LEIGHTRONIX, INC.
CONTROL PRODUCTS

NET Series Manual

Installation, Configuration, & Operation Instructions for the MINI-T-NET / NET-164 / NET-EC

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NET Series Controller Firmware Version 1.00.42
WinNET Version 1.0.2.6

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INTRODUCTION

The NET Series consists of three Event Controllers built upon the popular LEIGHTRONIX "PRO" line. Each NET Series Event Controller provides unattended, automatic control over a wide variety of video devices and includes a built-in real time clock, video source control, video/audio switching control, and a programmable database of events containing control instructions. When the Event Controller "sees" a match between the current day and time and a programmed event, the event is executed, typically starting a video source and switching video/audio signals.

Your LEIGHTRONIX NET Series Event Controller is designed to be used in a host of different applications, including the following scenarios:

- **AUTOMATED PROGRAM BROADCASTING**

  Throughout the cable television and broadcast industry NET Series Event Controllers are used for automated program broadcasting. Common industry branches using NET Series Event Controllers include full-power television (FPTV), low-power television (LPTV), master-antenna television (MATV), public access, educational access, government access, and leased access.

  In addition, the NET Series Event Controllers are often used for private in-house networks, as found in hospitals, hotel and resort channels, or corporate and manufacturing communications channels. These institutions use their NET Series Event Controllers to automatically feed programming or video signals such as character generators to the desired channel at the proper time.

- **UNATTENDED PROGRAM RECORDING**

  NET Series Event Controllers are well suited for use in satellite and network recording. With a NET Series Event Controller, you are able to switch to the proper satellite at the desired time in order to capture the programming you need for your operations.

  NET Series Event Controllers may also be used for playback verification and program archiving.

- **TIMED EVENT SWITCHING**

  NET Series Event Controllers are designed to accommodate complex switching tasks, such as Syndex Switching, channel wild-card switching, and channel sharing. This expands the flexibility of your channels and your programming opportunities. Perform Syndex Switching by scheduling your Event Controller to switch syndicated programming to only the channels with the corresponding syndication rights. Use your Event Controller to switch a different satellite signal to a channel in a process known as channel sharing or perform wild-card sharing by switching to any available source on a channel.

GENERAL NET SERIES FEATURES/SPECIFICATIONS

FEATURE	SPECIFICATIONS
Internal Real Time Clock	Type: microprocessor interfaced • Reference: crystal controlled • Accuracy: +/- 6 seconds per month
Configuration Storage	• Type: ➢ Internal battery-backed memory ➢ Data integrity verified • Elements: ➢ Internet protocol (IP) address ➢ Subnet mask ➢ Gateway ➢ Time clock parameters • User information
Firmware	• Updateable via Ethernet • CRC verified at time of reprogram
Compliance, safety	Certified and listed as: • UL STD 1419, 2nd Edition • CAN/CSA C22.2 NO. 1-98
Compliance, emissions	Certified type acceptance: FCC Class A digital device, Part 15
Integrated Logging	• Format: compact binary model, encoded date, time, severity, module, IP address and user name (if applicable), and action. • Total size limit: 20KB, approximately 1000 events • Logged elements include: ➢ Immediate commands ➢ Scheduled events ➢ External router changes ➢ Errors ➢ Access by user name (if applicable) ➢ Restart time and date including shutdown time and date • Clock set

FEATURE	SPECIFICATIONS
Network Support	• Interface: ➢ Eight-position, eight-conductor modular female ➢ 10/100 BASE-T, unshielded twisted pair, Ethernet ➢ Ethernet_II frame type ➢ Transmission Control Protocol/Internet Protocol (TCP/IP) ➢ Services: Telnet • Maximum simultaneous network connections: Four
Power	• Locking connector • DC Power Input: 12VDC. Typical ~ 500mA. • Power Supply: ➢ Input: 100-240V~1.6A Max, 50-60 HZ ➢ Output: +12VDC, 3.33A, 40W Max.

NET SERIES MODEL FEATURES/SPECIFICATIONS

	MINI-T-NET	NET-164	NET-EC
MECHANICS			
Dimensions	2.75” H x 8.25” W x 6.5” D	3.50” H x 19.00” W x 8” D	1.75” H x 19.00” W x 8” D
Weight, without carton or cables	3 lbs.	6 lbs.	4 lbs.
Display	24 Characters x 2 Lines VFD	24 Characters x 2 Lines VFD	24 Characters x 2 Lines VFD
Keypad	Arrow Matrix	Arrow Matrix	Arrow Matrix
NETWORK ACCESS			
Remote Support	Dial-Up Networking	Dial-Up Networking	Dial-Up Networking
Network Support	Integrated 10/100Base-T Ethernet Port	Integrated 10/100Base-T Ethernet Port	Integrated 10/100Base-T Ethernet Port
Logging	Internal	Internal	Internal
PROGRAMMING			
Event Capacity	1000	1000	1000
Resource Library	1024	1024	1024
Control Mode	Immediate & Scheduled	Immediate & Scheduled	Immediate & Scheduled
Video Detection	Yes	Yes	N/A
Input/Output Naming	Yes	Yes	Yes
DEVICE CONTROL			
RS-232 Serial Interfaces	“COM 1”: reserved for future use/DB-9, male, DTE interface	“COM 1”: reserved for future use /DB-9, male, DTE interface	“SWITCHER”: used for external router control/DB-9, male, DTE interface
PRO-BUS Control Capacity	8 DVDs/VCRs	16 DVDs/VCRs	16 DVDs/VCRs
DVply Control for TASCAM® DV-D6500 Cue Title:Chapter	N/A	2	2
Switch Type	Relay	Active Matrix	N/A
Video/Audio Switching (in x out)	Internal 8 x 1 VA	Internal 16 x 4 VAA	External 32 x 32
Video Connectors	BNC	BNC	*
Video Standard	NTSC, 75-ohm terminated	NTSC, 75-ohm terminated	*

	MINI-T-NET	NET-164	NET-EC
DEVICE CONTROL (continued)			
Valid Video Detection	Yes	Yes	No
Fallback input	Optional to input 8 on loss	Optional to any input on loss	None
Vertical Interval Switching	No	Yes	*
Audio Connectors	RCA	RCA	*
Audio Channels	MONO (1)	STEREO (2)	*
Audio Level	Line Level unbalanced (-10dbV)	Line Level unbalanced (-10dbV)	*
Input DC offsets allowed	No	No	*
WARRANTY			
Warranty Parts/Labor	5 year	5 year	5 year

*NET-EC controls an external routing switcher of a maximum size of 32 inputs by 32 outputs. The NET-EC Controller is shipped with RS-232 interface cables for the LEIGHTRONIX PRO-16/PRO-8 Event Controllers and PESA and SIGMA routing switchers. Optionally, the NET-EC can control SIERRA video systems or KNOX routing switchers.

NET SERIES CONTROLLER FRONT PANEL

Illustration 1, MINI-T-NET Front Panel

Illustration 2, NET-164 Front Panel

Illustration 3, NET-EC Front Panel

KEYPAD

Each NET Series Controller has a four-button keypad which is used to display status information and enter password-protected TCP/IP addresses. If you hold down a key for more than one second, it begins to repeat. If you hold down the key for more than three seconds, it repeats in turbo mode.

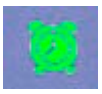
DISPLAY

Each NET Series Controller has a 24 character by 2 line vacuum fluorescent display (VFD) which gives status and password-protected TCP/IP address entry. A 24 character by 2 row display gives date, time, switch, and valid video status. The display and the four arrow keys allow configuration and control.

LEDS

The front panel of each NET Series Event Controller has four status light-emitting diodes (LEDs), which give at-a-glance feedback on the most important Event Controller conditions. See Table 1, NET Series Event Controller Front Panel LEDs, for a list of the status LEDs and their descriptions.

Table 1, NET Series Event Controller Front Panel LEDs

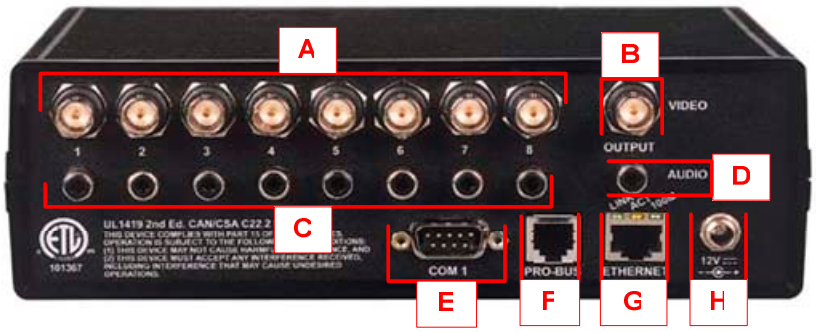
LED	DESCRIPTION
	NOTE: This only applies to the **MINI-T-NET** and the **NET-164**! **Video Lost:** the top LED flashes red when the valid video sensor detects video is lost and nothing is "on air." Check video connections and the condition of your sources or switch to another input. If a fallback time has been set, the MINI-T-NET will switch to Input 8 and the NET-164 will switch to the programmed fallback input for each output. It blinks once with a switch.
	NOTE: This only applies to the **NET-EC**! **Switch Com Lost:** the top LED flashes red when communication with the external switch is lost. It blinks once with a switch.
	**Schedule Active:** the second LED glows green when a schedule is active and being scanned for events to execute. If this LED is off, your schedule is suspended and no events will happen.
	Management: the third LED blinks yellow when a PC connection is made. This lets an operator know that someone is connected to the NET Series Controller over the network, and that configuration, control, and/or schedule updates are being performed.
	Check Log: the bottom LED glows red if Severity 1 or 2 events have been added to the log since it was last downloaded.

NET SERIES CONTROLLER REAR PANEL

MINI-T-NET REAR PANEL

The MINI-T-NET rear panel includes, from left to right, top to bottom (see Illustration 4, MINI-T-NET Rear Panel):

Illustration 4, MINI-T-NET Rear Panel



- A: 8 BNC video input connectors
- B: 1 BNC video output connector
- C: 8 RCA audio input connectors
- D: 1 RCA audio output connector
- E: “COM 1”: 9-pin male RS-232 connector reserved for use with any product that has its own software for controlling the MINI-T-NET
- F: RJ-11 PRO-BUS jack
- G: 10/100 megabytes per second (Mb/s) RJ-45 Ethernet jack
- H: 12VDC threaded power connector

NET-164 REAR PANEL

The NET-164 rear panel includes, from left to right, top to bottom (see Illustration 5, NET-164 Rear Panel):

Illustration 5, NET-164 Rear Panel

- A: 16 BNC video input connectors
- B: 4 BNC video output connectors
- C: 2 DVply connectors, 9-pin male, for TASCAM® DV-D6500 DVD players
- D: 32 RCA audio input connectors (16 stereo inputs)
- E: 8 RCA audio output connectors (4 stereo outputs)
- F: “COM 1”: 9-pin male RS-232 connector reserved for use with any product that has its own software for controlling the NET-164
- G: RJ-11 PRO-BUS jack
- H: 10/100 Mb/s RJ-45 Ethernet jack
- I: 12VDC threaded power connector

NET-EC REAR PANEL

The NET-EC rear panel includes, from left to right (see Illustration 6, NET-EC Rear Panel):

Illustration 6, NET-EC Rear Panel

- A: 2 DVply connectors, 9-pin male, for TASCAM® DV-D6500 DVD players
- B: “SWITCHER”: 9-pin male RS-232 connector for External Router Control
- C: RJ-11 PRO-BUS jack
- D: 10/100 Mb/s RJ-45 Ethernet jack
- E: 12VDC threaded power connector

CONTROLLER INSTALLATION & CONFIGURATION

PACKING LIST

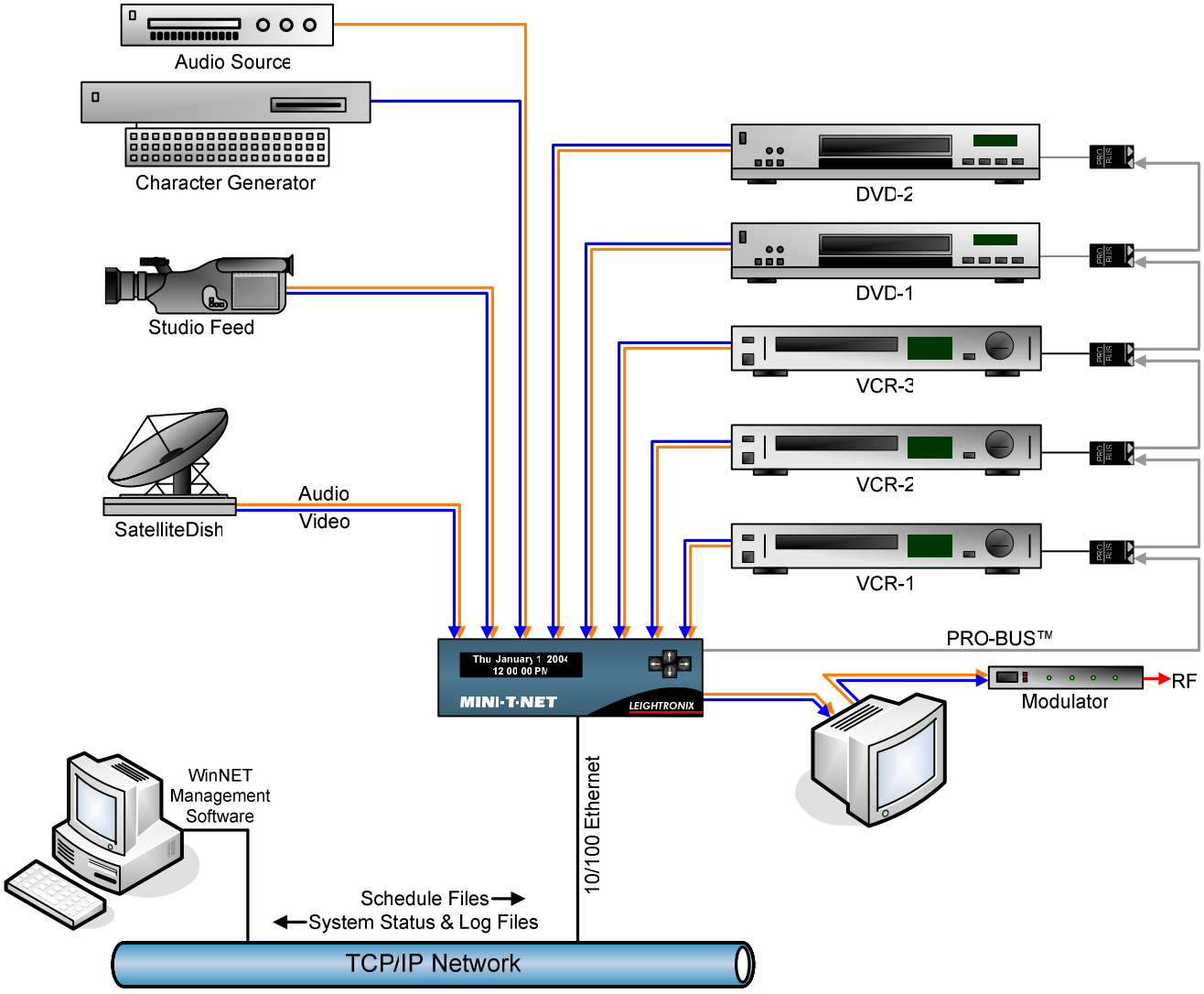
Ensure your NET Series Controller shipment box contains the following:

MINI-T-NET	NET-164	NET-EC
Power supply and cord	Power supply and cord	Power supply and cord
Manual	Manual	Manual
WinNET software installation disk	WinNET software installation disk	WinNET software installation disk
Warranty card	Warranty card	Warranty card
Straight Ethernet cable	Straight Ethernet cable	Ethernet cable
Crossover Ethernet cable	Crossover Ethernet cable	PRO-16/PRO-8 serial cable
		PESA serial cable
		Sigma serial cable

MINI-T-NET INSTALLATION OVERVIEW

Illustration 7 shows a sample connection scenario for the MINI-T-NET. Video and audio sources (VCRs, DVD players, satellite or studio feeds, character generator, etc.) are connected to the 8 inputs, while the MINI-T-NET output is connected to the desired destination, such as a modulator. VCRs and DVD players are controlled through the use of LEIGHTRONIX PRO-BUS interfaces, sold separately for many brands and models of professional video equipment. PRO-BUS interfaces loop together for easy setup and are available with infrared, mini-jack, and multi-pin connectors. PC configuration and control is done over a 10/100 Base-T Ethernet connection.

