



# Information Sheet IS13012A

## NVLT Series - Recovering / Installing the Operating System (For Software Version 4.x)

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Nautel Limited  
10089 Peggy's Cove Road,  
Hackett's Cove, NS, Canada B3Z 3J4  
T.877 6 nautel (628835) or +1.902.823.2233  
F.+1.902.823.3183 info@nautel.com

U.S. customers please contact:  
Nautel Inc.  
201 Target Industrial Circle, Bangor ME 04401  
T.877 6 nautel (628835) or +1.207.947.8200  
F.+1.207.947.3693 info@nautel.com

e-mail: support@nautel.com  
www.nautel.com



# IS13012A: NVLT Series – Recovering / Installing the Operating System (For Software Version 4.x)

## INFORMATION SHEET

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### 1 INTRODUCTION

This document describes how to recover/install the operating system (OS) of a NVLT series FM transmitter. This may be performed as part of an upgrade procedure or in the event that corruption of the OS has occurred.

#### NOTE

*If the need to reinstall the operating system has occurred as a result of upgrading software from version 3.x to 4.x, the user must confirm the software revision currently installed. Via the advanced user interface (AUI), go to **Menu/Software Configuration/Upgrade Software**. The Current Version must be 3.3.0.2. If it is not, users must upgrade to NVLT SW 3.3. Refer to IS13009 for complete details on performing this upgrade.*

#### 1.1 Equipment Affected

This procedure applies to all NVLT series transmitters running software 3.x or 4.x.

#### 1.2 Responsibility for Implementation of Procedure

This procedure should be carried out by qualified station maintenance personnel who are familiar with NVLT series transmitters.

#### 1.3 Scheduling

This procedure should be performed only when directed by a software upgrade procedure or when corruption of the OS has occurred. The transmitter will need to be “off air” during this procedure.

#### 1.4 Manpower Requirements

Implementing these instructions will require approximately 60 minutes.

#### 1.5 Special Tools/Test Equipment

- USB flash drive with no other files on it, formatted to FAT32, to hold downloaded OS recovery files.

#### 1.6 Publications Affected

This modification does not affect the NVLT series documentation.

#### NOTE

*This procedure will erase the user database. Only the default "Nautel" user will be valid with no password required. Before proceeding, record user settings such as network settings, user accounts, logs, SNMP configuration, email configuration, time zone, notifications and playlists to ensure they can be restored after the procedure is complete. Refer to the transmitter's Operations and Maintenance Manual to locate these settings.*



## 2 RECOVERING THE OS

- (a) Using a PC or laptop with a web browser, go to <ftp://www3.nautel.com>. Select Directory **NVLT\_Series/OS\_Recovery**.
- (b) Select the appropriate 4.x directory. (see Figure 1).

