



ETCNet2 Network Configuration Editor



Version 2.1.1

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Introduction

What is Network Configuration Editor?

ETC's Network Configuration Editor (NCE) is a spreadsheet-style software program designed to make configuring ETCNet2™ DMX and Video nodes easy. With NCE you can edit the parameters of any port on any node in an ETCNet2 system. Through an Ethernet connection, you can read the configuration of any node on the network, edit it offline, and send the configuration back to the node via the network.

Note: NCE is only compatible with ETCNet2 nodes running version 2.0 node code.

It does not work with ETC's older style Remote Video Interface (RVI), Remote Interface Unit (RIU) or with ETCNet2 nodes running ETCNet. If you have questions about the type of network you have, please call ETC Technical Services at the office nearest you:

ETC Americas 800/775-4382

ETC Asia +852 2799 1220

ETC Europe +44 (0)20 8896 1000

Minimum requirements

These minimum requirements are for a personal computer running Network Configuration Editor.

- Pentium or compatible processor, 266MHz or better
- 32MB RAM
- Screen resolution should be set to 800X600 or greater
- Compatible with Windows®98, 2000, NT4 (with Service Pack 5 and later)

Note: Windows 95 will require the WinSock 2 Update to run NCE. At the Microsoft website, search for "Winsock 2 Update". If you have any questions contact ETC Technical Services at one of the above numbers.

- Microsoft Internet Explorer 5.0
- Network Interface Card

Installing NCE

Install Network Configuration Editor

To install the ETCNet2 Network Configuration Editor (NCE):

1. Insert the diskette labeled "NCE Disk 1" into the floppy drive on your personal computer.
2. On your desktop, double-click **My Computer**.
3. Double-click **3-1/2 Floppy (A:)**.
4. Double-click the **Setup.exe** icon and follow the instructions on your screen.

Two additional diskettes are included with the installation that must be installed separately from NCE. They contain the DMXNode.bin and VidNode.bin files for the ETCNet2 DMX and Video nodes. These files are self-extracting executable files that are used to update software on ETCNet2 nodes.

To install the DMXNode.bin and VidNode.bin files (follow the same procedure for both diskettes):

1. Insert the diskette labeled DMXNode.bin.
2. On your desktop, double-click **My Computer**.
3. Double-click **3-1/2 Floppy (A:)**.
4. Double-click the **dmx_A2.1.1.9.0.35_R1.0.0_E3.1_T1.3.0.exe** file (**vid_A2.1.1.9.0.27_R1.0.0_E3.1_T1.3.0.exe** for the VidNode.bin disk).

Note: You must install the .bin files in the default directory. NCE is programmed to look in the default directory and will not update nodes properly if the .bin files are not stored there.

Network Settings

IP addresses for ETCNet2 nodes are automatically set by NCE based on the IP address of the PC that Network Configuration Editor is installed on. Manual editing of network addresses is password protected.

You also must set an IP address for any personal computer you plan to use on an ETCNet2 network. ETC recommends that the personal computer used on an ETCNet2 network is dedicated to that network so changes to network settings are kept to a minimum.

Note: If the computer you wish to use is currently being used on a non-ETCNet2 network please consult your Network Administrator before changing the IP, Subnet Mask or Gateway addresses.

Default Network Settings for your personal computer

Prior to changing any Network settings on your personal computer please record the current settings in the following spaces below.

- IP Address _____
- Subnet Mask _____
- Gateway _____

To use your personal computer on an ETCNet2 network that does not use a network router (i.e. hub/concentrator only), ETC recommends the following default settings:

- IP Address 10.101.1.101
- Subnet Mask 255.255.0.0
- Gateway 10.101.1.101

Note: If you have a network that does include a network router, you must set the Gateway address to that router.

Each additional computer on an ETCNet2 network must have it's own IP address which must be different from any other computer on the same ETCNet2 network. Select from the following default range of IP addresses for an additional personal computer running NCE:

10.101.1.101	10.101.1.113
10.101.1.102	10.101.1.114
10.101.1.103	10.101.1.115
10.101.1.104	10.101.1.116
10.101.1.105	10.101.1.117
10.101.1.106	10.101.1.118
10.101.1.107	10.101.1.119
10.101.1.108	10.101.1.120
10.101.1.109	10.101.1.121
10.101.1.110	10.101.1.122
10.101.1.111	10.101.1.123
10.101.1.112	10.101.1.124