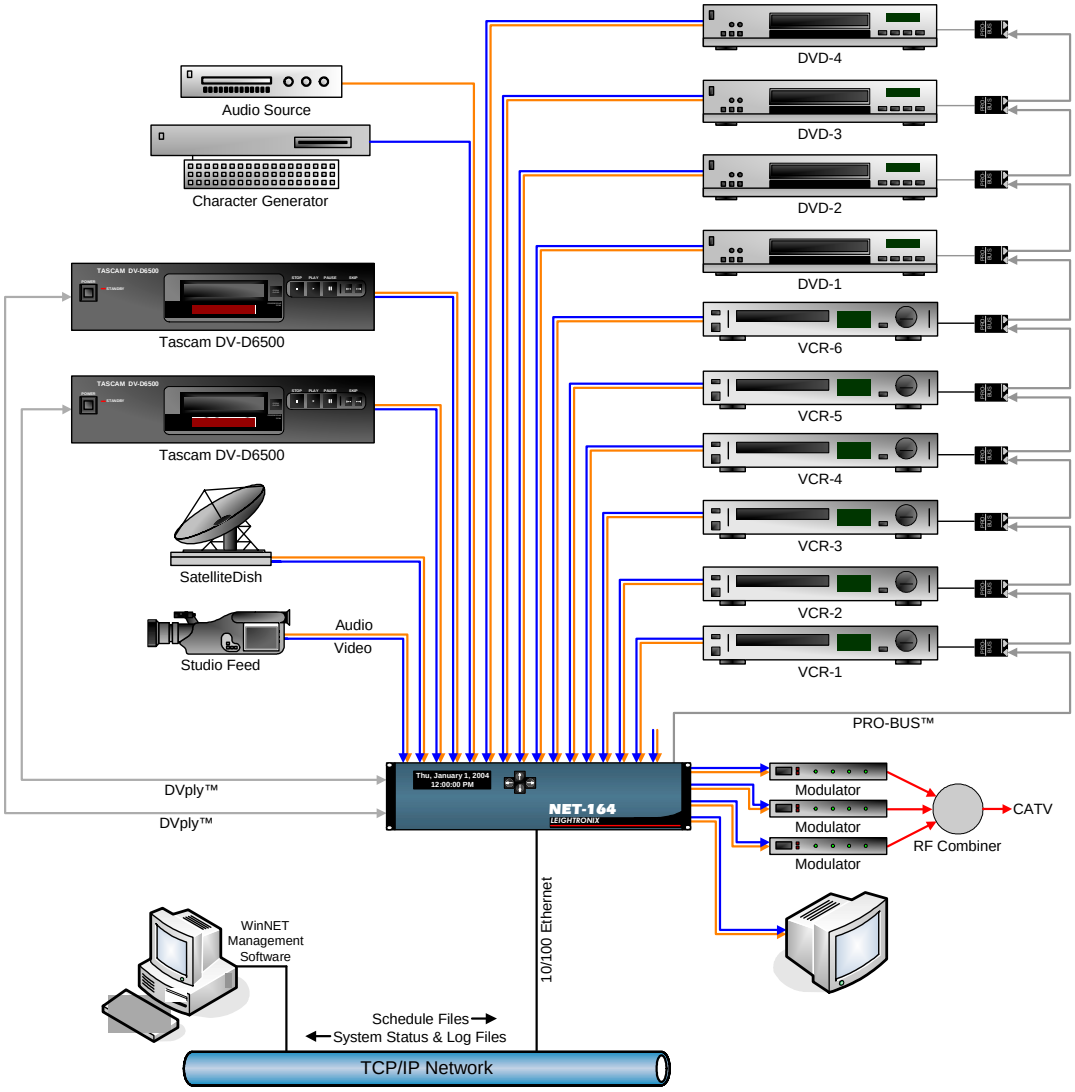
Illustration 7, MINI-T-NET Typical Playback System Diagram



NET-164 INSTALLATION OVERVIEW

Illustration 8 shows a sample connection scenario for the NET-164 similar to the setup shown in Illustration 7, MINI-T-NET Typical Playback System Diagram. The NET-164 has 16 video and audio input sources to connect your video equipment (VCRs, DVD players, satellite or studio feeds, character generator, etc.) and four outputs that are connected to the desired destination, such as modulators. VCRs and DVD players are controlled through the use of LEIGHTRONIX PRO-BUS interfaces, sold separately for many brands and models of professional video equipment. The PRO-BUS interfaces loop together for easy setup and are available with infrared, mini-jack, and multi-pin connectors. The NET-164 has two DVply connectors to control TASCAM® DV-D6500 DVD players, which allows cueing of DVDs by Title:Chapter. PC configuration and control is done over a 10/100 Base-T Ethernet connection.

Illustration 8, NET-164 Typical Playback System Diagram

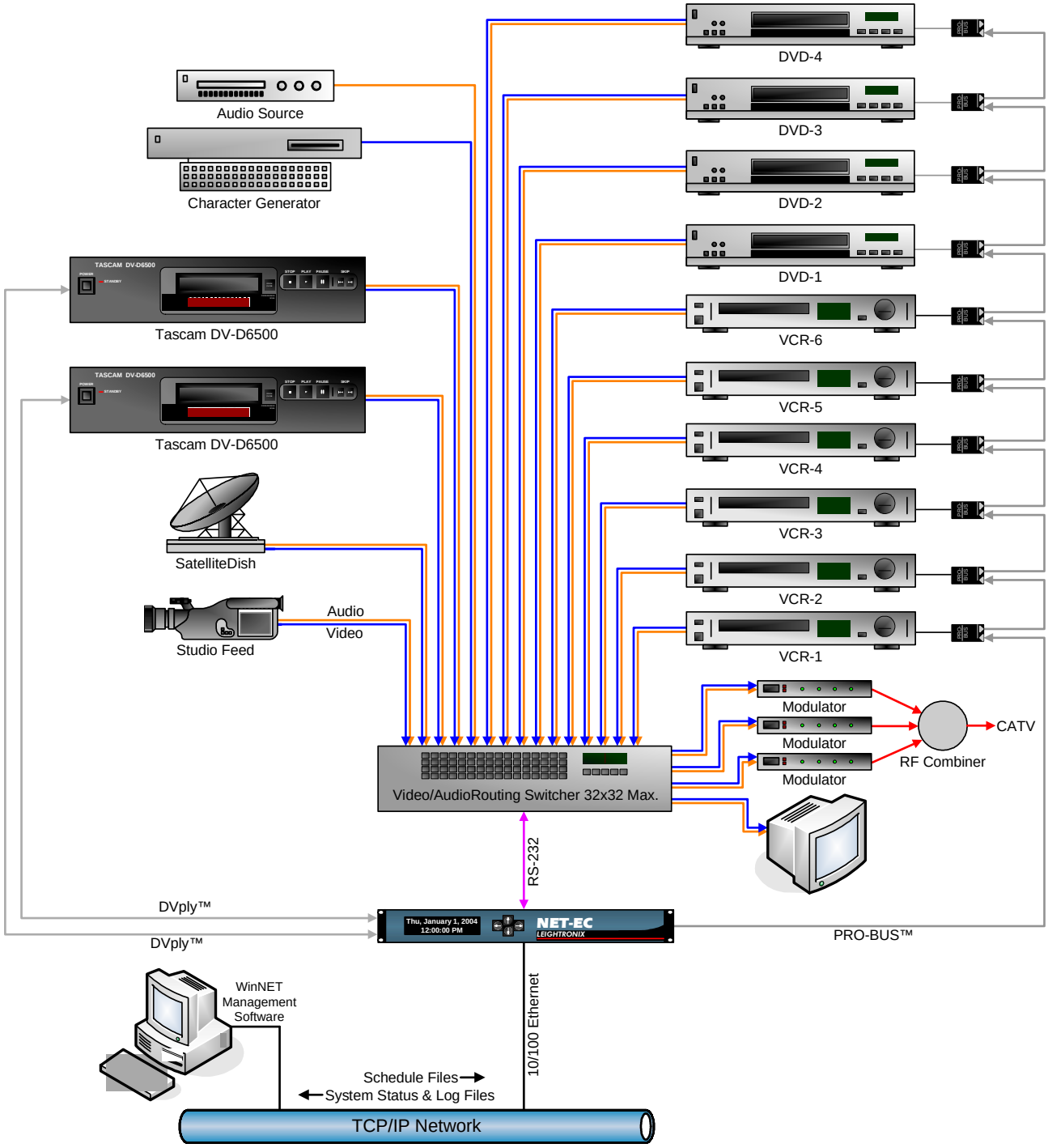


NET-EC INSTALLATION OVERVIEW

Illustration 9 shows a sample NET-EC connection scenario similar to those setups shown in Illustration 7 and Illustration 8. The NET-EC controls a video system but requires an external routing switcher with a maximum of 32 inputs by 32 outputs. The NET-EC supports several switcher types, including the LEIGHTRONIX PRO-16/PRO-8 Event Controllers, PESA routers, and SIGMA routers. Optionally the NET-EC may be ordered with the control option for the SIERRA VIDEO SYSTEMS switchers or the KNOX RS and ProSwitch switchers (contact LEIGHTRONIX Sales Department for more information on these options).

Video and audio sources (VCRs, DVD players, satellite or studio feeds, character generator, etc.) are connected to the external switcher inputs, while the outputs are connected to the desired destinations, such as modulators. VCRs and DVD players are controlled through the use of LEIGHTRONIX PRO-BUS interfaces, sold separately for many brands and models of professional video equipment. The PRO-BUS interfaces loop together for easy setup and are available with infrared, mini-jack, and multi-pin connectors. The NET-EC has two DVply connectors to control TASCAM® DV-D6500 DVD players, which allows cueing of DVDs by Title:Chapter. PC configuration and control is done over a 10/100 Base-T Ethernet connection.

Illustration 9, NET-EC Typical Playback System Diagram



CONNECTING SIGNAL WIRING

Throughout the following instructions, refer to Illustration 4, MINI-T-NET Rear Panel; Illustration 5, NET-164 Rear Panel; Illustration 6, NET-EC Rear Panel; Illustration 7, MINI-T-NET Typical Playback System Diagram; Illustration 8, NET-164 Typical Playback System Diagram; and Illustration 9, NET-EC Typical Playback System Diagram.

1. **NET-EC only:** the NET-EC controls external routers and comes standard with control cables for the LEIGHTRONIX PRO-16/PRO-8 Event Controllers (which can act as routing switchers) and PESA and SIGMA routing switchers. The NET-EC will also control SIERRA VIDEO SYSTEM and KNOX routing switchers (contact LEIGHTRONIX or your local dealer for more information). Connect the NET-EC "SWITCHER" connector to the serial input on the respective routing switcher.

2. **NET-164 and NET-EC only:** if using, connect digital DVD players with title:chapter access to the DVply connectors on Event Controller with included cables (contact LEIGHTRONIX for more information on applicable DVD players).

3. Route the video/audio from your sources that require switches (VCRs, DVD players, studio/satellite feeds, character generator, etc.) to the switch input connectors on the MINI-T-NET/NET-164 or switcher connected to the NET-EC.

LEIGHTRONIX recommends starting with Input 1 and successively connecting your devices to the Event Controller (MINI-T-NET and NET-164) or switcher (NET-EC) inputs to ensure your switcher input numbers correspond to the PRO-BUS interface numbers. This will make it easier to determine whether each of your devices is communicating with the appropriate PRO-BUS interface.

   - **MINI-T-NET and NET-164**: Input 8 on the MINI-T-NET is the designated fallback input, while the NET-164 has configurable fallback inputs. If valid video is lost on an output and a fallback time has been set, the MINI-T-NET and NET-164 will switch the fallback input to that output when video has been absent for the entered time. For this reason, place a continuous source of video such as a character generator, bulletin board, or satellite feed on your fallback input(s) to act as the fallback in case of source equipment malfunction.
   - **NET-EC**: connect your video/audio as outlined in your routing switcher manual.

4. Connect the output connector(s) on the MINI-T-NET/NET-164 or NET-EC-controlled switcher to the desired destination(s) (such as a modulator).

5. Attach PRO-BUS interfaces in a daisy chain from the PRO-BUS connector on the Event Controller. See "Appendix B: PRO-BUS Interface Connections," on page 142 for more details.

6. Screw the included power supply into the rear of the NET Series Controller, and then plug it into an AC power source.

CAUTION	LEIGHTRONIX strongly recommends the use of a surge protector/ uninterruptible power supply (UPS), as damage from power loss or spikes is not covered under warranty.

The Event Controller will automatically boot up and display the following messages:

a. Initial boot up screen: gives the bootware version, memory size, and memory check status (see Illustration 10, NET Series Bootware Screen).

Illustration 10, NET Series Bootware Screen

```
LEIGHTRONIX, INC.
Boot 1.0.8  16MB ok
```

b. Boot up progress screens: give the NET Series Controller's boot progress (see Illustration 11, NET Series Controller Boot Progress Screens). During initialization, any saved NET Series Controller settings and active schedule are implemented.

Illustration 11, NET Series Controller Boot Progress Screens

```
LEIGHTRONIX, INC.
Decompressing firmware..
```

```
LEIGHTRONIX, INC.
Executing firmware..
```

```
Initializing...
```

7. Configure Event Controller for remote control as follows:

a. If you will be using the provided LEIGHTRONIX WinNET software to control your Event Controller, proceed to "Configuring Ethernet Network Host Management" on page 26.

b. **For MINI-T-NET and NET-164 only:** if using with any product that has its own software for controlling the MINI-T-NET and/or NET-164, connect your Event Controller's "COM 1" port to the system via a serial cable.

CONFIGURING ETHERNET NETWORK HOST MANAGEMENT

NOTE: Your PC must have a Windows 98/ME/NT/2000/XP Operating System in order to run WinNET software.

The NET Series Controller is designed to interact with a host PC through a 10/100BASE-T Ethernet TCP/IP Network. Two of the most common connection scenarios are outlined below.

ACCESSING EVENT CONTROLLER FROM BUILDING/INTERNET TCP/IP NETWORK

1. Obtain the following from your technical support personnel or network administrator and enter into the front panel of your Event Controller (see "Configuring Front Panel Settings," on page 28):

- IP address

  NOTE: If using a Dynamic Host Configuration Protocol (DHCP) server, enter the IP address 255.255.255.255. Ensure your DHCP server is configured to always assign your Controller the same IP address.

- Subnet mask
- Gateway address

2. Using a straight-through RJ-45 Ethernet cable, connect the Event Controller's Ethernet jack to a 10/100BASE-T hub or switch on the TCP/IP network.

3. Ensure the PC from which you wish to control your Event Controller has been configured and attached to the TCP/IP network.

4. Ensure your Controller and PC have been properly configured for Ethernet network access (see "Confirming Ethernet Network Configuration," on page 27).

ACCESSING EVENT CONTROLLER DIRECTLY FROM A PC VIA ETHERNET

1. If necessary, install and configure a 10/100BASE-T Ethernet Network Interface Card (NIC) on the PC. Refer to the NIC documentation and technical support for help in getting the NIC operational.
2. If your PC has a Windows 98 Operating System, set up TCP/IP networking on your PC (refer to "Appendix A: TCP/IP Setup for PC with Windows 98 OS," on page 141 for more details).
3. Obtain your PC's TCP/IP networking IP address and subnet mask as follows:
   - **a.** Click on the Windows "Start" menu.
   - **b.** Open the "Run" dialog box and type in one of the following commands and then click "OK" or press "Enter" on your keyboard to open the cmd.exe window:
     - If you have Windows 2000 or XP, type "cmd" into the data entry field.
     - If you have any version of Windows **except** 2000 or XP, type "command" into the data entry field.
   - **c.** Type in "IPconfig" at the C:\ prompt of the cmd.exe window to reveal your PC's IP and subnet mask address.
4. Enter the following IP and subnet mask addresses into the front panel of your NET Series Controller (see "Configuring Front Panel Settings," on page 28):
   - IP address: one number above your PC's IP address (for example, if your PC's IP address is 10.255.9.15, set your Controller's IP address to 10.255.9.16)
   - Subnet mask: your PC's subnet mask address
5. Using a cross-over RJ-45 Ethernet cable (not a standard cable), connect the Event Controller to the PC's network interface card (NIC).
6. Ensure your Controller and PC have been properly configured for Ethernet network access (see "Confirming Ethernet Network Configuration," on page 27).

CONFIRMING ETHERNET NETWORK CONFIGURATION

Once your Controller and PC have been configured for Ethernet access, ensure the Ethernet LEDs on the rear panel of your Event Controller are lit (see Table 2, Ethernet LED Indicators and Descriptions).

Table 2, Ethernet LED Indicators and Descriptions

LED LABEL	STATE	DESCRIPTION
LNK	ON	Ethernet LINK established.
	OFF	Ethernet LINK not established.
ACT	ON	Event Controller is transmitting on the network.
	OFF	Event Controller is not transmitting on the network.
100M	ON	Ethernet connection speed is 100Mb/s.
	OFF	Ethernet connection speed is 10Mb/s.

CONFIGURING FRONT PANEL SETTINGS

NOTE: All crucial configuration information, such as user information, schedule information, time, and network information, are stored in battery backed or flash memory. Thus the NET Series Controller configuration is protected in the instance of an extended power failure.

