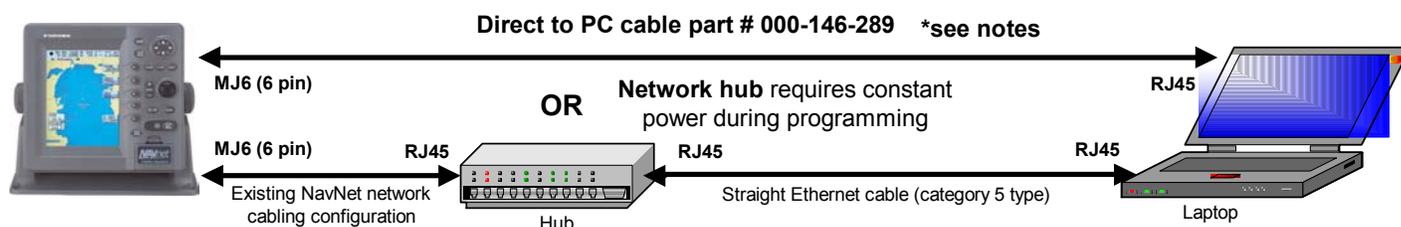


## NavNet Display Update Procedures using a PC computer

If an upgrade is required on any NavNet display, all other displays in the NavNet network must be checked (and updated as necessary) to ensure compatibility.

### System requirements:

- A personal computer with a Microsoft Windows operating system, an Ethernet network card, appropriate cabling (supplied in kit) and a CD ROM drive.
- The PC network card **IP ADDRESS** and **SUBNET MASK** must be changed using the instructions on page 2.
  - **Record all current computer settings to restore the previous PC network if required.**
- With the NavNet display powered off, connect the appropriate cable connector to the computer network Ethernet port, (RJ-45 style plug). **When using a USB to Ethernet type adapter always connect adapter to the same computer USB port.**
- Connect the 6-pin connector of cable to the NavNet display NETWORK port (located on the rear of display).
- NavNet displays that are not being updated must be powered off and/or disconnected from the network!
- Remove power from any NavNet network device such as a BBFF1, FAX 30 (these units do not have a power switch) or BBFF3 to help prevent a software upgrade failure.
- This update can also be accomplished through an Ethernet hub. Connect to the Ethernet hub as shown below.
- Note that only one NavNet display can be updated at a time.



**Note:** The cable included with this update kit must be connected between the NavNet display and the hub "UPLINK" port for updating software. Cable can also be used to connect any NavNet Network device to the hub using this configuration.

- The software will automatically save waypoints, routes, track lines, and configuration data if existing software is:
  - Navionics: 010, 012, 014, 015 or higher (last three digits of program number)
  - C-Map: 006, 008, 010, 011 or higher (last three digits of program number)
- Alternately all information can be saved using a memory card part # 000-140-483 (for a single display system) or by transferring the information to another display in a multiple display system (configuration data will not transfer).
- See the operations manual for detailed instructions regarding [RECEIVE DATA VIA NETWORK].

### Software update instructions:

1. Remove any chart or memory cards
2. Connect a single NavNet display to the computer using one of the diagrams above
3. Insert NavNet software CD (starts automatically) or select [Start], [Run], Browse "Drive letter", select **NetUpdate**, [OK]
4. Software update program displays screen 1/13 "Executing program update", Power "on" NavNet display
5. Click **Next(N)>** to advance to screen 2/13, note detected IP Address should be **172.31.200.2**
6. Continue to advance through screens by clicking **Next(N)>**
7. At step 6/13 power NavNet display "off" then "on" within 5 seconds to continue the update process (retry if 5 seconds is exceeded)
8. Step 7/13 click [Open], create a new directory and [Save] the "backup file name"(old.srm), click **Next(N)>**, step 8/13 (same)
9. Step 9/13 will find appropriate unit; or display model list (if software level is current), \*select model if required and click **Next(N)>**
10. Continue process by clicking **Next(N)>** (ok warnings as required), upon completion click [OK] to exit
11. Display will restart for normal operations (disclaimer screen will display new software revision with a suffix of "2" or higher)

- **Notes:** If an error message appears on the display, the program does not advance to step 7 or the progress bar stalls, repeat the update process by pressing the Ctrl-Alt-Delete keys on the computer, this displays the PC task manager.
  - End the update software program by selecting "Netupdate" and clicking on "End Task".
  - Remove and reinsert the CD ROM into the PC to restart and retry the update program.
- It may be necessary to set the computer network adapter to 10Mbps / Half duplex for a direct cable connection. Correct in "network card properties" or follow information supplied from the network card manufacturer.
- If the problems persist please refer to the "troubleshooting section" on page 2 to confirm the network configuration.