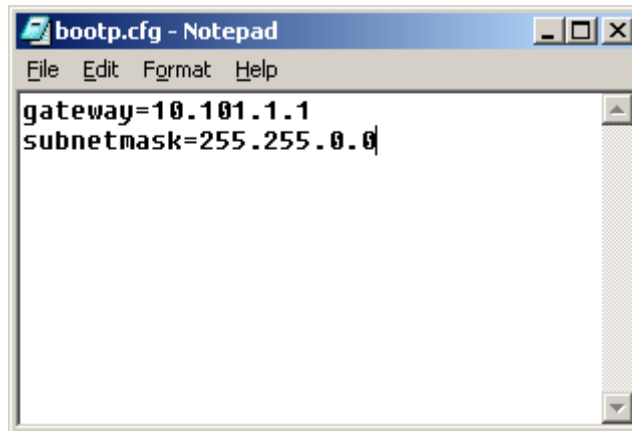
Change the bootp.cfg file settings

In NCE version 2.1.1 there is an additional file installed in the Windows directory that may require user intervention. If you use something other than the default IP addresses, the bootp.cfg file must be set to match the network settings on your personal computer.

To change the bootp.cfg file settings:

1. Using Windows Explorer, browse to the Windows folder (default path is C:\windows – or C:\winnt depending on the operating system of the machine)
2. Double-click on **bootp.cfg** (if it does not automatically open in Notepad, select Notepad in the **Open With** dialogue box).
3. Edit the bootp.cfg file so that the Gateway and the Subnet Mask match the Network Settings of your personal computer.
4. Save your changes and close Notepad.

Note: If you are using default IP Addresses the bootp.cfg file will not need to be changed.



Setting the IP address on ETCNet2 Nodes

When ETCNet2 nodes are shipped from the factory, they do not have a valid IP address. They must be assigned an IP address via NCE. NCE automatically sets the IP address for ETCNet2 nodes via the **Network Address Server**.

Note: For a node with factory defaults to receive an IP address it must be powered on and connected to the network. Connect all nodes to the network prior to enabling Network Address Server.

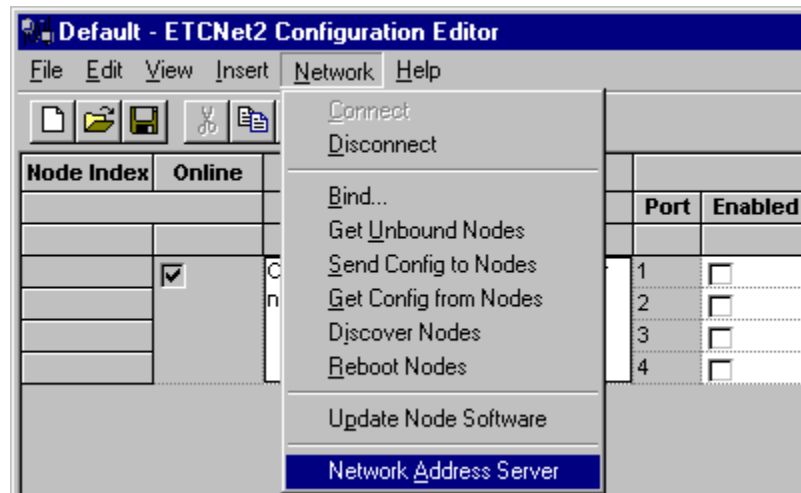
Enabling Network Address Server is a two step process, first you must connect NCE to the network, then you must enable Network Address Server.

To connect NCE to the network:

- Open the **Network** menu, click **Connect**.

To set IP addresses for ETCNet2 DMX and Video nodes:

- Open the **Network** menu, click **Network Address Server**



Once Network Address Server is enabled, it will send IP addresses to all ETCNet2 nodes (that are currently at factory defaults) on the network. No user intervention is required during this process.

On larger networks that employ a network switch or router, the Network Address Server resolves IP addresses for nodes on different network segments automatically.

Note: Any programmable switch or router to be used on an ETCNet2 network must be configured prior to using ETCNet2 nodes or Network Configuration Editor.

Note: To resolve IP addresses on nodes that currently have an IP address, see pp.9.

What to do if a Node has an IP address but the address is not compatible with the current network address scheme.

It's possible that you may want to use a node that was previously used on a different network. If the IP address for that node is not compatible with the address scheme on your network you will need to assign it a new IP address.

The following procedure also resolves the IP addresses for a node in the event that it has the same IP address as another node already on the network.