ENTERING PASSWORD

1. Press the right arrow key from any one of the status screens to display the password entry screen (see Illustration 12, NET Series Password Entry Screen).

Illustration 12, NET Series Password Entry Screen

```
Use arrow keys to enter
Password:*****
```

2. Press the five-key password.

NOTE: The factory-default password is five right arrow keys. To change password, see “Changing Front Panel Password,” on page 53.

3. If the password is correctly entered, the NET Series Controller’s main menu will be displayed (see Illustration 13, NET Series Main Menu Screen). If the password is incorrectly entered, the display returns to the status screens.

Illustration 13, NET Series Main Menu Screen

```
MAIN MENU          Use ↑/↓
Setup                    →
```

ACCESSING THE CONFIGURATION SUBMENUS

Use the "Setup" and "TCP/IP Configuration" submenus to configure the following settings for your NET Series Controller:

NOTE: The clock, time zone, fallback configuration, and switcher configuration may be set from the Controller's front panel or WinNET.

"Setup" Submenu	"TCP/IP Configuration" Submenu
• Clock • Time zone • Fallback configuration • Switcher configuration • Com 1 Baud Rate	• IP Address • Subnet Mask • Gateway Address • DNS #1 Address • DNS #2 Address

Both of these submenus are available from the main menu and may be accessed as follows:

1. Press the up or down arrows to display the main menu's submenus. When the desired configuration submenu is displayed, press the right arrow to select the submenu item.

NOTE: Pressing the left arrow will take you back to the main status screens.

2. Press the up and down arrows to view the selected configuration settings. Pressing the right arrow selects the desired configuration setting and allows changes to the selected setting.

SETTING CLOCK

Use to set the time and date of the battery-backed clock in the NET Series Controller (see Table 3, Configuring Event Controller Clock from Front Panel).

NOTE: The Controller clock may also be set from WinNET (see "Configuring Site Information and Clock, Updating Firmware, and Rebooting Controller," on page 54).

Table 3, Configuring Event Controller Clock from Front Panel

CLOCK SETUP STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Setup." 2. Press "→" to select "Setup."	MAIN MENU Use ↑/↓ Setup →

CLOCK SETUP STEPS	CORRESPONDING SCREEN DISPLAYS
3. Press "↑" or "↓" to proceed to "Set Clock." 4. Press "→" to select "Set Clock."	SETUP MENU Use ↑/↓ Set Clock →
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	Set clock to Thursday 2004 Feb 19 9:20:26 AM
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to set clock. 2004 Feb 19 9:20:26 AM

SETTING TIME ZONE

Use to set the NET Series Controller's time zone to any of the North American time zones (see Table 4, Configuring Event Controller's Time Zone from Front Panel).

NOTE: The Controller's time zone may also be set from WinNET (see "Configuring Site Information and Clock, Updating Firmware, and Rebooting Controller," on page 54).

Table 4, Configuring Event Controller's Time Zone from Front Panel

TIME ZONE SETUP STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Setup." 2. Press "→" to select "Setup."	MAIN MENU Use ↑/↓ Setup →
3. Press "↑" or "↓" to proceed to "Set Time Zone." 4. Press "→" to select "Set Time Zone."	SETUP MENU Use ↑/↓ Set Time Zone →
5. Press "↑↓" to change time zone. 6. Press "→" to enter next screen.	Set time zone Eastern (EST5EDT)
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to set time zone. Eastern (EST5EDT)

CONFIGURING FALLBACK SETTING

Use to set the output valid-video detection fallback input for the **MINI-T-NET** and the **NET-164** (see Table 5, Setting Fallback Settings from Front Panel). If an output loses video, it will be switched to a user-defined input that can be relied upon to have video. The user defines the number of seconds of invalid video before the switch is made.

NOTE: The fallback configuration may also be set from WinNET (see "Setting Event Controller Properties," on page 67).

Table 5, Setting Fallback Settings from Front Panel

FALLBACK CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Setup." 2. Press "→" to select "Setup."	MAIN MENU Use ↑/↓ Setup →
3. Press "↑" or "↓" to proceed to "Fallback Configuration." 4. Press "→" to select "Fallback Configuration."	SETUP MENU Use ↑/↓ Fallback Configuration →
5. Press "↑↓" to change fallback configuration. 6. Press "→" to enter next screen.	Output 1 fallback to Input 8 after -- seconds **NOTES:** • The **MINI-T-NET** doesn't have the output field as it is a single channel switcher. • The "- -" in the seconds field means that when a loss of valid-video is detected no switch will occur. A range of 1–99 seconds may be entered in the seconds field to define the delay time before the fallback switch will occur.
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to save loss of video fallback.

CONFIGURING SWITCHER

NET-EC only: use to set the external switcher type and the number of inputs, outputs, and level that will be switched (see Table 6, Setting Switcher Type from Front Panel).

NOTES:

- The **NET-EC** supports router sizes up to 32 inputs by 32 outputs by 8 levels. Check your routing switcher manual for the number of levels that are present in your router.
- The switcher configuration may also be set from WinNET (see "Setting Event Controller Properties," on page 67).

Table 6, Setting Switcher Type from Front Panel

SWITCHER CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Setup." 2. Press "→" to select "Setup."	MAIN MENU Use ↑/↓ Setup →
3. Press "↑" or "↓" to proceed to "Switcher Configuration." 4. Press "→" to select "Switcher Configuration."	SETUP MENU Use ↑/↓ Switcher Configuration →
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	SW:PESA In:16 Out:16 Lvls:3
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to save Switcher configuration.

SETTING COM 1 BAUD RATE FOR MINI-T-NET AND NET-164

NOTE: The "COM 1" port is reserved for use with any product that has its own software for controlling the **MINI-T-NET** or **NET-164**.

Use to set the **MINI-T-NET** and the **NET-164** Controller's serial port baud rate within a range of 115200 to 1200 baud. The baud rate must be programmed from the Event Controller's front panel (see Table 7, Configuring Serial Port Baud Rate from Front Panel).

Table 7, Configuring Serial Port Baud Rate from Front Panel

SERIAL COMMUNICATIONS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Setup." 2. Press "→" to select "Setup."	MAIN MENU Use ↑/↓ Setup →
3. Press "↑" or "↓" to proceed to "Set COM 1 Baud Rate." 4. Press "→" to select "Set COM 1 Baud Rate."	SETUP MENU Use ↑/↓ Set COM 1 Baud Rate →
5. Press "↑↓" to change com 1 baud rate. 6. Press "→" to enter next screen.	Set COM 1 Baud Rate 115200 baud
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to set baud rate 115200 baud

EDITING IP ADDRESS

Obtain IP address from your technical support personnel or network administrator. See Table 8, Editing IP Address from Front Panel, for editing instructions.

Table 8, Editing IP Address from Front Panel

IP ADDRESS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "TCP/IP Configuration." 2. Press "→" to select "TCP/IP Configuration."	MAIN MENU Use ↑/↓ TCP/IP Configuration →
3. Press "↑" or "↓" to proceed to "Edit IP Address." 4. Press "→" to select "Edit IP Address."	IP CONFIG MENU Use ↑/↓ Edit IP Address →

IP ADDRESS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	Enter new IP address 0. 0. 0. 0
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to confirm IP address.
NOTE: Unit must be rebooted to apply any TCP/IP address changes (simultaneously press "↓" and "→" and then press "↑"). Refer to "Rebooting Event Controller," on page 129.	

EDITING SUBNET MASK

Obtain subnet mask address from your support personnel or network administrator. See Table 9, Editing Subnet Mask from Front Panel, for editing instructions.

Table 9, Editing Subnet Mask from Front Panel

SUBNET MASK CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "TCP/IP Configuration." 2. Press "→" to select "TCP/IP Configuration."	MAIN MENU Use ↑/↓ TCP/IP Configuration →
3. Press "↑" or "↓" to proceed to "Edit Subnet Mask." 4. Press "→" to select "Edit Subnet Mask."	IP CONFIG MENU Use ↑/↓ Edit Subnet Mask →
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	Enter new Subnet Mask 255.255.255. 0 →
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to confirm Subnet Mask.
NOTE: Unit must be rebooted to apply any TCP/IP address changes (simultaneously press "↓" and "→" and then press "↑"). Refer to "Rebooting Event Controller," on page 129.	

EDITING GATEWAY ADDRESS

Obtain gateway address from your technical support personnel or network administrator. See Table 10, Editing Gateway Address from Front Panel, for editing instructions.

Table 10, Editing Gateway Address from Front Panel

GATEWAY ADDRESS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "TCP/IP Configuration." 2. Press "→" to select "TCP/IP Configuration."	MAIN MENU Use ↑/↓ TCP/IP Configuration →
3. Press "↑" or "↓" to proceed to "Edit Gateway Address." 4. Press "→" to select "Edit Gateway Address."	IP CONFIG MENU Use ↑/↓ Edit Gateway Address →
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	Enter new Gateway 0. 0. 0. 0 (none)→
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to confirm Gateway address.
NOTE: Unit must be rebooted to apply any TCP/IP address changes (simultaneously press "↓" and "→" and then press "↑"). Refer to "Rebooting Event Controller," on page 129.	

EDITING DNS ADDRESSES

Obtain domain name server (DNS) addresses from your technical support personnel or network administrator. See Table 11, Editing DNS Addresses from Front Panel, for editing instructions.

The DNS address is used if the "Auto Log Email" feature is implemented and a simple mail transfer protocol (SMTP) mail server is given by name, not IP address. The DNS Server can be queried to resolve the name into an IP address. Enter the IP address(es) of the DNS Server(s) available to your network in the DNS #1 and #2 entry fields.

Table 11, Editing DNS Addresses from Front Panel

DNS ADDRESS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "TCP/IP Configuration." 2. Press "→" to select "TCP/IP Configuration."	MAIN MENU Use ↑/↓ TCP/IP Configuration →
3. Press "↑" or "↓" to proceed to "Edit DNS #1 Address." 4. Press "→" to select "Edit DNS #1 Address."	IP CONFIG MENU Use ↑/↓ Edit DNS #1 Address →
5. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 6. Press "→" to enter next screen.	Enter new DNS #1 address 0. 0. 0. 0 (none)
7. Either press "→" again to save your changes or "←" to abort changes.	Press → to confirm DNS #1 static address.
8. Press "↑" to proceed to "Edit DNS #2 Address."	IP CONFIG MENU Use ↑/↓ Edit DNS #1 Address →
9. Press "→" to select "Edit DNS #2 Address."	IP CONFIG MENU Use ↑/↓ Edit DNS #2 Address →
10. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 11. Press "→" to enter next screen.	Enter new DNS #2 address 0. 0. 0. 0 (none)

DNS ADDRESS CONFIGURATION STEPS	CORRESPONDING SCREEN DISPLAYS
12. Either press "→" again to save your changes or "←" to abort changes.	Press → to confirm DNS #2 static address.
NOTE: Unit must be rebooted to apply any TCP/IP address changes (simultaneously press "↓" and "→" and then press "↑"). Refer to "Rebooting Event Controller," on page 129.	

SOFTWARE INSTALLATION AND CONFIGURATION

WinNET software is included on a CD-ROM with every NET Series Controller, and is used to create the schedules that will be run on the NET Series Controller. This software is only needed for management and does not have to be continuously running on your PC for standard operation.

WINNET FIRST TIME INSTALL CHECKLIST

The following ordered checklist is a guide to using WinNET software for the first time and properly setting up your system.

✓	TASK
	1. Load WinNET software on the PC (see “Load Software,” on page 41).
	2. Open WinNET (see “Opening and Logging into WinNET,” on page 79).
	3. Add your Controller’s IP address to the “Locations” database (see “Adding Controller(s) to Locations Database,” on page 43).
	4. Load Controller image by clicking on icon representing your Event Controller type in the “Resources” window.
	5. Log into WinNET (see “Opening and Logging into WinNET,” on page 79).
	6. Confirm that a valid communication link exists between the PC and Event Controller as follows: **a.** Open the “Control Panel” from the “Tool” menu or main toolbar icon. **b.** On the control panel window, confirm that the Controller clock is counting and the status bar says connected. If this is not the case, check your IP address and network connections and try again.

✓	TASK
	7. Perform the following WinNET setup tasks: • Set program settings (see “Setting WinNET Viewing and Communication Options,” on page 63). • Set time zone and time (see “Configuring Site Information and Clock, Updating Firmware, and Rebooting Controller,” on page 54). **NOTE:** The time zone and time may also be set from the Event Controller’s front panel (see “Setting Clock” on page 29 and “Setting Time Zone,” on page 30). • Read “Loading Event Controller Images,” on page 47, to familiarize yourself with images and image files. Open the sample image for your Event Controller type to see examples of image contents. • Enter the Event Controller properties (see “Setting Event Controller Properties,” on page 67). **NOTE:** The fallback configuration and NET-EC’s external switcher settings may also be set from the Event Controller’s front panel (see “Configuring Fallback Setting” on page 31 and “Configuring Switcher” on page 32). • Enter each device’s properties (see “Setting Device Properties,” on page 72).
	8. Check PRO-BUS interface, DVply, and switcher wiring by sending a command to each device from the control panel as follows: **a.** Select a device controlled by a PRO-BUS interface or DVply in the left-hand “Device” column on the control panel window. **b.** Send a command to the selected device from the “Device control” section of the control panel and ensure the device itself responds accordingly (see “Performing Unscheduled Device and Switch Actions,” on page 117). **NOTE:** To check video quality, switch your device to an output connected to a monitor.
	9. Pre-program any inputs not controlled by PRO-BUS or DVply under the “Switch” tab (see “Setting Switch Properties,” on page 74).
	10. Pre-program any media resources under the “Library” tab (see “Setting Switch Properties,” on page 74).
	11. Begin creating a playlist of events (see “Software Operation,” on page 79).

INSTALLING WINNET

LOAD SOFTWARE

NOTE: WinNET must be installed on a PC with a 98/ME/NT/2000/XP operating system.

1. Place the LEIGHTRONIX PRODUCT RESOURCE DISC in your CD-ROM drive. The HTML page shown in Illustration 14 should automatically load.

Illustration 14, LEIGHTRONIX HTML Page

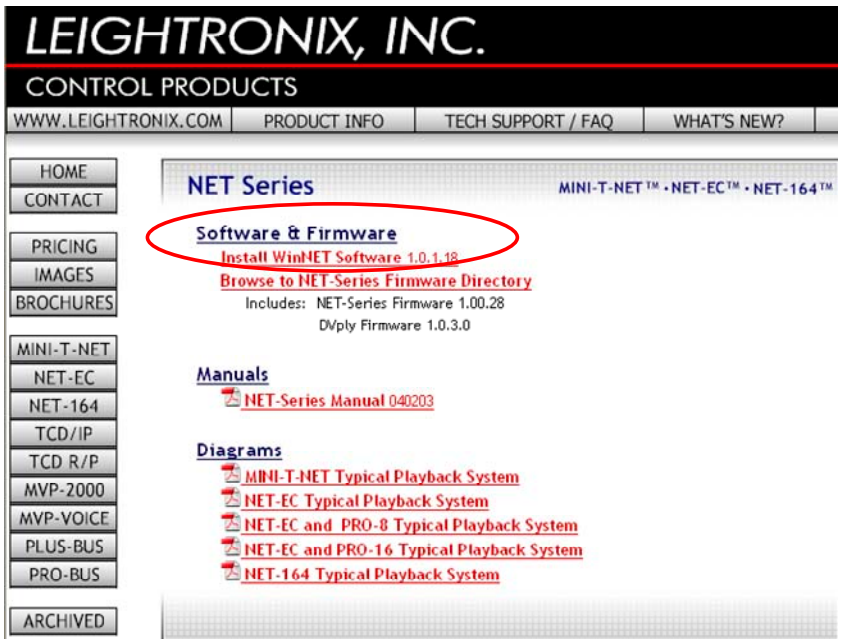
If the HTML page does not load, perform the following steps:

a. Open the Windows “My Computer” folder.

b. Double click your CD-ROM drive.

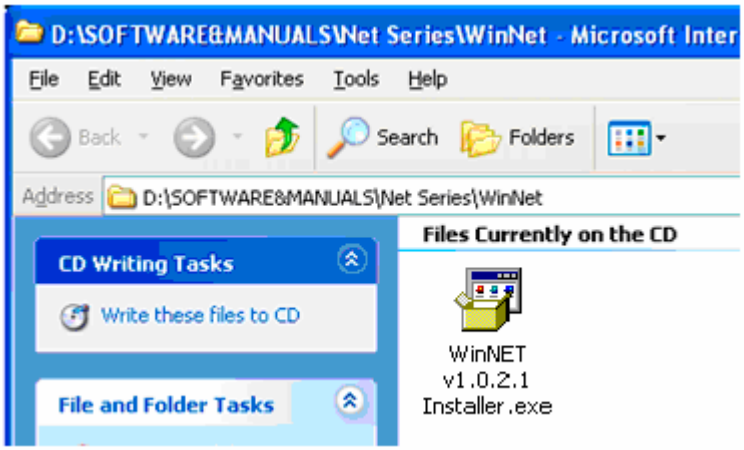
2. From the LEIGHTRONIX HTML page shown in Illustration 14, click the button that matches your Event Controller. This will load a new page (see Illustration 15, WinNET Software HTML Page) with content specifically for your system.