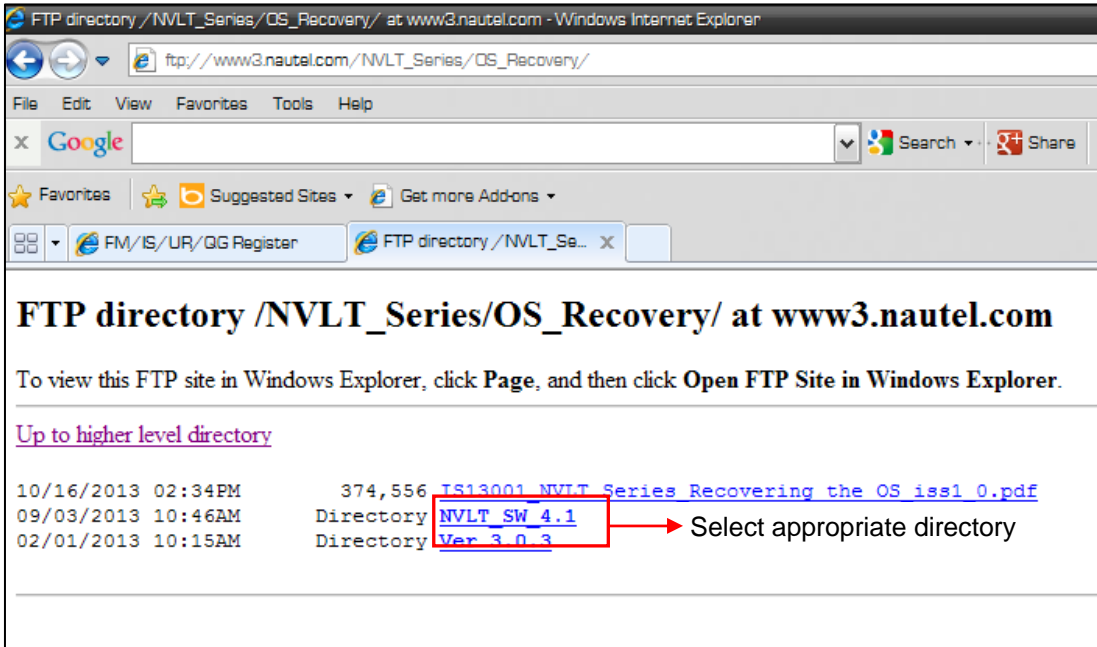


Figure 1: FTP Directory Selection

- (c) Download the zip file found in the chosen directory.
- (d) Extract the contents of the zip file to the root directory of a USB flash drive.
- (e) Ensure transmitter is in RF Off mode.
- (f) Remove any USB devices from rear of the controller.



- (g) Plug the USB flash drive used in step (d) into the top USB port (A1J8B) on the rear of the transmitter's controller located immediately below the LAN port (see Figure 2).

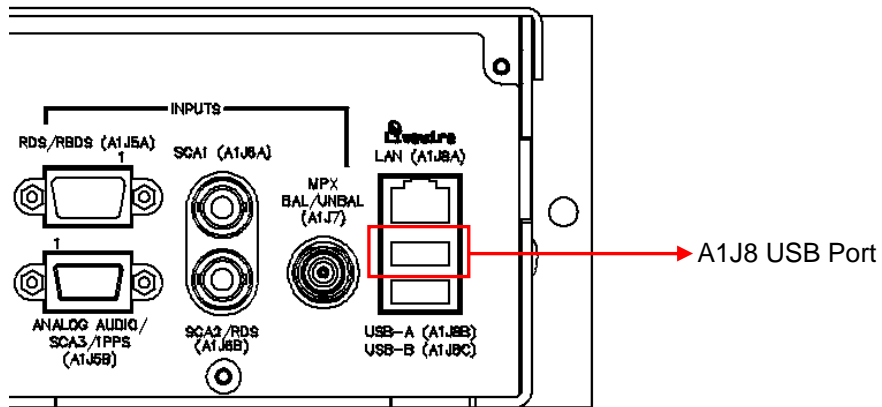


Figure 2: A1J8 USB Port location

- (h) Using the transmitter's front panel UI, navigate to the Main Menu -> System Settings -> OS Recovery screen, which should display the word **Cancel**. Press the UI's up arrow key to change the selection to **Force OS Recovery** (see Figure 3). Press the center checkmark button to initiate the process.

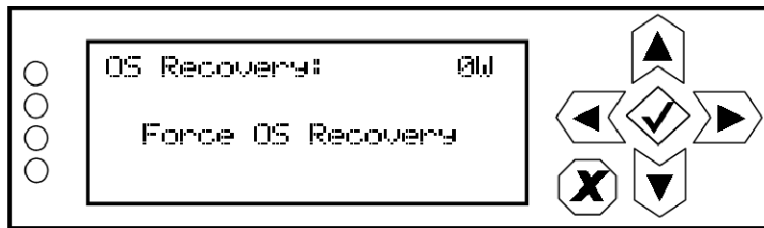


Figure 3: Force OS Recovery screen



- (i) After approximately 30 seconds, the NVLT transmitter's front panel will indicate the OS Recovery process has started (see Figure 4). The process takes about 20 minutes.