To assign an IP address to a node that already has an IP address:

1. Connect the node in question to the network but do not power it on.
2. In NCE, enable **Network Address Server**.
3. Apply power to the node.

Note: Although there is a network function called **Reboot Nodes**, it will not do anything in this instance because the node you need to reboot has an IP Address that can not be "seen" with NCE. A node must be configured with a valid IP Address and properly connected to the network and NCE in order for **Reboot Nodes** to work.

Overview

Product Definitions

ETCNet2 - ETC's Ethernet protocol suite, ETCNet2 supports IP addressing that allows the use of off-the-shelf Ethernet hubs and switches in networked systems.

EDMX - Ethernet DMX. On an ETCNet2 network there are 32,767 valid EDMX addresses (from 1-32,767).

vPort - A vPort is a sequential range of EDMX values assigned a numeric label. By default, a vPort contains 512 sequential addresses (and their associated EDMX values). See *Appendix A* for a table of vPorts and their default EDMX values.

System - A collection of networked or non-networked ETC devices connected via any of a variety of communication protocols for the control of a specific geographic area (i.e. Lobby, Theatre, Ballroom, etc.). A system may also refer to a specific family of controllers (Obsession system, Expression system, Unison system, etc.) It should be noted that a single network may connect several different systems.

Network - A collection of ETCNet1 or ETCNet2 devices connected via Ethernet.

NCE and the ETCNet2 DMX node

NCE allows you to configure the DMX512 and RFU ports on the ETCNet2 DMX node. Each DMX port may be defined as either an input or an output, regardless of the sex of the physical connector.

DMX Input

When a port on the node is configured for Input, the node receives DMX512 from an external source and outputs EDMX to the ETCNet2 network.

DMX Output

When a port is configured for Output, the node receives EDMX channels from the ETCNet2 network and outputs DMX512 to a DMX512 device.

EDMX and vPorts

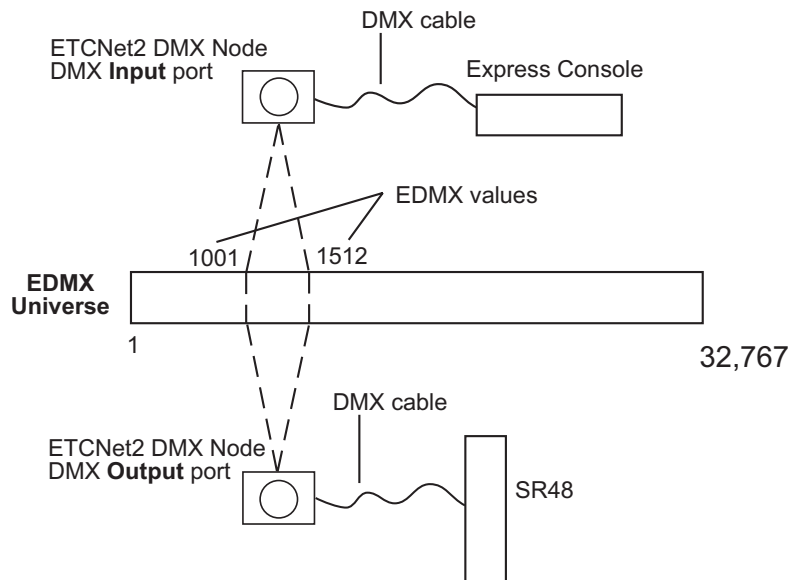
A vPort's group of addresses can be assigned (sequentially) anywhere in the range of 32,767 addresses allowed on an ETCNet2 network. There are 64 default vPorts on an ETCNet2 network. A vPort can be assigned to any DMX input or DMX output port on an ETCNet2 network.

Any DMX port may be mapped to specific addresses in the EDMX universe of 32,767 values. This is accomplished in one of two ways.

1. Editing EDMX numbers

When you have a device inputting DMX512 onto a ETCNet2 network you will typically have at least two ETCNet2 DMX nodes. One will generally serve as a DMX512 input and the other as a DMX512 output device. Match the EDMX Start values for each port on both nodes so that they communicate the correct values.

Editing EDMX numbers is the most flexible manner of numbering but can make for a lot of bookkeeping due to the large numbers involved.



2. Using vPorts

vPorts are virtual ports used by NCE that have nothing to do with the physical ports found on a DMX node. A vPort is a range of EDMX values assigned a numeric label. Once your vPorts are set up, you can assign them to physical ports without having to edit EDMX addresses.