Illustration 15, WinNET Software HTML Page



3. From the WinNET software HTML page shown in Illustration 15, click on the "Install WinNET Software" link. A new window containing the executable file will open (see Illustration 16, WinNET File Icon).

Illustration 16, WinNET File Icon



4. Double click on the file "WinNET v* Installer.EXE" to start the installer (see Illustration 16, WinNET File Icon).

5. Choose "YES" to continue installing the software.

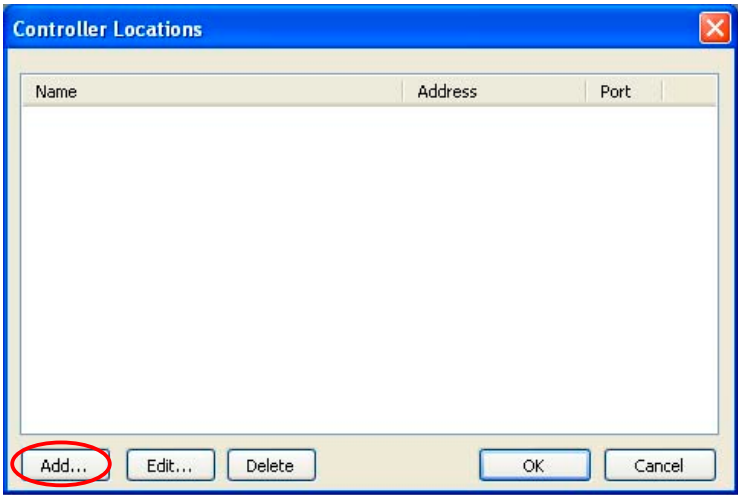
6. Setup will then prompt you for a program folder. The default is “Leightronix, Inc.,” but you may change it to anything you desire.
7. Once you have chosen a file path, setup installs the software and creates icons. It will prompt you again when it is finished.
8. Click “Finish” to close the installer and return to Windows.

ADDING CONTROLLER(S) TO LOCATIONS DATABASE

Create an IP address listing of your NET Series Event Controllers as follows:

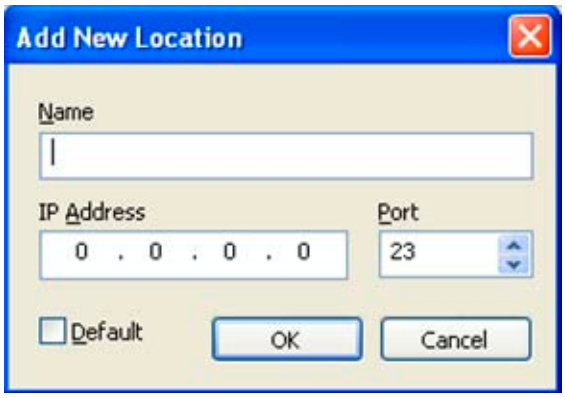
1. Click “Locations” in the “Tools” menu or the icon on the main toolbar to open the “Controller Locations” window shown in Illustration 17.

Illustration 17, “Controller Locations” Window



2. Click “Add” on the “Controller Locations” window (see Illustration 17, “Controller Locations” Window) to open the “Add New Location” window shown in Illustration 18. Complete the following fields:

Illustration 18, “Add New Location” Window



- “Name”: type a name for your Event Controller.

- "IP Address": enter the IP Address displayed on the Event Controller's front panel. This address can be viewed from the front panel by pressing the up or down arrows until the IP Address is shown.

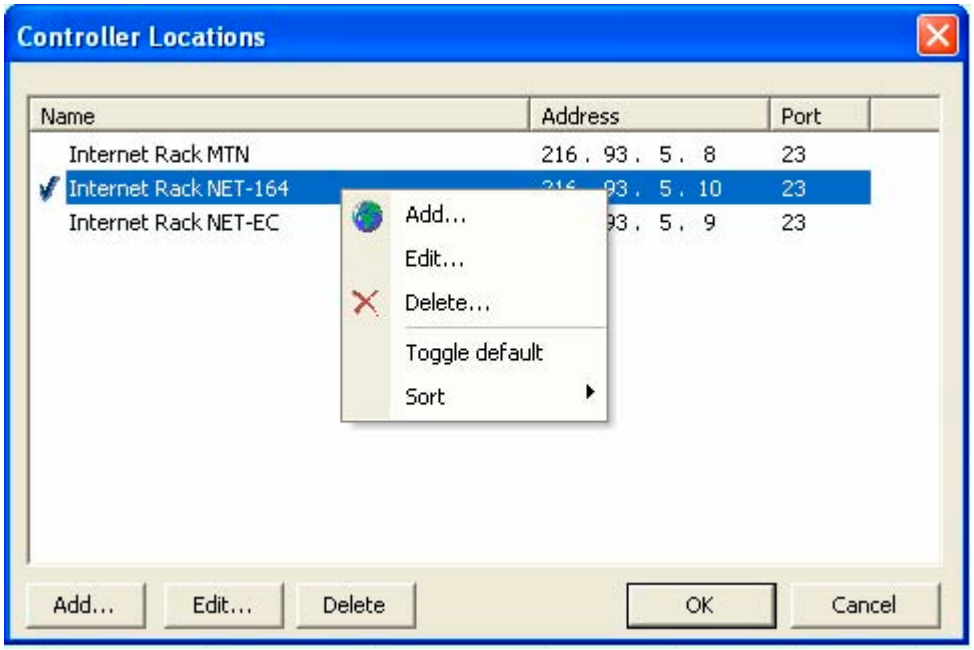
  NOTE: Do not enter 255.255.255.255 in the "IP Address" field. This address means your Event Controller is configured for dynamic host configuration protocol (DHCP). Use the Event Controller's front panel to view the address that was assigned to your Controller by your company network's DHCP server.

- "Port": this field is intended for Advanced Configuration Only! For all typical installations, the value should be left at 23. An incorrect port number will cause WinNET to fail to connect to your Controller. If you feel an alternate port number is needed for your installation, contact LEIGHTRONIX for details on setting your Controller to a different port number.

- "Default": check if you wish to make the Event Controller the one to which WinNET will connect when it performs remote operations. Only one Controller can be the default, so selecting it for one Controller removes default status from another.

3. Click "OK" to enter your Event Controller in the database or "Cancel" to abort entry. Your Controller(s) should now appear in the "Locations" database (see Illustration 19, "Controller Locations" Window). The window's columns show the name, IP address, and port of each Event Controller along with a check to indicate the default Event Controller.

Illustration 19, "Controller Locations" Window



4. If applicable, repeat steps 2–3 for each additional NET Series Controller in your system.

5. Click “OK” to close the “Controller Locations” window.

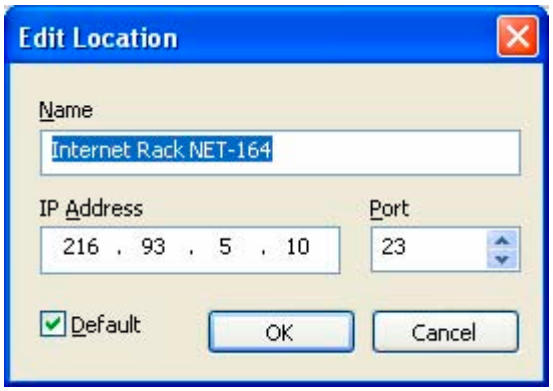
CONFIGURING WINNET

EDITING/DELETING CONTROLLER LOCATIONS

1. To configure Controller locations, click “Locations” under the “Tools” menu (see Illustration 17, “Controller Locations” Window) and perform the following:

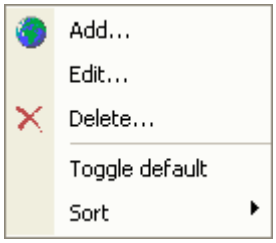
- Clicking the “Edit” button opens the data entry box shown in Illustration 20, which allows you to change the Controller’s IP address, name, port, and default status.

Illustration 20, “Edit Location” Window



- Clicking “Delete” prompts you for confirmation, then deletes the Controller.
- Right clicking on the Event Controller opens the context menu shown in Illustration 21, Controller Location Menu. From here you can add, edit, delete, set (or un-set) default status, or sort the list of Event Controllers based on name or IP address.

Illustration 21, Controller Location Menu



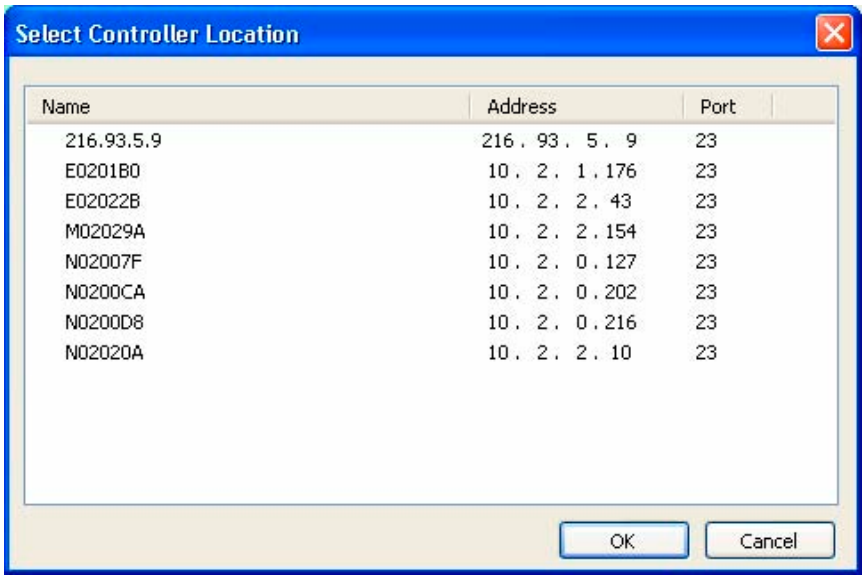
2. Click “OK” at the bottom of the “Controller Locations” window to save your changes to the database, or click “Cancel” to discard your changes.

SETTING DEFAULT EVENT CONTROLLER

The default Event Controller is used by WinNET for all remote connections, such as sending and receiving images, control panel, Controller operations, and user account configuration. You may choose to select a default controller or select a controller each time a remote connection is performed.

- Select a default Controller through one of the following options:
  - Check the "Default" box in the "Add New Location" (see Illustration 18) or "Edit Location" (see Illustration 20) window.
  - Right click in the "Controller Locations" window (see Illustration 17) and select "Toggle default."
- If you choose not to select a default Event Controller, the "Select Controller Location" window shown in Illustration 22 appears every time a remote operation is attempted.

Illustration 22, "Select Controller Location" Window



Select the Event Controller which you would like to perform the remote operation through one of the following options:

- Highlight the desired Event Controller in the locations database list and click "OK" to make the change or "Cancel" to abort the operation.
- Double click an Event Controller to choose it and begin the operation.

LOADING EVENT CONTROLLER IMAGES

NOTE: The “Control Panel” window can not be accessed until an Event Controller image is loaded in WinNET.

An image contains the Controller type and playlist along with the control, device, library, and switch properties. If all three Controllers are shown in the “Control” tab of the “Resources” window, no image has been loaded. Also, the playlist will not have labeled tabs on its left side.

If an unsaved image is open in WinNET when another image is loaded, a box appears asking if you want to discard the changes in the unsaved image. Clicking “No” aborts the load, allowing you to save. Clicking “Yes” loads the new image and overwrites the unsaved image.

The following steps describe the four ways to load an image into WinNET:

- **Create a new image.**
  A new image does not contain any control, device, library, or switch properties. Also, a new image’s playlist does not contain any events.

  1. If an image is already loaded, unload it (see “Unloading Event Controller Images,” on page 50).

  1. Click your Event Controller icon in the “Control” tab of the “Resources” window. The selected Event Controller will then become the only icon in the window, and property fields will appear in the “Properties” window. See “

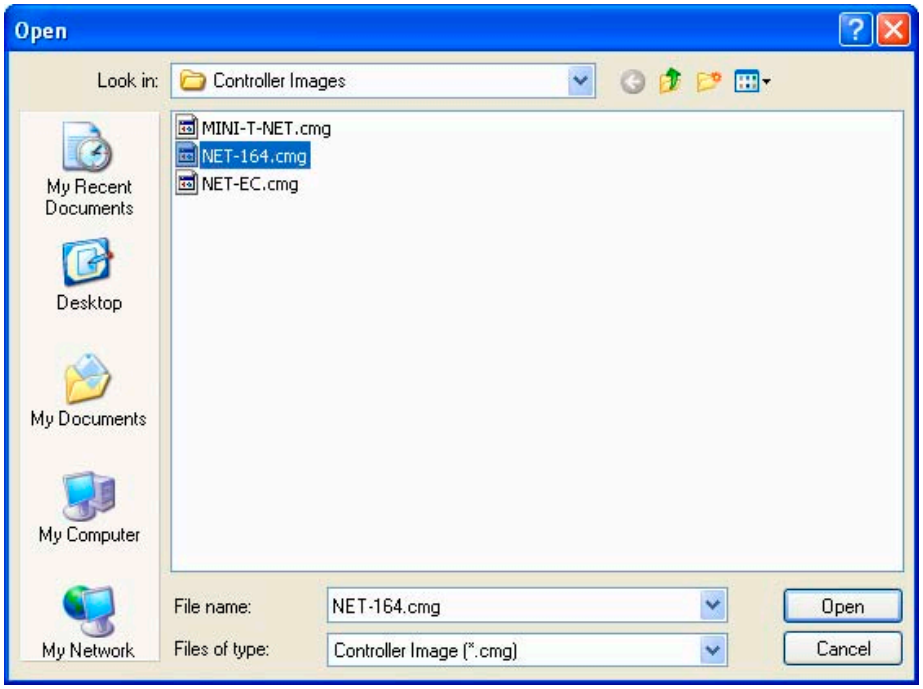
2. Setting Event Controller Properties," beginning on page 67, for a description of each NET Series Controller's properties.

- **Open an image file.**

  An image file contains a Controller type and any data that was entered and saved in the playlist and control, device, library, and switch properties windows.

  1. Select "Open" in the "File" menu or click the icon on the main toolbar to open the file selection dialog box shown in Illustration 23, Open Image File Window.

Illustration 23, Open Image File Window



  2. Select an image file folder from the "Look in" field at the top of the open image file window. Image files end in ".cmg," so files are filtered on this extension.
  3. To open an image file, select it and click "Open" or double click the file. The image file data is then loaded into WinNET.

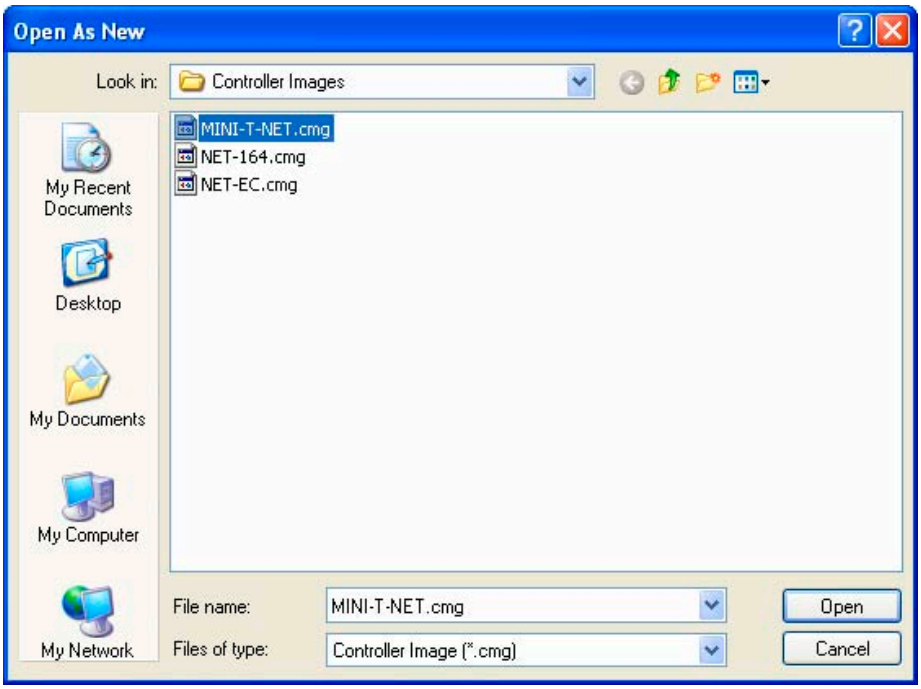
     NOTE: Three sample image files, "MINI-T-NET.cmg," "NET-164.cmg," and "NET-EC.cmg," are included with WinNET. These files are used in the examples in this manual and can be opened and used as learning aids. The default image file folder is c:\program files\winnet\Controller images.

