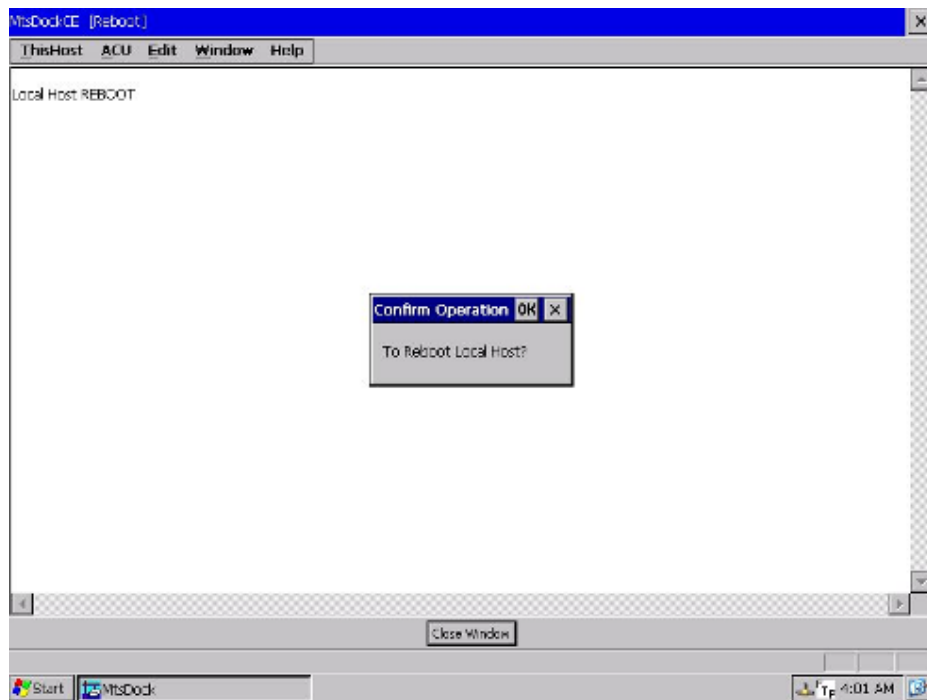
8. The update file is copied into the CCU. After a successful update process, the following screen is displayed:
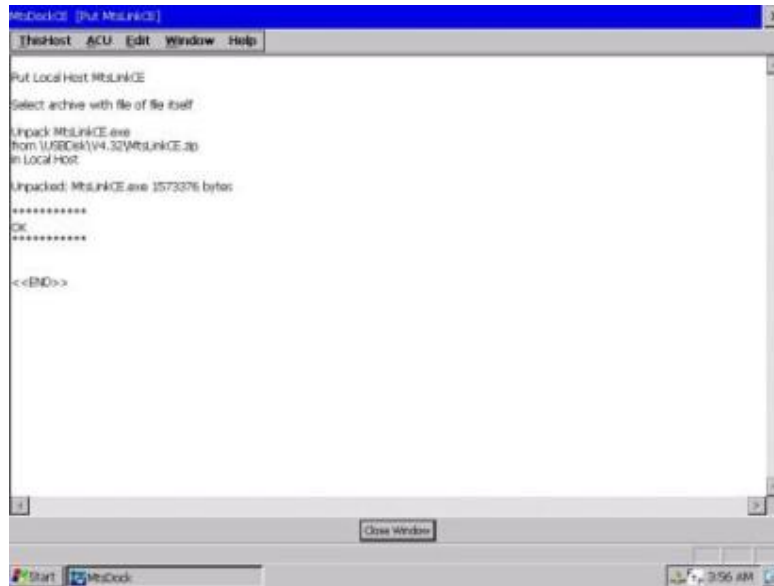
9. The new settings will take effect only after CCU Reboot. You may reboot the CCU from the **MtsDockCE** program by selecting the **ThisHost** drop-menu, and then select the **Reboot…** option.

10. Confirm the reboot on the following dialog box:

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2.5   Post-Upgrade Tests

- Install the upgraded CCU on the Master system.

- Perform basic-operation performance tests, as defined in Chapter 4 of the User Manual (MAN26-1327).

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