There are 32,767 addresses in the EDMX universe. A vPort is a collection of up to 512 sequential addresses that can be placed anywhere within that range.

Each of the 512 addresses in a vPort has an EDMX value associated with it. In a default configuration, vPort 1 = EDMX addresses 1-512, vPort 2 = EDMX addresses 513-1024 and so on.

Note: NCE defaults to 64 vPorts. Additional vPorts can be created and will start with vPort 65.

Getting Started

There are two approaches to creating a configuration in Network Configuration Editor. The first is to create a configuration for each node from scratch and then download the configuration to the nodes. A second, easier approach is to install your network with all of the nodes and then use the **Get Unbound Nodes** command in NCE.

Building Configurations

To use the **Get Unbound Nodes** command you must have all nodes installed on the network and also have your personal computer properly configured.

Once your nodes are installed and your personal computer's IP address is set, you're ready to begin building a configuration.

Connect to the network

Once you've opened NCE you must first connect your PC to the network.

To connect your PC to the network:

- On the **Network** menu, click **Connect**.

Note: The status bar along the bottom of the window shows information about devices on the network and whether or not your PC is connected.

On the status bar:

Nodes = the number of nodes in the configuration.

Nodes Online = the number of nodes on the network.

Network Online = pc is connected to the network.

Network Offline = pc is not connected to the network.

Port	Enabled	Input Output	DMX Input Port Properties		
			DMX Start	EDMX Start	EDMX Channels
1	☐	Input	1	1	512
2	☒	Input	1	513	512
3	☒	Input	1	1025	512
4	☐	Input	1	1537	512

Status Bar

Nodes: 1	Nodes Online: 2	Network: Online
----------	-----------------	-----------------

Get Unbound Nodes

Build a new configuration file from nodes already on the network by using the **Get Unbound Nodes** command. When you start with a blank configuration, this command will add any nodes on the network to your configuration as new nodes. You must be connected to the network to get a configuration file from a node.

To get the configuration files from unbound nodes:

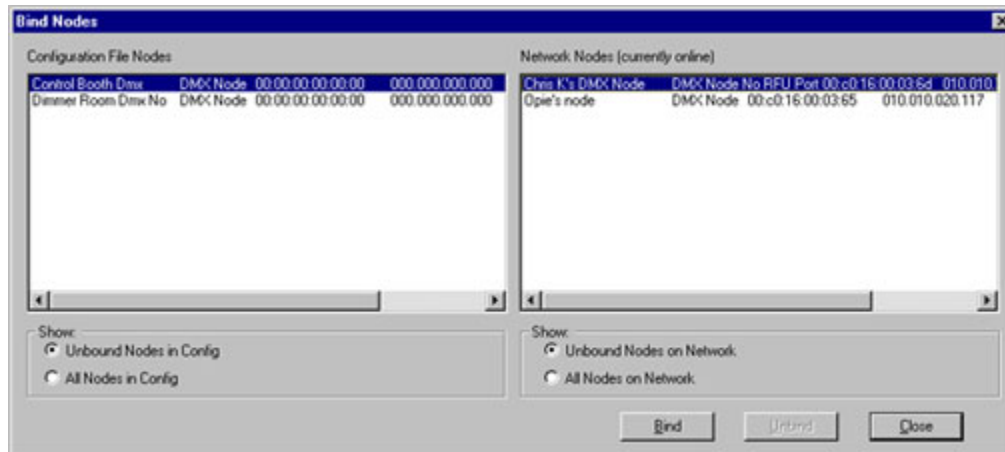
- On the **Network** menu, click **Get Unbound Nodes**.

Once the unbound nodes appear in your configuration file, proceed with editing parameters of the nodes. When the configuration is complete, download the configuration to the nodes to complete the process.

Other Network commands

Binding Nodes

If you've created the configuration offline you must bind the nodes in your configuration file to the physical nodes on the network. When planning your network, keep track of the MAC address's of your nodes. Use the MAC address to identify your nodes when working in the **Bind Nodes** display.



To bind configuration file nodes to physical nodes:

1. On the **Network** menu, click **Bind**.
2. In the **Bind Nodes** display, click a node in the **Configuration File Nodes** window and the corresponding node in the **Network Nodes** window, click **Bind**.

Send a Configuration to a Node

Use the **Send Config to Nodes** command to update a node on the network with a configuration from your pc. Configuration file nodes must be bound to network nodes before sending a configuration to a node.

- On the **Network** menu, click **Send Config to Nodes**.