- **Open an image file as new.**

  By opening an existing image file as new, you can create a new playlist without reentering all of the Controller, device, library, and switch data. The default image file folder is c:\program files\winnet\Controller images.

  1. Select “Open as new” in the “File” menu or click the icon on the main toolbar to open the file selection dialog box shown in Illustration 24, Open Image File as New Window.

Illustration 24, Open Image File as New Window



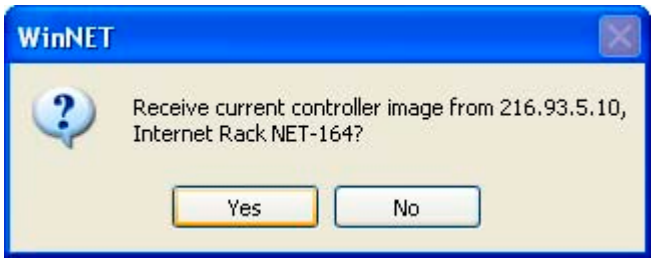
  2. Select an image file folder from the “Look in” field at the top of the open image file window. Image files end in “.cmg,” so files are filtered on this extension.
  3. To open an image file as new, select the file and click “Open” or double click file. The image file data minus the playlist is then loaded into WinNET as an unnamed file.

- **Receive the current Controller image from the default Controller.**

  An image received from the default Controller contains the Controller type, playlist, and the control, device, library, and switch properties last sent to the Controller.

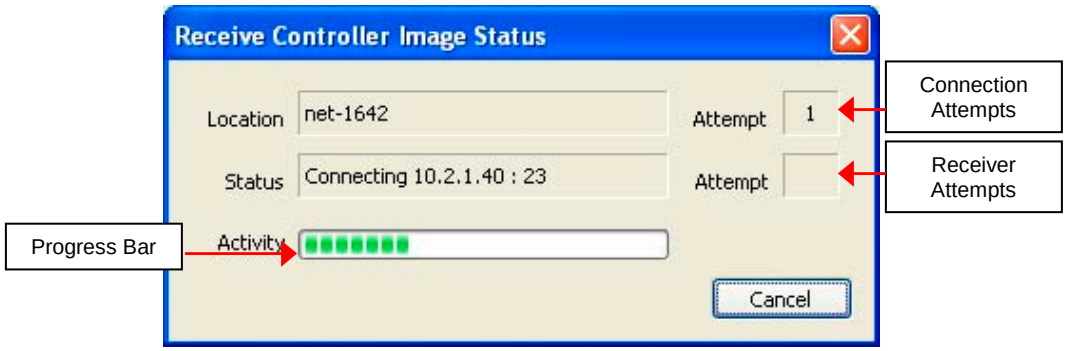
  1. Select “Receive” in the “File” menu or icon on the main toolbar to open a dialog box confirming that you want to receive the image from the default Controller (see Illustration 25, Receive Image Dialog Box).

Illustration 25, Receive Image Dialog Box



  2. Click “Yes” to open the status box shown in Illustration 26, Image Status Window. To interrupt the send, click the “Cancel” button. If the send appears to be stalled, cancel it and check your default location IP address and your network connections.

Illustration 26, Image Status Window



  A “Receive Completed” message appears when the image has been received. WinNET will now contain the remote data in an unnamed image.

UNLOADING EVENT CONTROLLER IMAGES

If an image is loaded into WinNET, only one Controller will be visible in the “Control” tab of the “Resources” window and channel tabs will be shown along the left side of the playlist window.

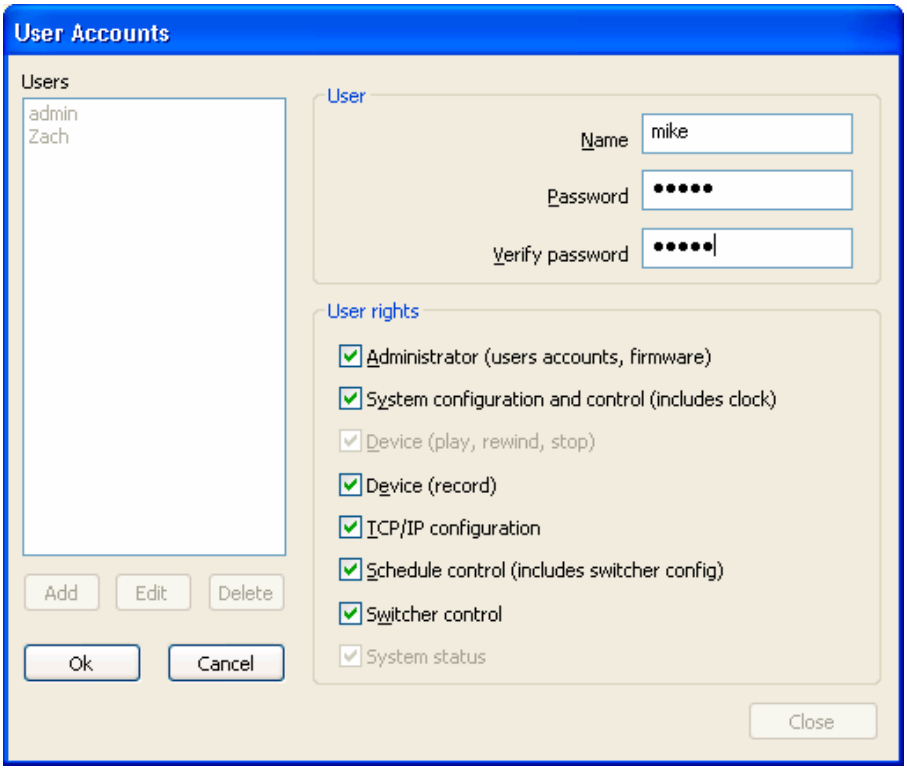
To unload an image, click “New” in the “File” menu or the icon on the main toolbar.

SETTING USER ACCOUNT RIGHTS (INCLUDING WINNET PASSWORD CHANGES)

1. Select "User accounts" in the "Tools" menu to open the "User Accounts" window (see Illustration 27).

NOTES:
- This menu item will only become enabled for users with account administration access.
- If you have not already logged in, the WinNET login prompt will appear and must be completed before the "User Accounts" window will appear.

Illustration 27, "User Accounts" Window



2. User rights are described in Table 12, User Rights, and apply only to the WinNET software program. All functions controllable from the Event Controller's front panel are only restricted by the front panel password. User rights may be configured as follows:

- Add user
  1. Click "Add."
  2. Enter new username and password.
  3. Check user rights you want the user to be able to access.
  4. Click "Ok" to send the new user settings to the Event Controller or "Cancel" to abort the addition.

- Edit user rights
  1. Highlight the desired username and click “Edit.”
  2. If desired, change username and/or password.
  3. Check the user rights you want the user to be able to access and uncheck the items you do not want the user to access.
  4. Click “Ok” to send the new user settings to the Event Controller or “Cancel” to abort the edit.
- Delete a user
  1. Highlight the desired username and click “Delete.”
  2. In the dialog box that appears, click “Yes” to delete user or “No” to abort the change.

Table 12, User Rights

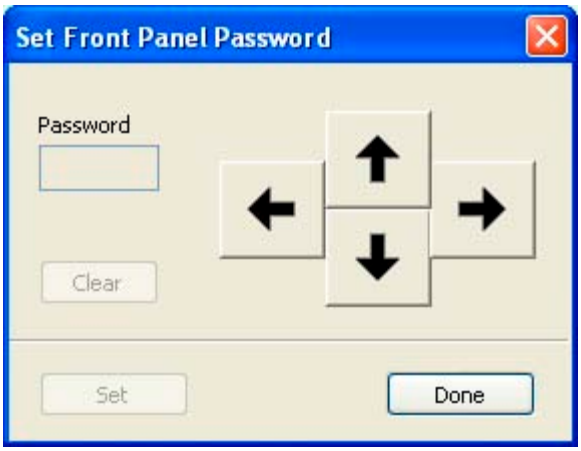
USER RIGHTS	DESCRIPTIONS
“Administrator”	Allows user to change user account rights and perform firmware updates and factory resets.
“Device (play, rewind, stop)”	Allows user to cause a device to play, rewind, or stop.
“Device (record)”	Allows user to cause a device to record.
“TCP/IP configuration”	Allows user to set up the TCP/IP addresses.
“Schedule control (includes switcher config)”	Allows user to start and stop schedule with the “Schedule Enable” command on the control panel. Also allows user to set fallback settings in the “Control” tab of the “Properties” window. **NET-EC** users may set up the number of switcher inputs/outputs and levels and the switcher type.
“Switcher control”	Allows user to perform switches from control panel.
“System configuration and control”	Allows user to set site information, set clock, update firmware, and reboot Event Controller from the “Controller” window under the “Tools” menu.
“System status”	This is a default right that allows all users to view the Event Controller status from the control panel.

3. When finished configuring user information, exit the “User Accounts” window by clicking the “Close” button.

CHANGING FRONT PANEL PASSWORD

1. Select “Set front panel password” in the “Tools” menu to open the window shown in Illustration 28.

Illustration 28, “Set Front Panel Password” Window

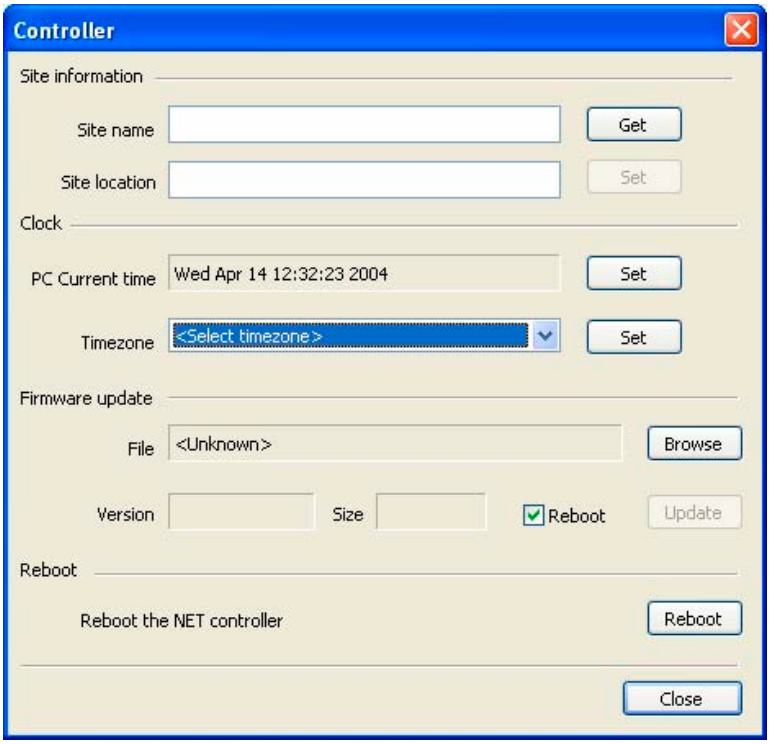


2. Click on a combination of five arrows for the new front panel password.
3. Click “Set” to accept new password or “Clear” to cancel.
4. Click “Done” to close the “Set Front Panel Password” window.

CONFIGURING SITE INFORMATION AND CLOCK, UPDATING FIRMWARE, AND REBOOTING CONTROLLER

1. In the "Tools" menu, choose "Controller" to open the dialog box shown in Illustration 29, "Controller" Dialog Box.

Illustration 29, "Controller" Dialog Box



2. Use the "Controller" dialog box to set the following configuration maintenance settings. After clicking "Get," "Set," "Update," or the "Reboot" button, you will be prompted for confirmation to perform the action on the default or selected Event Controller. Clicking "Yes" opens a box showing location name, action status, progress bar, and connection and action attempt counts. An "action completed" box appears when finished. If the action appears to be stalled or if you would like to interrupt the action, click the "Cancel" button.

Click "Close" to close the Controller configuration dialog box.

- Site Information: click "Get" to obtain the current site name and location aliases. If you would like to change this information, type the new aliases in the "Site name" and "Site location" field and click "Set."
- Clock

  NOTE: The clock and time zone may also be set from the Controller's front panel.

  ➢ To set the Event Controller's time, click the "Set" button to the right of the PC time shown. WinNET uses the PC time, PC time zone, and Controller

time zone to set the time, adjusting the time to account for zones crossed. All these items need to be correct for “Set Time” to be accurate.

➢ To set the Controller time zone, select the desired time zone from the list and click the “Set” button. The list contains the standard Windows time zones for the United States.

- Firmware Update

  To perform a firmware update, refer to “Firmware/Software Updates,” on page 135.

- Reboot

  To reboot the default Event Controller, click the “Reboot” button.

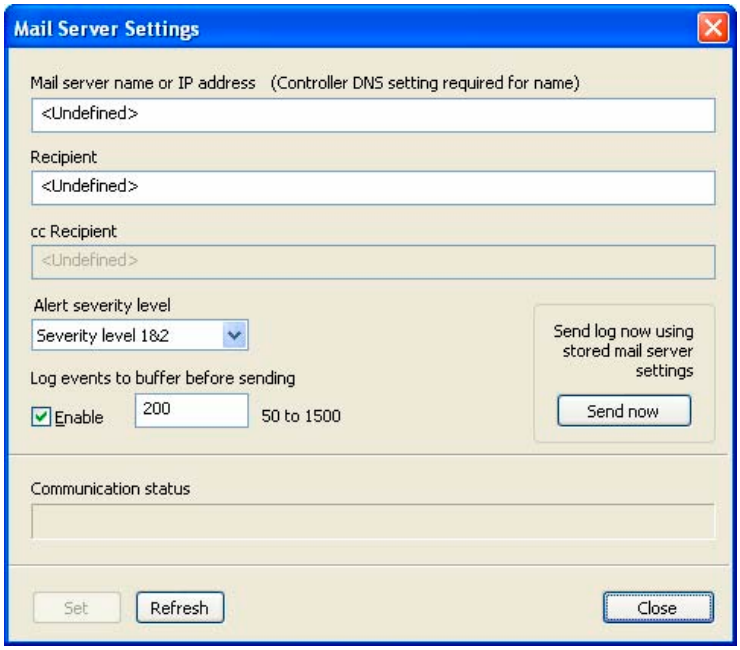
CONFIGURING LOG AUTO EMAIL SETTINGS

Use the “Mail server” option to configure the auto email settings of your Event Controller’s log as follows:

NOTES:
- You need IP Configuration rights to modify mail server settings.
- The auto email feature does not turn off the “Log” LED. You must choose “Get Log” in the “File” menu to turn off the LED.

1. Click “Mail server” under the “Tools” menu to open the dialog box shown in Illustration 30, “Mail Server Settings” window.

Illustration 30, “Mail Server Settings”



2. Enter the desired email address into the “Recipient” field.

3. Specify the outgoing mail server by one of the following methods in the “Mail server name or IP address” field:

- Enter the IP address of the outgoing SMTP mail server (port 25 will be used on this server). This server can be viewed in the setup of your email program.
- Enter the name of the outgoing mail server. Your Event Controller will attempt to obtain the IP address of your mail server from your DNS server(s), so ensure you have entered your DNS server’s IP address(es) into the front panel of your Event Controller (see the “Editing DNS Addresses” section on page 36 for instructions).

4. If desired, enter another email address to receive mailings of the log in the carbon copy recipient (“cc:Recipient”) field.

5. Specify how often the Controller emails its log to you according to one or all of the following methods:

a. Use log item severity to determine how often emails are sent by selecting one of the following in the “Alert severity level” field:

- “All events”: email sent after every logged item (**NOT RECOMMENDED!**)
- “Severity level 1&2”: email sent after a severity 1 or 2 item is logged
- “Severity level 2 only”: email sent after only after a severity 2 item is logged
- “Disabled”: emails not sent according to severity level of log items

b. Specify the number of items that must be logged before an email is sent under the “Log events to buffer before sending” field as follows:

- Check the “Enable” box.
- Specify the number of log items you wish the Controller to accumulate before the log is emailed.

c. Click the “Send now” button to tell the Controller to email the recipient immediately. The mail server will email you a list of the Event Controller’s actions that have occurred since the last time the mail server emailed you.

6. Click the “Set” button to send the new settings to the Event Controller, “Refresh” to display the most current auto email settings, and/or “Close” to exit window.