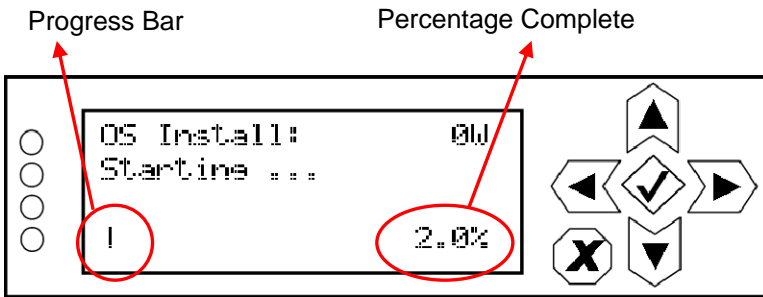


Figure 4: OS Recovery Process Begins

- (j) When the OS recovery process is complete, the front panel will indicate a 100% completion percentage (see Figure 5). Cycle the transmitter ac power (turn off, then on) and any UPS inputs (remove and then re-connect the inputs). Remove the USB flash drive. This completes the OS recovery procedure. Wait approximately two minutes after the ac power cycle to allow the ARM to boot before proceeding.

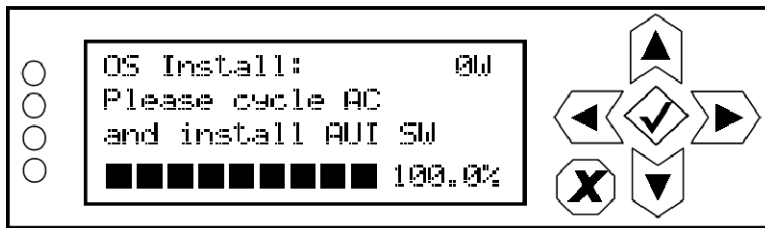


Figure 5: OS Recovery Complete

### 3 SOFTWARE UPGRADE

After an OS recovery, a software upgrade must be performed. When first logging into the AUI after an OS recovery, normal AUI functionality will not be available until a software upgrade from a .tgz file is performed. A software upgrade file is included with the OS recovery file.

To perform the post OS recovery software upgrade, use the front panel UI of the NVLT Series transmitter and navigate to Main Menu -> System Settings -> Firmware Update. See Figure 6 for a depiction of the **Firmware Update** screen.

The software upgrade .tgz file that was included with the OS recovery will appear on the front panel UI screen. Use the up arrow to scroll to the TGZ file (see Figure 6 for file format example) and press the center checkmark button to initiate the upgrade process.

#### NOTE

*The transmitter will reboot as part of the upgrade process.*



Figure 6: Software Upgrade Screen (Example tgz file shown)



#### NOTE

*Once the OS Recovery is complete, the user database is reset, therefore only the default "Nautel" user is valid with no password required.*

*Refer to the transmitter's Operations and Maintenance Manual to re-establish lost user settings including: network settings, user accounts, logs, SNMP configuration, email configuration, time zone, notifications and playlists.*

*Before connecting remotely via the AUI, clear your web browser's cache to remove any obsolete AUI files.*

#### 4 CHANGING THE OS PASSWORD

After completing an OS install or recovery, the OS password must be changed for security purposes. To do this, you will need a way to remotely connect to a Linux computer using SSH. PuTTY is a common utility for Windows users (available at <ftp://www3.nautel.com/Utilities/putty/putty.exe>; if unable to open this link, use a search engine to find new URL), while Linux users can use 'ssh' from the command line. Change the password as follows:

- (a) Connect to the transmitter IP address using your selected SSH client.
- (b) Login with username **root** and password **gckTZbiMEq**
- (c) At the prompt, type the command **passwd**. This is the Linux command to change your password.
- (d) Enter and confirm your new password.
- (e) Record your new password on the Proof of Performance document provided with the transmitter. If you would like Nautel to track your password for support purposes, please email [support@nautel.com](mailto:support@nautel.com) with your new information.
- (f) Close the console window.

**If you have any questions or require additional assistance, please contact Nautel's Customer Service Department at:**

**Telephone: 1-902-823-5100**  
**Email: [support@nautel.com](mailto:support@nautel.com)**