Note: To send a config to a specific node, highlight the node (or nodes) and follow the same procedure.

Read a Configuration from a Node

Use the **Get Config from Nodes** command to update an existing configuration file. Configuration file nodes must be bound to network nodes to be able to get a configuration from a node.

To get the configuration from a node:

- On the **Network** menu, click **Get Config from Nodes**.

Note: To get a config from a specific node, highlight the node (or nodes) and follow the same procedure.

Discover Nodes

The **Discover Nodes** feature sets any ETCNet2 node running in ETCNet1 mode into ETCNet2 mode (i.e. a node previously connected to an Expression console).

Note: Discover Nodes does not allow ETCNet1 devices (ETCNet Remote Interface Unit or ETCNet Remote Video Interface) to operate in ETCNet2 mode.

To set all nodes on the network in ETCNet1 mode to ETCNet2 mode:

- On the **Network** menu, click **Discover Nodes**.

Reboot Nodes

The **Reboot Nodes** feature is used in the event that you want to reboot your nodes remotely.

To reboot all nodes:

- On the **Network** menu, click **Reboot Nodes**.

Note: To reboot a specific node, highlight the node (or nodes) and follow the same procedure.

Update Node Software

To update node software you must first enable Network Address Server. Once Network Address Server is enabled you can update node software.

To update Software in all Nodes:

- On the **Network** menu, click **Network Address Server**.
- On the **Network** menu, click **Update Node Software**.

Note: To update software for a specific node, highlight the node (or nodes) and follow the same procedure.

Note: To update node software via NCE you must have the upgrade itself installed on your hard drive. Software upgrades are distributed separately from NCE and by default are installed in the C:\etc\nodesbin directory. When you run **Update Node Software**, NCE looks in this directory for a new version of node software.

Network Address Server

Enable the Network Address Server to download new software to an ETCNet2 node or to dynamically assign IP addresses to new nodes.

To enable Network Address Server:

- On the **Network** menu, click **Network Address Server**.

Basic Configurations

NCE is designed to make configuring an ETCNet2 node easy. To meet the needs of all types of networks, NCE provides both basic and advanced levels of programming for all types of nodes.

NCE supports four types of ETCNet2 nodes:

1. DMX Node
2. DMX Node without RFU
3. Video Node
4. DMX Node two port

Note: Fields that are greyed out are not editable based on selected parameters.

Configure an ETCNet2 DMX node

To configure an ETCNet2 DMX node you must first add a node to your configuration or get unbound nodes from the network.

To add a node to a configuration:

- Open the **Insert** menu and click **DMX Node**.

The default view shows **Node Properties** and **DMX Port Properties**. The screen shot below is the left side of the screen and shows **Node Properties**, which has two editable text fields, the **Node Name** and **Comment** fields.

Text entered in the **Name** field is stored in the node and will appear each time that node is bound to NCE, but text entered in the **Comment** field is only stored in NCE, not in the node.

Node Properties		
Name	Type	Comment
ETC Node	DMX Node	

To edit Node Name:

- Double-click in the **Name** field to place a cursor in the field then type the name you wish to assign to the node.

The right side of the display shows **DMX Port Properties**.

Port	Enabled	Input Output
1	☒	Input
2	☒	Input
3	☒	Input
4	☒	Input

DMX Node Two Port

You can name the node and the ports of a 2 port DMX node in NCE and have those names appear on the LCD screen of the 2 port node.

To name the node and or ports of the DMX Node 2 port:

- In the Name field, type the name of the node, the name of port 1 and the name of port 2 with each of them separated by a colon ':'. For example node1:port1:port2.
- There is an additional (fourth) field that can be used to determine the state of the LCD backlight on the node. Valid values are "ON" or "OFF". The syntax to enable the backlight is: node1:port1:port2:ON.

Note: if nothing is entered in the Name field, the IP address of the node will appear on the LCD screen.

DMX Port Properties

- Port** The **Port** column displays the DMX512 port number on your ETCNet2 DMX node.
- Enabled** Check the box in the **Enabled** column to activate a DMX port.
- Input Output** Click on **Input Output** to designate your port as either an input or an output. If a port is designated as Input, the Output Port Properties will be greyed out for that port.

DMX Input Port Properties

When a port on the ETCNet2 DMX node is configured as Input, the port receives DMX512 from an external source, such as a console, and outputs EDMX onto the ETCNet2 network.

To view the properties of a DMX input port:

- On the **View** menu, select **DMX Inputs**.