CREATING TEMPLATES FOR EXPORTING OR PRINTING PLAYLISTS

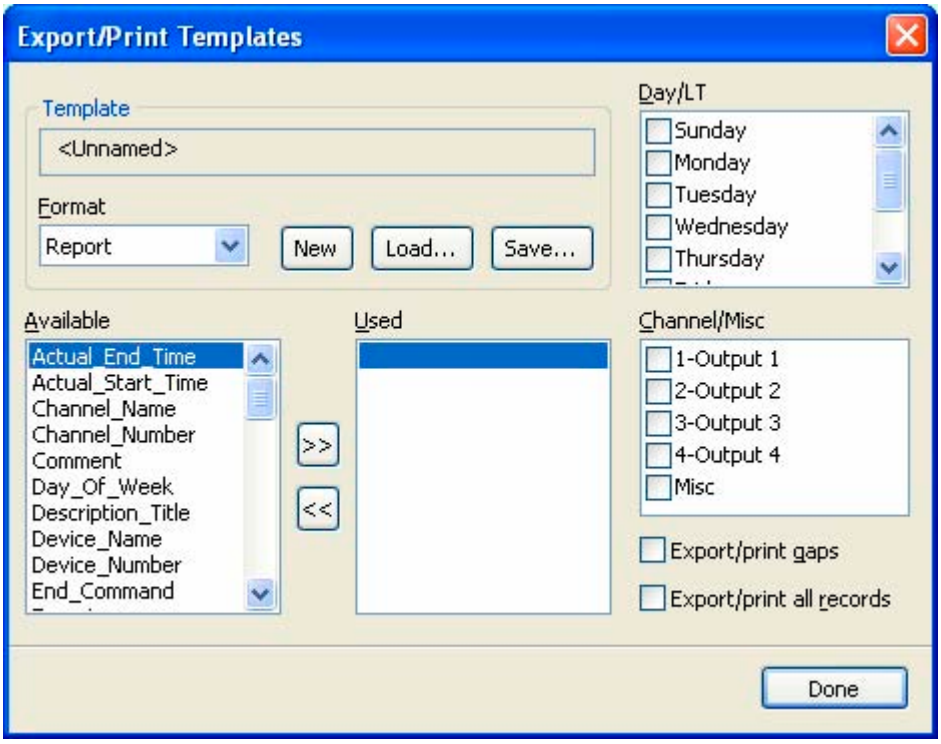
Playlist templates allow you to determine what playlist information will be exported or printed. Playlists can be exported into comma delimited or Microsoft Excel® formats and then printed (see “Exporting Playlists,” on page 91) or printed directly from WinNET (see “Printing Playlists,” on page 89).

1. Create a template per the following steps.

a. Click “Export/Print templates” in the “Tools” menu to open the dialog box shown in Illustration 31.

NOTE: This option is only enabled if a Controller image has been loaded (see “Loading Event Controller Images,” on page 47).

Illustration 31, “Export/Print Templates” Window



b. Select template display items as follows:

NOTES:
- The “Format” field is intended for future use and may only be set to “Report.”
- Click “New” to clear all settings.

- Determine which event panes are included:

  1. Check the boxes in “Day/LT” section to select the desired days (or LT).

2. Check the boxes in the “Channel/Misc” section to select the channels that should be included for the selected days.

   NOTE: The channel list varies depending on the Controller.

- Check the “Export/print gaps” checkbox to display playlist gaps.
- Check “Export/print all records” to include all events in the selected event panes.

  NOTE: This function overrides any export or print values set to “No” in the device, library, or switch tab properties.
- Add/remove playlist fields (columns) in template as follows:
  - Add a field to the “Used” list by double clicking a field item in the “Available” list or selecting it and clicking “>>.” The fields in the “Used” list will be printed/exported in the selection order listed.
  - To add a field at a specific point within the “Used” list, highlight the “Used” display item you would like to display the new field before. Double click a field item in the “Available” list or select it and click “>>.” The new field is added above the selected field (select the blank field at the bottom to add a field to the end of the list).
  - Remove a “Used” field, by double clicking it or selecting it and clicking “<<.”

c. Click “Save” to save the template to a file.

2. To revise a template:

a. Click “Export/Print templates” in the “Tools” menu to open the window shown in Illustration 31, “Export/Print Templates” Window.

b. Click “Load.” In the “Select Export/Print Template” Window that appears, browse for the desired template and open. The filename will then appear in the “Template” box at the top of the “Export/Print Templates” Window.

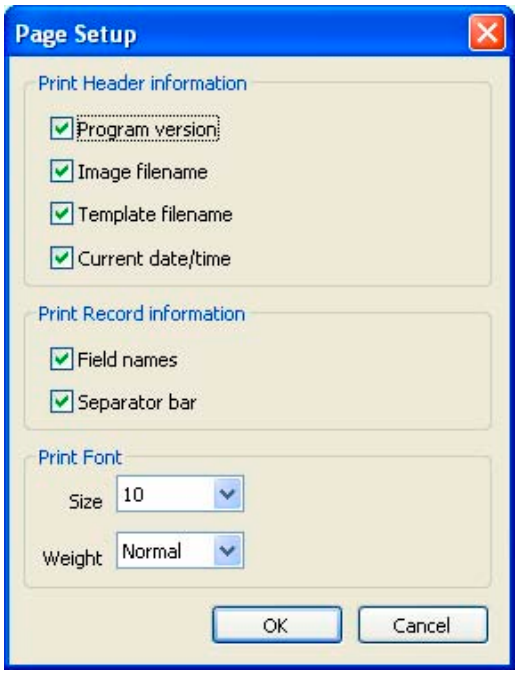
3. Click “Done” when finished to close the “Export/Print Templates” Window.

CONFIGURING PAGE LAYOUTS FOR PLAYLISTS PRINTED FROM WINNET

The following steps allow you to determine the page layout of playlists printed directly from WinNET. Refer to Illustration 33, Example Playlist, for an example of a playlist configured through page setup.

1. Select “Page Setup” in the “File” menu to open the box shown in Illustration 32, “Page Setup” Window, and configure the playlist printout according to the following options:

Illustration 32, “Page Setup” Window



- “Print Header information” section: check the items you want to appear at the top of the printout. “Program version” refers to the top two lines shown in Illustration 33, Example Playlist.

Illustration 33, Example Playlist

```
WinNET  Version 1.01.20                                                    Page
Copyright © 2003-2004,  LEIGHTRONIX, INC.
Image Filename: mini-t-net.cmg
Template Filename: mtn.xpt
Today is: Mon Feb 23 13:02:33 2004


Title/Description                Day Of Week  Lock  Scheduled Time  Length
--------------------------------  -----------  ----  --------------  --------
6:00:00 Gap                      Sunday             12:00:00 AM     06:00:00
Tape2 56min                      Sunday       Yes   06:00:00 AM     00:56:00
0:04:00 Gap                      Sunday             06:56:00 AM     00:04:00
In5 1hr                          Sunday       Yes   07:00:00 AM     01:00:00
Disc2 1hr                        Sunday       No    08:00:00 AM     01:00:00
Tape1a 29min                     Sunday       No    09:00:00 AM     00:29:00
0:01:00 Gap                      Sunday             09:29:00 AM     00:01:00
Tape1b 57min                     Sunday       Yes   09:30:00 AM     00:57:00
1:33:00 Gap                      Sunday             10:27:00 AM     01:33:00
Tape3 2hr                        Sunday       Yes   12:00:00 PM     02:00:00
In5 1hr                          Sunday       No    02:00:00 PM     03:00:00
```

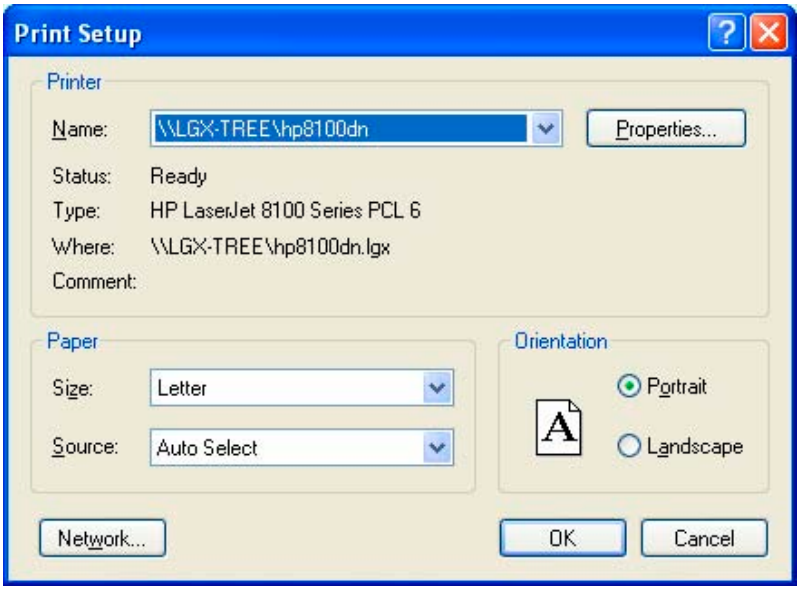
- "Print Record information" section: check the items you want to appear above the playlist data.
  - "Field names" shows the column headers.
  - "Separator bar" inserts a line of dashes.
- "Print Font" section: choose the font size and weight (normal/bold).

2. Click "OK" to save your settings or "Cancel" to close the dialog box without saving.

CONFIGURING PRINTER AND PAPER SETTINGS FOR PLAYLISTS PRINTED FROM WINNET

1. Selecting "Print Setup" in the "File" menu opens the box shown in Illustration 34, "Print Setup" Window, which allows you to configure the printer and paper settings as follows:

Illustration 34, "Print Setup" Window



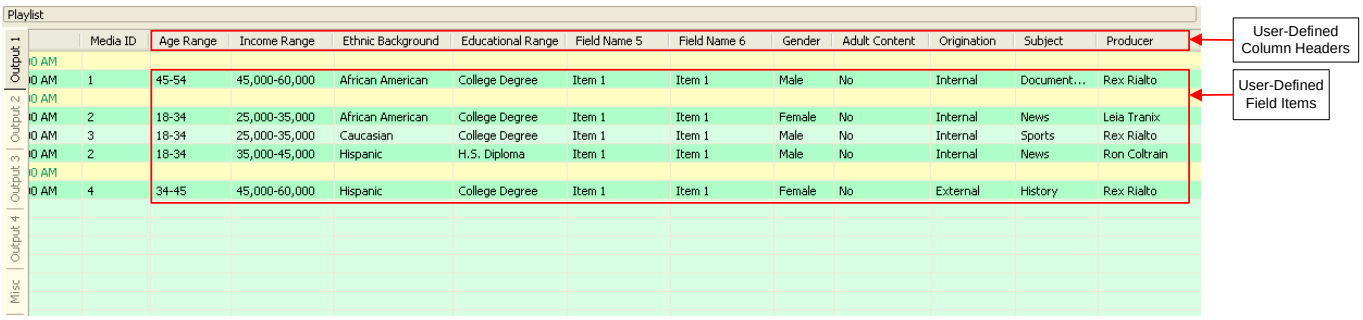
- "Printer" section: choose the desired printer from a list of your PC's available printers. When a printer is chosen, its status appears below the "Name" field.
- "Properties" button": click to open a dialog box specific to the printer, so that detailed printer settings can be made.
- "Paper" section: choose the size and source tray of the paper.
- "Orientation" section: choose to print in portrait or landscape mode. If your Printing template has many fields (columns) chosen, you may want to print in "Landscape" mode to fit it all from left to right. Print in "Portrait" mode if you don't have many fields (columns) and want to fit more events on a page.
- "Network" button: click to open a network printing dialog box so that you can attach to and print to a network printer, if it is not already in the upper list.

2. Click "OK" to save your settings or "Cancel" to close the dialog box without saving.

SETTING USER-DEFINED PLAYLIST FIELD NAMES

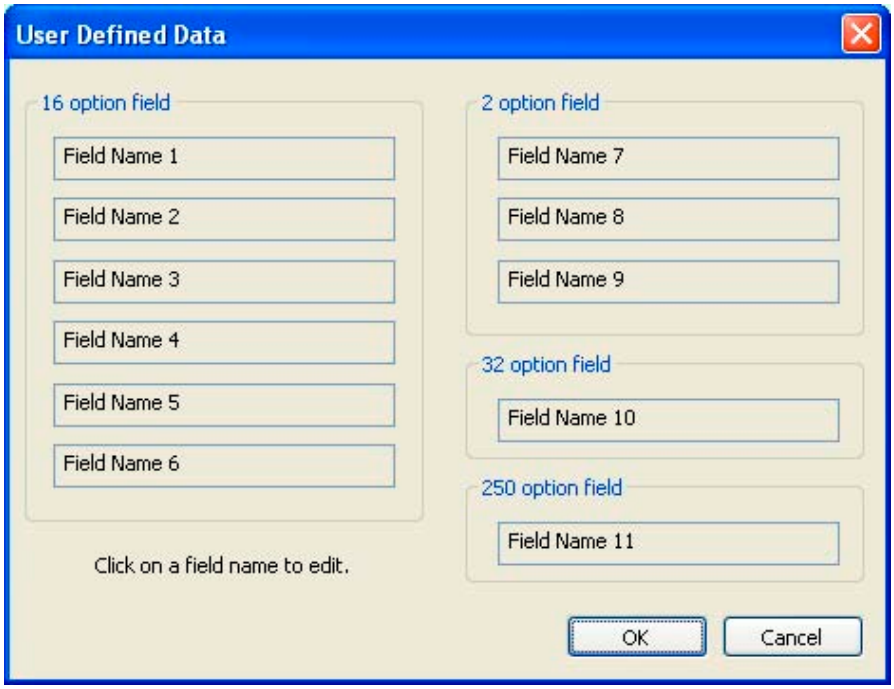
Assign names to the “Field Name” event columns in the playlist and the “Item” fields listed under each column as follows (see Illustration 35 for an example of a playlist with user-defined fields):

Illustration 35, Example of Playlist with User Defined Fields



1. Click “User defined data” under the “Tools” menu to open the window shown in Illustration 36.

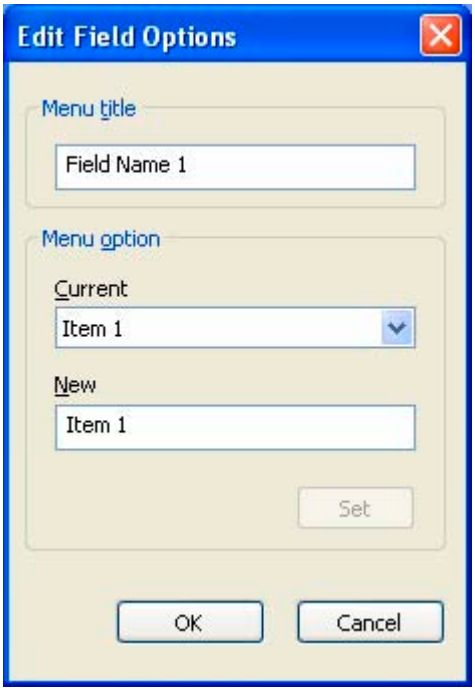
Illustration 36, “User Defined Data” Window



2. Click on the field name number to which you would like to assign a new name.

3. In the “Edit Field Options” window that appears (see Illustration 37), perform the following:

Illustration 37, “Edit Field Options” Window



- Edit playlist column headings as follows:
  1. Type a new event column category heading in the “Menu Title” field.
  2. Click “OK” if you only wanted to edit the column heading, “Cancel” to abort change, or begin editing column field item name(s).
- Edit each column’s field items as follows:
  1. Under “Current,” use the drop down menu to select the item you would like to edit.
  2. Under “New,” type in the new item name.
  3. Click “Set” to accept change or “Cancel” to abort.
  4. Repeat steps until all of the desired item names have been edited.

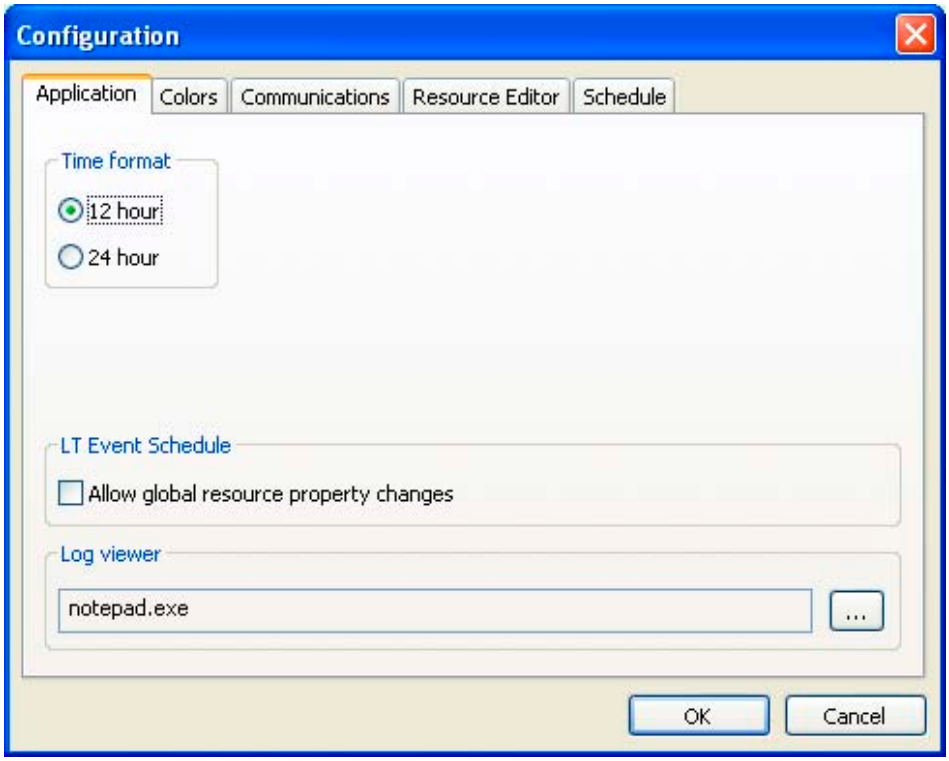
4. Click “OK” to accept changes or “Cancel” to abort all editing changes made in the “Edit Field Options” window.

