
SECTION 3.4: NON-STANDARD MAINTENANCE

This section provides instructions for performing non-standard maintenance on the NV10LT/NV7.5LT transmitter. This section includes the following topics:

- [Upgrading Software](#)
- [Configuring a Mod Loss Backup Preset - see page 3.4.4](#)

Upgrading Software

Periodically, enhancements or improvements to the operating system are identified and made available. Perform a software upgrade, as required, as follows:

NOTE: Nautel recommends you perform a software upgrade at the transmitter site.

Parts and Tools

- Laptop (i.e., local computer for direct connection) or network computer with Windows and Internet Explorer Web browser
- CAT5 Ethernet cable
- Upgrade software (*.tgz file), provided via email or web download

Preliminary Checks

1. Determine the current software revision installed. Via the advanced user interface (AUI) screen, go to Menu/System Settings/Upgrade Software. Select the *.tgz file in the Select Upgrade File list (should highlight in blue) and click Details. Note the current software revision for Audio Player, AUI, Axia Livewire Module, Controller, Exciter B (if applicable), Orban Inside (if applicable), Rack, Server, SNMP Agent and Watchdog.
2. Contact Nautel for the most recent software revision and download *.tgz file to a laptop or network location.

Transferring Upgrade File

The following steps assume either the laptop will be used to connect directly to the transmitter OR the transmitter and network computer are currently connected to the same network.

Transmitter IP Configuration

1. From the transmitter AUI, go to Menu/User Settings/Network Setup.
2. Record your current network settings (IP Address, Subnet Mask, Default Gateway).
3. If connecting to the transmitter directly with a laptop, you must set a static IP address. This can only be done via the front panel interface. From the front panel UI's Main Menu, go to User Settings/Network Settings and set the IP address as follows:
 - DHCP: OFF
 - IP Address: 10.10.10.2
 - Netmask: 255.255.255.0
4. Set the transmitter for Remote control.

Laptop IP Setup

The following steps assume the operating system is Windows XP. Adapt as required for computers with different operating systems.

1. On the laptop go to Start Menu/Control Panel/Network Connections/Local Area Network.
2. In the Local Area Network Status, open the General tab and choose Properties. Scroll down and highlight Internet Protocol (TCP/IP). Choose Properties.
3. In the Internet Protocol (TCP/IP) Properties window, select Use the following IP address.
4. Enter the following settings:
 - IP Address: 10.10.10.1
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 192.168.1.2
5. In the Internet Protocol (TCP/IP) Properties window, select OK.
6. In the Local Area Connection Properties window, select OK.
7. In the Local Area Connection Status window, select Close.
8. Close the Network Connections window.

Transfer Software Upgrade File to Transmitter

1. If using a laptop, connect the laptop network interface card to the transmitter LAN (A1J8A) connector on the rear panel using a CAT5 Ethernet cable. Open Internet Explorer and search for 10.10.10.2. The transmitter login screen should appear.
2. If using a network computer, open Internet Explorer and search for the IP address recorded in [Step 2 of Transmitter IP Configuration, on page 3.4.2](#). The transmitter login screen should appear.
3. At the transmitter login screen enter:
 - User: "Nautel" or "*****", where ***** is the user assigned user name
 - Password: leave blank (default) or "*****", where ***** is the user assigned password
4. Navigate through the AUI to Menu/Software/Upload Files, select the upgrade files tab and press Browse. Locate the software update *.tgz file stored on the laptop or network computer, and press Upload to load the file into the transmitter upload file list. Allow this operation to complete.

Installing New Software

1. Set the transmitter to RF Off and for Remote control. If the transmitter is already in Remote control mode, turn off the transmitter using the AUI on the laptop. Perform the following steps remotely using the AUI on the laptop.
2. Go to the AUI Menu/System Settings/Upgrade Software screen and select the update *.tgz file from the Select Upgrade File list (should highlight in blue) and press Start Upgrade.

CAUTION! Do not leave this page until the flash process is complete.

3. After a successful load (status is 100% complete and a message indicates a successful load), cycle the ac power (turn off, then on) on the NV10LT/NV7.5LT.
4. This completes the software upgrade. Restore the former network settings on the transmitter and laptop as required (see [Step 2 of Transmitter IP Configuration, on page 3.4.2](#)).
5. Login and repeat [Step 1 of Preliminary Checks, on page 3.4.1](#) to determine if the current version is the same as the upgrade version - this confirms the upgrade was successful.
6. If the upgrade was not successful, repeat [Step 1](#) through [Step 5](#). If still unsuccessful, contact Nautel.