- DMX Start** The number entered in the **DMX Start** column is the first DMX channel that the DMX Input port listens to.
- EDMX Start** The number entered in the **EDMX Start** column is the first EDMX value output to the network. Valid numbers range from 1-32,767.
- EDMX Channels** Enter a number between 1-512 in the **EDMX Channels** column to designate the number of EDMX channels you want to input. An EDMX port defaults to 512 channels.
- Note:** if there are fewer than 512 DMX channels being input, the number of EDMX channels will be reduced accordingly.
- EDMX End** The **EDMX End** column will change to reflect the last EDMX channel used on the Input port. Changing the DMX Start, DMX Channels, or EDMX Start columns will cause the EDMX End column to increment or decrement accordingly.
- DD** A checkmark in the **DD** column indicates that Dimmer Doubling is enabled. When Dimmer Doubling is enabled the number of EDMX channels for a port is divided into two ranges of 256 channels.

DD EDMX Start The **DD EDMX Start** address column displays the start address of the “B” channels on a Dimmer Doubled port.

DD EDMX End The **DD EDMX End** address column displays the end address of the “B” channels on a Dimmer Doubled port.

HLL **HLL** is an abbreviation for Hold Last Look (Forever). If an ETCNet2 DMX node input port loses the EDMX stream from its source, the node will continue to play the last look for an infinite amount of time when the HLL box is checked.

HLL Time **HLL Time** is also used in the event of a loss of EDMX input. If the HLL box is not checked, the node will check to see if an **HLL Time** is set. If a time is set, then the node will hold the last look for the amount of time specified. Time is displayed in seconds.

vPort Enter a number from 1-64 in the **vPort** column to use a default set of 512 EDMX channels. When you specify a vPort, NCE displays the default EDMX start address and EDMX end address for that vPort. A table of vPorts and their default values is located in *Appendix A* of this manual.

Note: When you assign a vPort, the DMX Start address defaults to 1. Changing the DMX Start address to a number other than 1 will clear the vPort selection.

Port Priority Use a **Port Priority** setting to determine which ports have control of any EDMX channels. A valid Port Priority is numbered from 1-20, 1 is the highest priority and 20 is the lowest.

Port Priorities are used to establish the relative priority or importance of a DMX port based on levels from 1-20 (1 having highest priority, 20 having lowest). When an EDMX channel is patched to more than one DMX input port, Port Priority determines which DMX port controls that channel. As a rule, DMX Ports with higher priority levels take control of EDMX channels from ports with lower priority levels.

Note: A port will only take control of EDMX values when valid DMX is coming into the port

Line Termination **Line Termination** is a property of input ports but can only be enabled in the Node Details screen.

To enable Line Termination: on the **View** menu select **Node Details**.

DMX Output Port Properties

When a port on the ETCNet2 DMX node is configured as Output, the Node can receive EDMX from the network and output DMX512 to other DMX512 compliant devices.

To view the properties of a DMX output port:

- On the **View** menu, select **DMX Outputs**.

EDMX Start The number in the **EDMX Start** column displays the first EDMX address assigned to a port. Valid numbers range from 1-32,767.

EDMX Channels	The number in the EDMX Channels column, enter the number of EDMX channels you want assigned to that port. A maximum of 512 EDMX channels can be assigned to a port.
EDMX End	The EDMX End column is for display only and shows the last EDMX address assigned to a port.
DD	A checkmark in the DD column indicates that Dimmer Doubling is enabled. When Dimmer Doubling is enabled the number of EDMX channels for a port is divided into two ranges of 256 channels.
DD EDMX Start	The DD EDMX Start address column displays the start address of the “B” channels on a Dimmer Doubled port.
DD EDMX End	The DD EDMX End address column displays the end address of the “B” channels on a Dimmer Doubled port.
vPort	Enter a number from 1-64 in the vPort column. Each vPort has a default set of 512 EDMX channels. When you specify a vPort, NCE displays the EDMX start address and EDMX end address for that vPort. A table of vPorts and their default values is located in <i>Appendix A</i> of this manual.
Port Speed	Port Speed is a property of DMX output ports but it can only be accessed via the Node Details screen. To change Port Speed: on the View menu select Node Details. Under Port Speed select from Max, Fast, Medium, Slow. Refresh rate is (average): Max = 42Hz, Fast = 39Hz, Medium, = 35Hz, Slow = 30Hz.
HLL	HLL is an abbreviation for Hold Last Look (Forever). If an ETCNet2 DMX node output port loses the EDMX stream from its source, the node will continue to play the last look for an infinite amount of time when the HLL box is checked.
HLL Time	HLL Time is also used in the event of a loss of EDMX input. If the HLL box is <u>not</u> checked, the node will check to see if an HLL Time is set. If a time is set, then the node will hold the last look for the amount of time specified. Time is displayed in seconds.
Data Loss Fade Enabled	When HLL is disabled, check the Data Loss Fade Enabled box to set a fade time a DMX port so that if it does lose EDMX the port will fade out.
Data Loss Fade Time	The Data Loss Fade Time is the amount of time that it takes for a port to fade from the last known level to a level of zero if EDMX has been lost.
Data Loss Port Disable	The Data Loss Port Disable box allows you to determine the state of a DMX output port in the event that EDMX input is lost. When this box is checked, and there is a loss of EDMX input, the DMX output port is disabled. When this box is not checked, and EDMX input is lost, the DMX output port goes to zero and continues to output zeros on the DMX line until EDMX input is reestablished.