SETTING WINNET VIEWING AND COMMUNICATION OPTIONS

In the "Tools" menu, choose "Options" to open the "Configuration" window. Perform the following tasks from the four "Configuration" window tabs. Click "OK" on the bottom of the "Configuration" window to save any changes you have made or "Cancel" to discard them.

- "Application" tab (see Illustration 38, "Application" Tab Window)

Illustration 38, "Application" Tab Window



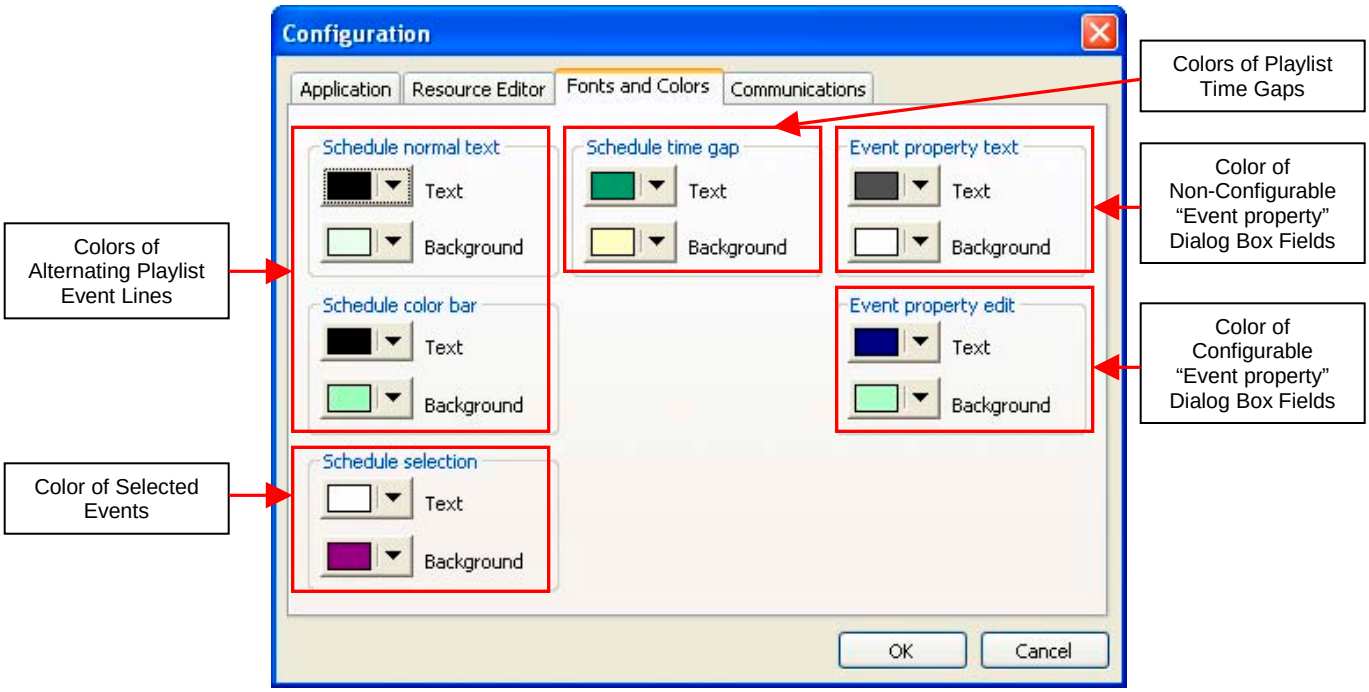
- ➢ Under "Time format," select either the 12 hour (AM/PM) format or 24 hour (military) format.

  NOTE: This does NOT change the time format on the front of your NET Series Controller.

- ➢ Under "LT Event Schedule," check "Allow global resource property changes" to permit the editing of resource properties (device, library, and switch items) that have only been added to a "WinNET-LT" tab playlist. Checking the item will give you the option to merge those changes into the playlist.
- ➢ Under "Log Viewer," click the button to the right of the log viewer field to select a software program for viewing your Event Controller's log file.

- "Colors" tab (see Illustration 39, "Colors" Tab Window): allows you to choose the following WinNET text and background colors.

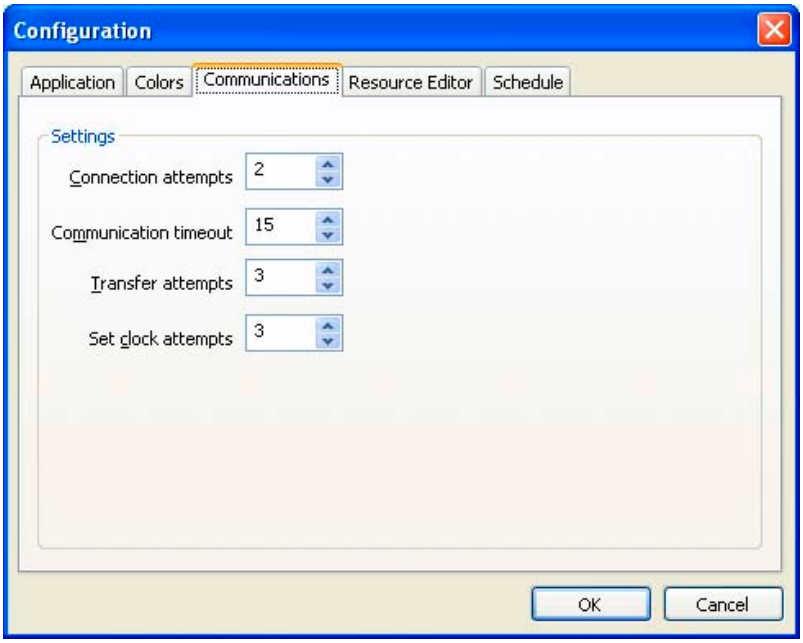
Illustration 39, "Colors" Tab Window



- Alternating colors for the playlist event lines
- Color of selected events
- Playlist time gaps
- "Event properties" dialog box non-configurable fields
- "Event properties" dialog box configurable fields

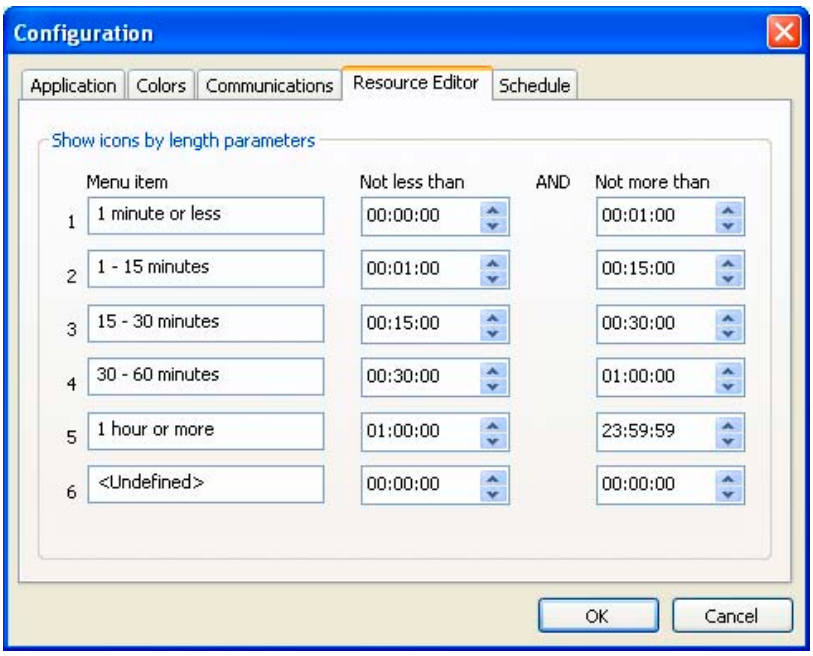
- "Communications" tab (see Illustration 40, "Communications" Tab Window): allows you to choose the number of attempts that are made when communicating with a Controller. The expiration time for each attempt can also be set under "Communication timeout." These numbers can be set to personal preference or to allow for network delays.

Illustration 40, "Communications" Tab Window



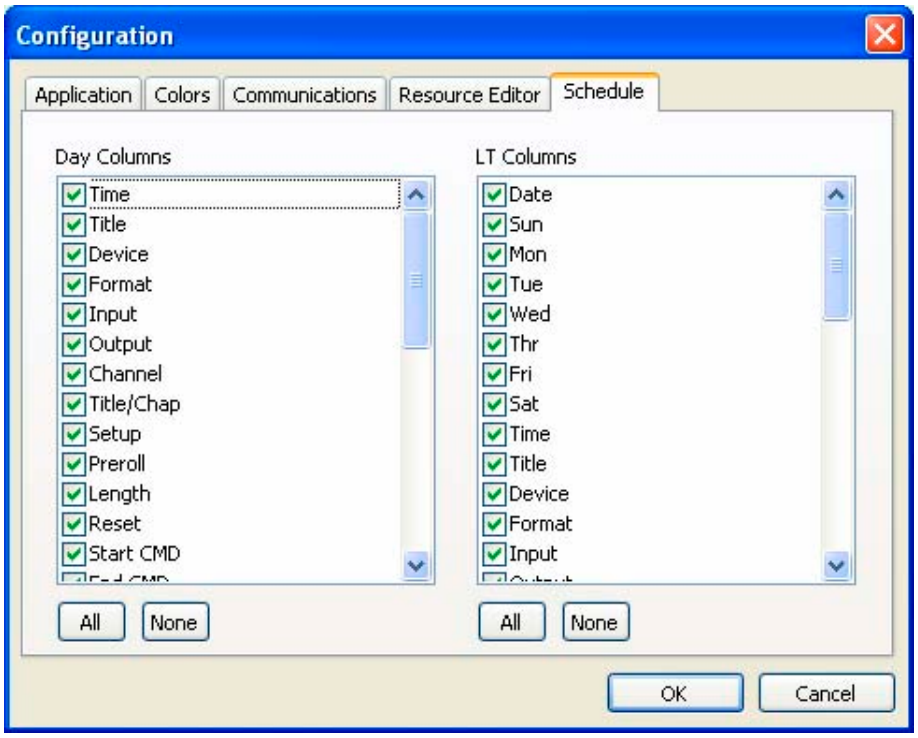
- "Resource Editor" tab (see Illustration 41, "Resource Editor" Tab Window): use this tab to configure the sorting filter for your library and switch resource items.

Illustration 41, "Resource Editor" Tab Window



- "Schedule" tab (see Illustration 42, "Schedule" Tab Window): use this tab to hide/display playlist columns.

Illustration 42, "Schedule" Tab Window



Note that the "Day Columns" listing corresponds to the columns in the playlist day tabs and the "LT Columns" listing corresponds to the columns in the playlist WinNET-LT tab. Perform the following steps:

2. Click on the desired combination of the following:

- Check marked column heading if you want to hide the corresponding column on the playlist or on an unchecked item if you want to display it
- "All" button to display all of the columns for the corresponding playlist tabs
- "None" button to remove all columns from corresponding playlist tabs

3. When all selections have been made, click "OK" to display changes on playlist or "Cancel" to abort changes.

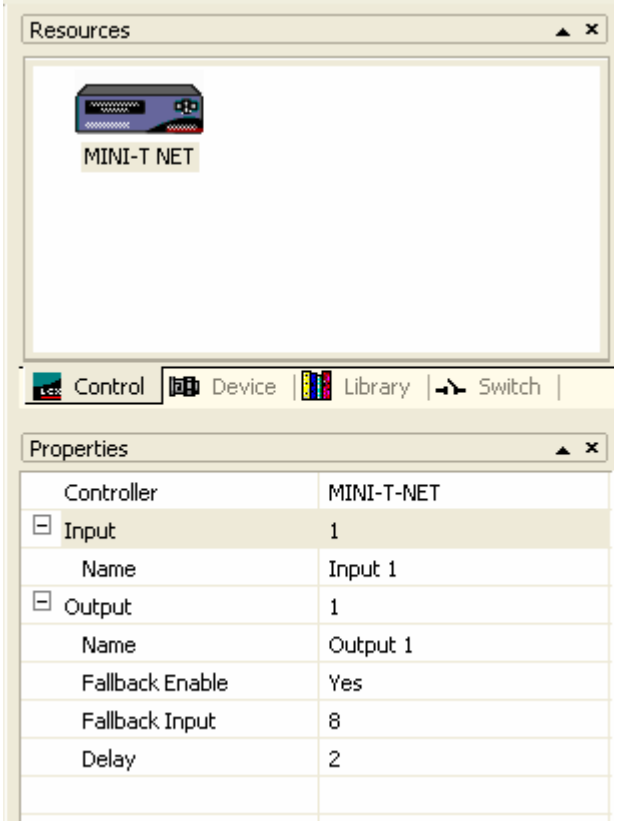
SETTING EVENT CONTROLLER PROPERTIES

When the “Control” tab of the “Resources” window is selected, the Controller type is shown in the window. (If all three Controllers are visible, no image is loaded. Refer to “Loading Event Controller Images,” on page 47, for instructions on loading an image.) View and enter the Controller properties in the “Properties” window. The properties for each of the three NET Series Event Controller models are as follows:

- **MINI-T-NET**

  The MINI-T-NET’s control properties may be set as follows (refer to Illustration 43, MINI-T-NET Control Property Settings):

Illustration 43, MINI-T-NET Control Property Settings



  - Input aliases
    1. In the “Input” field, select an input (1 – 8 may be chosen).
    2. Type the selected input’s alias in the “Name” field (up to 31 characters).
  - Output alias: only “1” is available in the “Output” field. Type the alias for output 1 in the “Name” field (up to 31 characters).
  - Loss-of-video fallback setting

    NOTE: The fallback setting may also be set from the Controller’s front panel.

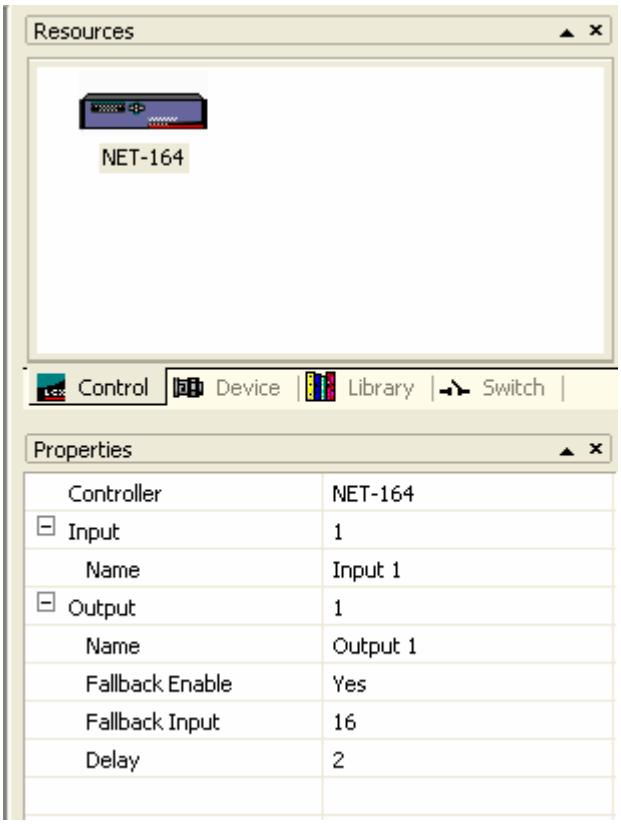
"Fallback Enable" can be set to "Yes" or "No."

1. Select "No" to disable loss-of-video fallback.
2. Select "Yes" to enable fallback capabilities. "Fallback Input" and "Delay" fields appear upon selection. "Fallback input" is fixed at 8. Delay can be set from 1–99 seconds. This means that if valid video is lost from Output 1 and not restored within the delay time, the output will be switched to Input 8.

- **NET-164**

The NET-164's control properties may be set as follows (see Illustration 44, NET-164 Control Property Settings):

Illustration 44, NET-164 Control Property Settings



➢ Input aliases

1. In the Input field, select an input (1 – 16 may be chosen).
2. Type the selected input's alias in the "Name" field (up to 31 characters).

➢ Output aliases

1. In the Output field, select an output (1 – 4 may be chosen).
2. Type the selected output's alias in the "Name" field (up to 31 characters).

- Loss-of-video fallback settings for each output

  NOTE: The fallback setting may also be set from the Controller's front panel.