## Computer Network Setup instructions for Microsoft Windows operating systems

### Windows 95, 98 or ME

Select [Start], Settings, Control Panel, Network  
Select [TCP/IP](for network card), Properties  
Select [Specify an IP Address]  
Set **IP Address:**        **172.31.200.2**  
Set **Subnet Mask:**     **255.255.0.0**  
Click **[OK]**  
"TCP/IP Properties", Click **[OK]**  
"Network", Click **[OK]**  
**Close** "Control Panel"  
**Restart Computer**

### Windows 2000

Select [Start], Settings  
Network and Dial-Up connections  
Select [Local Area Connection], Properties  
Select [Internet Protocol (TCP/IP), Properties  
Select [Use the following IP Address]  
Set **IP Address:**        **172.31.200.2**  
Set **Subnet Mask:**     **255.255.0.0**  
Default Gateway:        Unchanged  
DNS Information:        Unchanged  
Click **[OK]**  
"Local Area Connection Properties", Click **[OK]**  
**Close** "Local Area Connection Status"  
**Exit** "Network and Dial-up Connections"

### Windows XP

Select [Start], Control Panel  
Click Network and Internet connections  
Click Network Connections  
Select [Local Area Connection] Icon  
Right Click, select [Properties]  
Select [Internet Protocol (TCP/IP), Properties  
Select [Use the following IP Address]  
Set **IP Address:**        **172.31.200.2**  
Set **Subnet Mask:**     **255.255.0.0**  
Default Gateway:        Unchanged  
DNS Information:        Unchanged  
Click **[OK]**  
Select **"Advanced"** (Local Area Connection Properties)  
**Deselect** "Internet Connection Firewall", click **[OK]**  
**Exit** "Network Connections"

### NOTES FOR ALL WINDOWS OPERATING SYSTEMS

- Disable all computer firewall programs before updating
- Norton Internet Security, McAfees, etc.)
  - Also see "Windows XP" above for disabling firewall
- Do not confuse the Network adapter with the Dial-up adapter settings
  - Selecting wrong model will cause display to restart incorrectly
  - **Updating a previous version display** resets the "IP Address" and "Host Name" to default; change as required
  - **Updating a current version display** does not reset the "IP Address" and "Host Name"; no change required

### NETWORK TROUBLESHOOTING: (with computer configured, cabling connected and NavNet display powered on)

#### Checking internal computer network configuration: (Windows 95, 98, and ME)

1. Select [Start], [Run], type "**command**"(without the quotation marks), click **[OK]**, Command window displays with a flashing \_
2. Type "**winipcfg**" (without the quotation marks)
3. Press computer keyboard **[Enter]** key; this will return the computer network card information in a graphical windows box.
4. Confirm IP Address "**172.31.200.2**" and Subnet Mask "**255.255.0.0**" information is correct (other settings; no change required)

#### Checking internal computer network configuration: (Windows 2000 and XP)

1. Select [Start], [Run], type "**command**"(without the quotation marks), click **[OK]**, Command window displays with a flashing \_
2. Type "**ipconfig**" (without the quotation marks)
3. Press computer keyboard **[Enter]** key; this will return the computer network card information.
4. Confirm IP Address "**172.31.200.2**" and Subnet Mask "**255.255.0.0**" information is correct (other settings; no change required)

#### Checking network communications between the computer and NavNet display:

1. Select [Start], [Run], type "**command**"(without the quotation marks), click **[OK]**, Command window displays with a flashing \_
2. Type **ping** (enter **IP address of display**) (IP Address of NavNet display is found by pressing **[DISP]**, then press any **one** of the five soft keys located below the **[SAVE/MOB]** key)
3. Press computer keyboard **[Enter]** key; should return "Reply from" the NavNet display **IP Address** with no lost packets
4. **This confirms configuration and cabling are correct and the computer is communicating with the NavNet display**

### Remember to restore original computer network (if required) by reinserting previously recorded information

**Note that many factors can affect network communications including improper computer configurations, network adapter, cabling and/or hub problems which may be beyond the scope of this information sheet**

If you require additional technical assistance concerning the NavNet product, please visit our website ([www.furuno.com](http://www.furuno.com)) and click on "Support," then "Ask Furuno a Question." You may also contact a FURUNO support technician at either our Camas, WA facility, (360-834-9300) or at our Denton, MD facility, (410) 479-4420. **Thank you for purchasing FURUNO products!**