Edit vPort Table

To edit vPorts:

- On the **Edit** menu, click **Edit vPorts**.

EDMX values

The default vPort table shows the list of **vPort ID** numbers in the left-hand column. To change the EDMX Start and EDMX Channels for a vPort, click in a text box in one of these columns and enter a new value.

Note: If a DMX port (Input or Output) is assigned to that vPort, the EDMX values will be updated in the configuration when the vPort is updated.

Dimmer Doubling

Dimmer doubling can be enabled in the vPort menu.

A checkmark in the **DD** column indicates that Dimmer Doubling is enabled. When Dimmer Doubling is enabled the number of EDMX channels for a port is divided into two ranges of 256 channels.

The **DD EDMX Start** address column displays the start address of the “B” channels on a Dimmer Doubled port.

The **DD EDMX End** address column displays the end address of the “B” channels on a Dimmer Doubled port.

View menu

There are a number of viewing options available that can be used to get specific information about your ETCNet2 nodes.

View DMX Nodes

To get information on DMX nodes, select **View DMX Nodes**.

To view DMX nodes:

- Open the **View** menu, click **DMX Nodes**.

View Video Nodes

To get information about Video nodes, select **View Video Nodes**.

To view Video nodes:

- Open the **View** menu, click **Video Nodes**.

View vPorts

To see what vPorts are used on any current input or output port, select **View vPorts**.

To view vPorts:

- Open the **View** menu, click **vPorts**.

View DMX Inputs

To check settings for all of the DMX Input ports in your configuration, select **View DMX Inputs**.

To view DMX Inputs:

- Open the **View** menu, click **DMX Inputs**.

View DMX Outputs

To check settings for all of the DMX Output ports in your configuration, select **View DMX Outputs**.

To view DMX Outputs:

- Open the **View** menu, click **DMX Outputs**.

View Video Ports

To check settings for all of the Video ports in your configuration, select **View Video Ports**.

To view Video Ports:

- Open the **View** menu, click **Video Ports**.

View RFU Ports

To check settings for any RFU ports in your configuration, select **View RFU Ports**.

To view RFU Ports:

- Open the **View** menu, click **RFU Ports**.

View Node Addresses

There are many different types of network addresses used to define a node and its functions in an ETCNet2 network. These addresses are automatically set by NCE and do not require additional configuration by the user.

To see Node addresses:

- On the **View** menu, click **Node Addresses**.

View Node Details

The **Node Details** window is an expanded view of every parameter of the ETCNet2 nodes in your configuration. These parameters are primarily used by ETC personnel for diagnostics and troubleshooting.

To see all available parameters of your nodes:

- On the **View** menu, click **Node Details**.

Configure an ETCNet2 Video node

To configure an ETCNet2 Video node you must first add a node to your configuration.

To add a node to a configuration:

- On the menu bar, click **Insert** and click **Video Node**.

Node Properties			Video Port Properties			PC Keyboard Port Properties
Name	Type	Comment	System ID	Display Number	Locked	System ID
ETC Video Node	Video Node		0	CRT1	☐	0
			0	CRT1	☐	

The ETCNet2 Video node is used to provide remote displays of your control system. There are three properties of a video node that can be edited by the user.

Video Port Properties

System ID

The System ID is used in networks where there is more than one Obsession II[®] console. Use the System ID to identify which Obsession console your video node is connected to.

Display Number

Select CRT 1-CRT 8 to identify which video ports on the Obsession II console you want the ETCNet2 video node to mimic.

Monitor	Display
CRT 1	User one - CRT 1 - console
CRT 2	User one - CRT 2 - console
CRT 3	User one - expanded channel display 1
CRT 4	User one - expanded channel display 2
CRT 5	User two - CRT 1 - console
CRT 6	User two - CRT 2 - console
CRT 7	User two - expanded channel display 1
CRT 8	User two - expanded channel display 2

Locked

Enable the Lock feature to lock the properties of a video port so that they can only be changed by Network Configuration Editor.

Note: In version 2.1.1 of NCE you must either lock both video ports or neither of the video ports. This is due to the fact that currently an Obsession processor and NCE treat video ports slightly differently.

PC Keyboard Port Properties

If a keyboard is connected to a video node you can also set a System ID for the keyboard. The System ID is used in networks where there is more than one Obsession II console. Use the System ID to identify which Obsession console your keyboard is connected to.

RFU Port Properties

ETCNet2 DMX and Video Nodes also support a Remote Focus Unit (RFU). There is one property that may be set for an RFU, **System ID**.

To view the RFU port properties of a video or DMX node:

- On the **View** menu, click **RFU Ports**.

Node Index	Online	Node Properties			RFU Port Properties
		Name	Type	Comment	System ID
	☐	ETC Video Node	Video Node		1

System ID

The System ID is used in networks where there is more than one Obsession II console. Use the System ID to identify which Obsession console your RFU port is connected to.

The parameters for DMX Input port 2 are:

DMX Start = 1
 EDMX Start = 1025
 EDMX Channels = 72

Node Properties		DMX Port Properties						
Name	Type	Port	Enabled	Input Output	DMX Input Port Properties			
					DMX Start	EDMX Start	EDMX Channels	EDMX End
Control Booth Dmx Node	DMX Node	1	☒	Input	1	1001	24	1024
		2	☒	Input	1	1025	72	1096
		3	☐	Input	1	1025	511	1535
		4	☐	Input	1	1537	512	2048

The parameters for DMX Output port 1 are:

EDMX Start = 1001
 EDMX Channels = 96

Node Properties		DMX Port Properties						
Name	Type	Port	Enabled	Input Output	DMX Output Port Properties			
					EDMX Start	EDMX Channels	EDMX End	
Dimmer Room Dmx Node	DMX Node	1	☒	Output	1001	96	1096	
		2	☐	Output	513	512	1024	
		3	☐	Output	1025	512	1536	
		4	☐	Output	1537	512	2048	

Note: Certain fields in the above screen shots are minimized so that the graphics will fit on the printed page.

Appendix A - Default vPort table

Use the default vPort table is for reference when working with NCE.

vPort	EDMX#	vPort	EDMX#	vPort	EDMX#	vPort	EDMX#
1	1-512	17	8,193-8,704	33	16,385-16,896	49	24,577-25,088
2	513-1,024	18	8,705-9,216	34	16,897-17,408	50	25,089-25,600
3	1,025-1,536	19	9,217-9,728	35	17,409-17,920	51	25,601-26,112
4	1,537-2,048	20	9,729-10,240	36	17,921-18,432	52	26,113-26,624
5	2,049-2,560	21	10,241-10,752	37	18,433-18,944	53	26,625-27,136
6	2,561-3,072	22	10,753-11,264	38	18,945-19,456	54	27,137-27,648
7	3,073-3,584	23	11,265-11,776	39	19,457-19,968	55	27,649-28,160
8	3,585-4,096	24	11,777-12,288	40	19,969-20,480	56	28,161-28,672
9	4,097-4,608	25	12,289-12,800	41	20,481-20,992	57	28,673-29,184
10	4,609-5,120	26	12,801-13,312	42	20,993-21,504	58	29,185-29,696
11	5,121-5,632	27	13,313-13,824	43	21,505-22,016	59	29,697-30,208
12	5,633-6,144	28	13,825-14,336	44	22,017-22,528	60	30,209-30,720
13	6,145-6,656	29	14,337-14,848	45	22,529-23,040	61	30,721-31,232
14	6,657-7,168	30	14,849-15,360	46	23,041-23,552	62	31,233-31,744
15	7,169-7,680	31	15,361-15,872	47	23,553-24,064	63	31,745-32,256
16	7,681-8,192	32	15,873-16,384	48	24,065-24,576	64	32,257-32,767



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