  For each output, "Fallback Enable" can be set to "Yes" or "No."

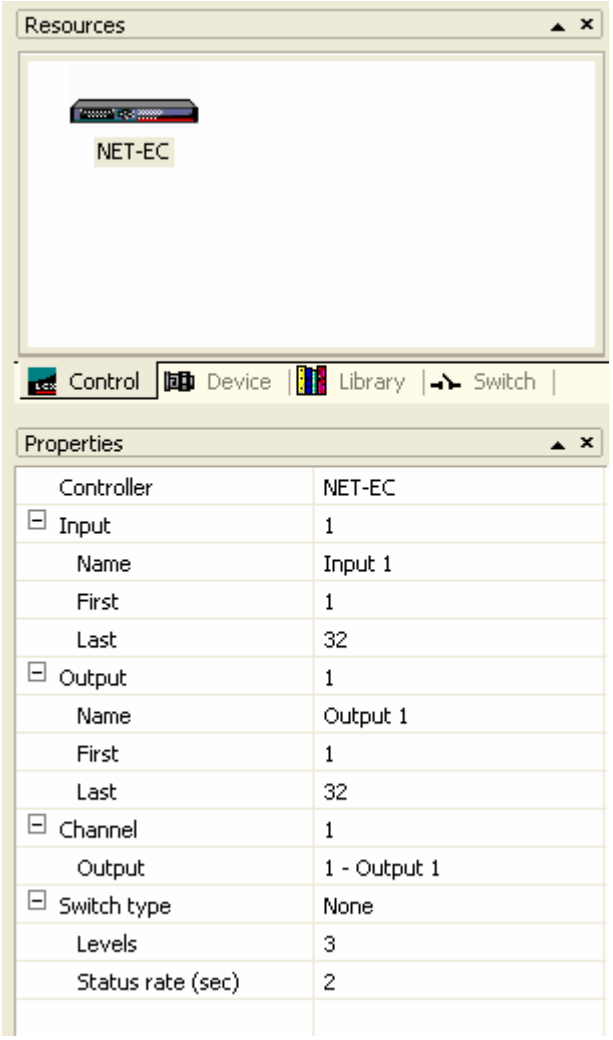
  1. Select "No" to disable the loss-of-video fallback for the selected output.
  2. Select "Yes" to enable loss-of-video fallback and the "Fallback Input" and "Delay" fields appear. The fallback input for the selected output may be set to any one of the 16 inputs. Delay can be set from 1–99 seconds. This means that if valid video is lost from that output and not restored within its "Delay" time, the selected output will be switched to its fallback input.

- **NET-EC**

  The NET-EC's control properties must be set as follows (see Illustration 45, NET-EC Control Property Settings):

  NOTE: Input and output alias assignments are optional.

Illustration 45, NET-EC Control Property Settings



➢ Input aliases

1. Enter the external switch's first and last input values into the "First" and "Last" input fields. Each of the inputs in this range may be assigned an alias.
2. Type an alias into the "Name" field of the selected input (up to 31 characters).

- Output aliases

  1. Enter the external switch's first and last output values into the "First" and "Last" output fields. Each of the inputs in this range may be assigned an alias.
  2. Type an alias into the "Name" field of the selected output (up to 31 characters).

- Playlist channel output assignments

  A NET-EC playlist can have up to 8 channels, represented by tabs on the left side of the playlist window. In the "Channel" field, select a channel and assign an output to the channel in the "Output" field.

- External switch type, size, levels, and status rate

  NOTE: The switch type, size, and levels may also be set from the Controller's front panel.

  1. "Switch type" field: select your external switcher type. The choices are: LEIGHTRONIX PRO-8 or PRO-16, Pesa CPULink, Sigma, Sierra, and Knox.
  2. "Levels" field: use to enter the number of levels (video, audio left, audio right, etc.) configured on the external switch.

     NOTE: Consult your switcher manual to determine how many levels should be assigned.

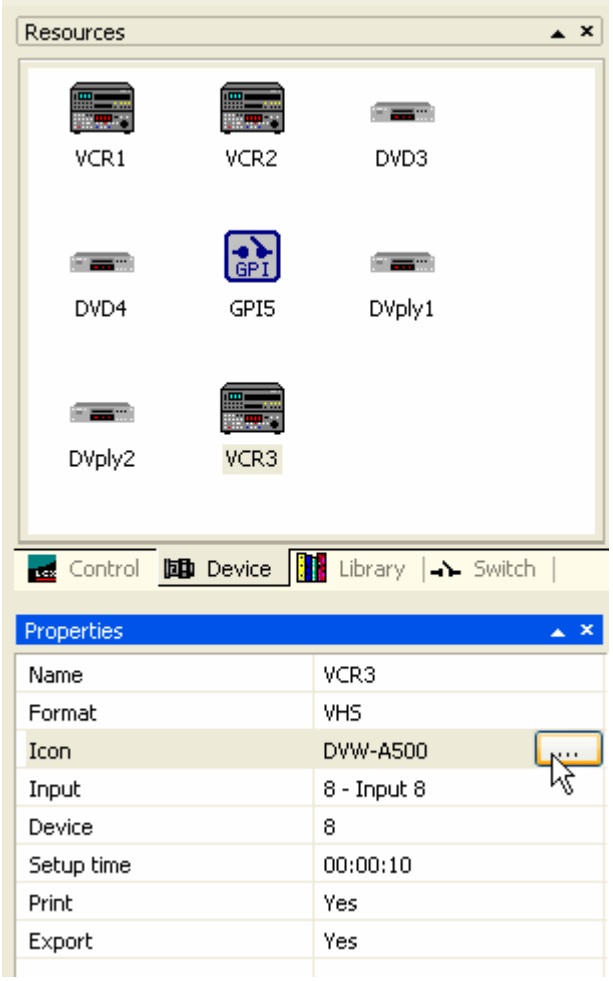
  3. "Status rate (sec)" field use to configure the interval at which the NET-EC polls the external switcher for output status information. The range is 0 – 6000 milliseconds, where 0 means never poll. The default is 2000 milliseconds.

SETTING DEVICE PROPERTIES

NOTE: A device is any source (input) controlled by a PRO-BUS interface or DVply.

Enter the properties of your Controller's PRO-BUS interface and DVply-controlled devices according to the following steps (refer to Illustration 46, Device Properties Window).

Illustration 46, Device Properties Window



1. Click on the "Device" tab of the "Resources" window.
2. Right-click in the "Device" window and select "New" in the context menu (or click in the "Resources" window and press the "Insert" key) to insert an undefined new device in the window.
3. Complete the following fields in the device "Properties" window:
   - "Name": enter a unique and descriptive name, up to 31 characters.
   - "Format": choose the device format. Choices are:
     - ¾"
     - 8mm
     - Beta SP
     - DVD
     - General purpose interface (GPI)

       NOTE: A GPI device will not display the "Input" and "Setup time" fields.
     - HI-8mm
     - S-VHS
     - VHS
     - DVply for NET-164 and NET-EC
   - "Icon": open the icon selection window by selecting the "Icon" field and clicking the button that appears. Select an icon that reflects the piece of equipment attached to Event Controller, then click "OK" or double click an icon. Click "Cancel" to close the icon selection box without changing the icon.
   - "Input": if the device is connected to a switcher input, choose the switcher input number to which the device is connected. If the device is not connected to a switcher input, select "<None>." Assigning an input to a device removes the input number from the input list.

     NOTE: The "Input" field appears after "Format" is selected.

- "Device": enter the PRO-BUS address number of the device. Choices are:
  - 1 – 8 for the MINI-T-NET
  - 1 – 16 plus DVply-1 and DVply-2 for the NET-164 and NET-EC

  NOTES:
  - Ensure that "Format" and "Device" agree when selecting DVply.
  - Ensure assigned device number reflects actual PRO-BUS interface connected to input device. A PRO-BUS interface only responds to those PRO-BUS commands which contain its address.

  When a device number is chosen, it is removed from the "Device" list.

- "Setup time":

  NOTE: This field appears after "Format" is selected.

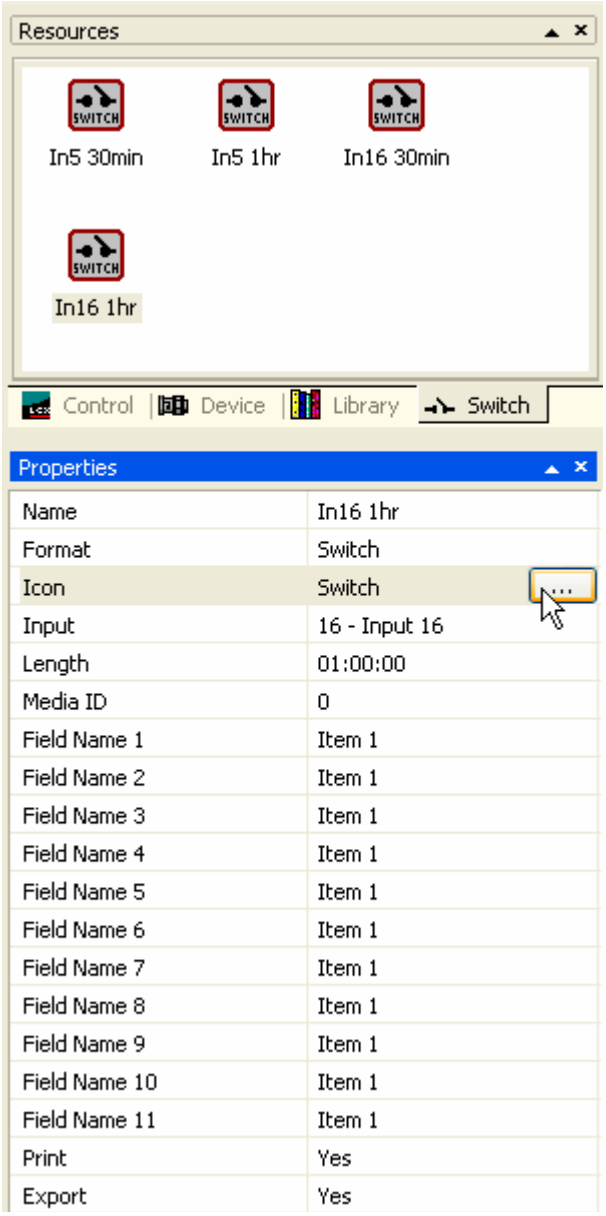
  - For a DVply device, enter time it takes to cue a title:chapter.
  - For all other devices, enter time it takes to produce video after receiving a play command.

- "Print" and "Export": select "Yes" if you want an event to be included in a print or export operation.

SETTING SWITCH PROPERTIES

Enter the properties of any Event Controller source inputs not controlled by PRO-BUS interfaces or DVply under the "Switch" tab of the "Resources" window according to the following steps (refer to Illustration 47, Switch Properties Window). Example switch sources are satellite and studio feeds, character generators, etc.

Illustration 47, Switch Properties Window



1. Click on the "Switch" tab of the "Resources" window.
2. Right-click in the "Switch" window and select "New" in the context menu (or click in the "Resources" window and press the "Insert" key) to insert a new undefined switch item in the window.
3. When a switch item is selected in the "Resources" window, its properties are listed and can be entered in the "Properties" window. Complete the following switch property fields:
   - "Name": enter a unique and descriptive name, up to 31 characters.
   - "Format": fixed at "Switch."
   - "Icon": switch items have a default icon. If you would like to select a different icon, open the icon selection window by selecting the "Icon" field and clicking the button that appears. Select an icon, then click "OK" or double click an icon. Click "Cancel" to close the icon selection box without changing the icon.
   - "Input": choose the switcher input connected to the device. Selecting an input in the "Switch" tab removes it from the "Input" field list in the "Device" tab, but does not remove it from the "Input" field list in the "Switch" tab. This is so an input can be entered multiple times with various time lengths, but not used for a device.
   - "Length": enter the length of time you want the switch to be connected. If you want to create only one switch item per input, enter the time likely to be used

most often. You will be able to modify the time to a different value when a switch event is created.

- “Media ID”: if desired, assign a library tracking number.
- “Field Name” 1–x: if desired, select the user-defined column field items that pertain to the new library item.
- “Print” and “Export”: select “Yes” if you want an event to be included in a print or export operation.

SETTING LIBRARY PROPERTIES

Use the “Library” tab in the “Resources” window to create a library of your tapes and discs (refer to Illustration 48, Library Properties Window).

1. Click on the “Library” tab of the Resources window.

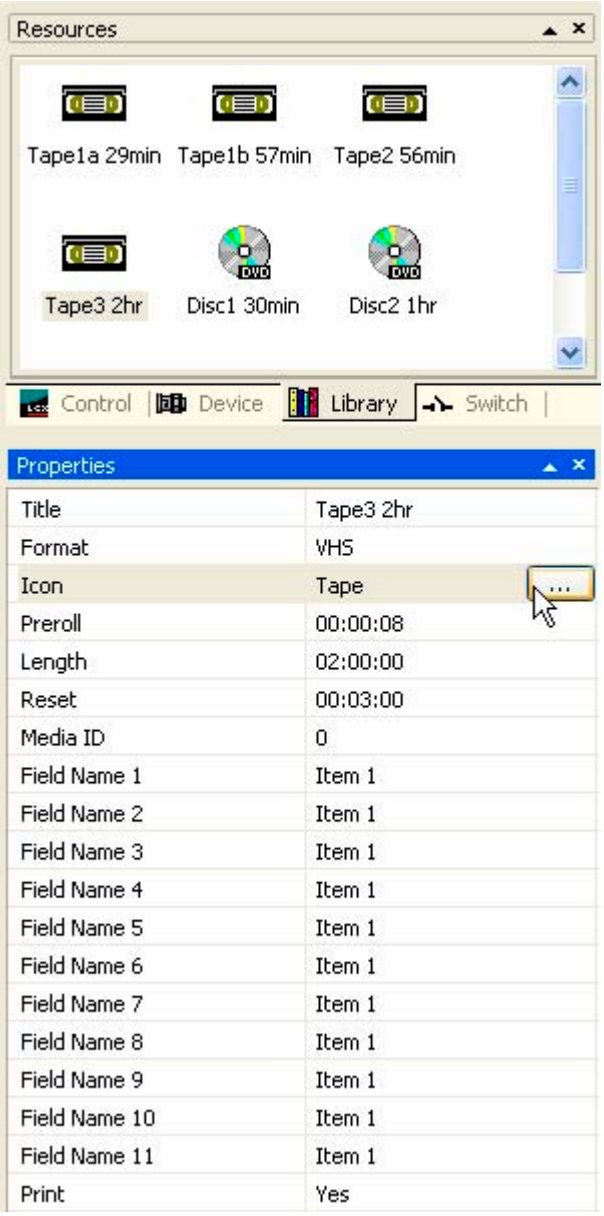
2. Right-click in the “Library” window and select “New” in the context menu (or click in the “Resources” window and press the “Insert” key) to insert a new undefined library item in the window.

3. When a library item is selected in the “Resources” window, its properties are listed and can be entered in the “Properties” window. Complete the following library property fields:

- “Name”: enter a unique and descriptive name, up to 31 characters.
- “Format”: choose a medium. Choices are:
  - ¾”
  - 8mm
  - Beta SP
  - DVD
  - GPI
  - HI-8mm
  - S-VHS
  - VHS
  - DVply for NET-164 and NET-EC The DVply format displays the “Title:Chapter” field, which lets you enter the program location on a DVply disc.
- “Preroll”: enter a length of time to indicate the amount of unwanted video (black, etc.) at the start of a program that you do not want playing on air.

  NOTE: This field appears after any non-GPI is selected in the “Format” field.
- “Length”: enter the on-air length of the program medium

Illustration 48, Library Properties Window



- “Reset”: enter time the playback device will be busy and unavailable for scheduling after the end of the program. It is typically the rewind time.

  NOTE: The “Reset” field appears after any non-GPI is selected in the “Format” field.

- “Media ID”: if desired, assign a library tracking number.
- “Field Name” 1–x: if desired, select the user-defined column field items that pertain to the new library item.
- “Print” and “Export”: select “Yes” if you want an event to be included in a print or export operation.

SOFTWARE OPERATION

PERFORMING GENERAL WINNET OPERATIONS

OPENING AND LOGGING INTO WINNET

1. To open WinNET, double click on the WinNET desktop icon (see Illustration 49).

Illustration 49, WinNET Desktop Icon

2. When WinNET first starts, you are not logged in (this can be seen in the lower right corner of the WinNET window in the status bar). When a remote connection attempt is first made or "Login user" in the "File" menu is selected, a login box appears (see Illustration 50). Log in as follows:

Illustration 50, Login Dialog Box

a. Enter the username and password given to you by the NET Series Event Controller administrator. If the username and password have not been changed from the factory defaults, enter “admin” in the “User” field and “default” in the “Password” field.

NOTE: Logins are case sensitive. To change passwords, see “Setting User Account Rights (Including WinNET Password Changes),” on page 51.

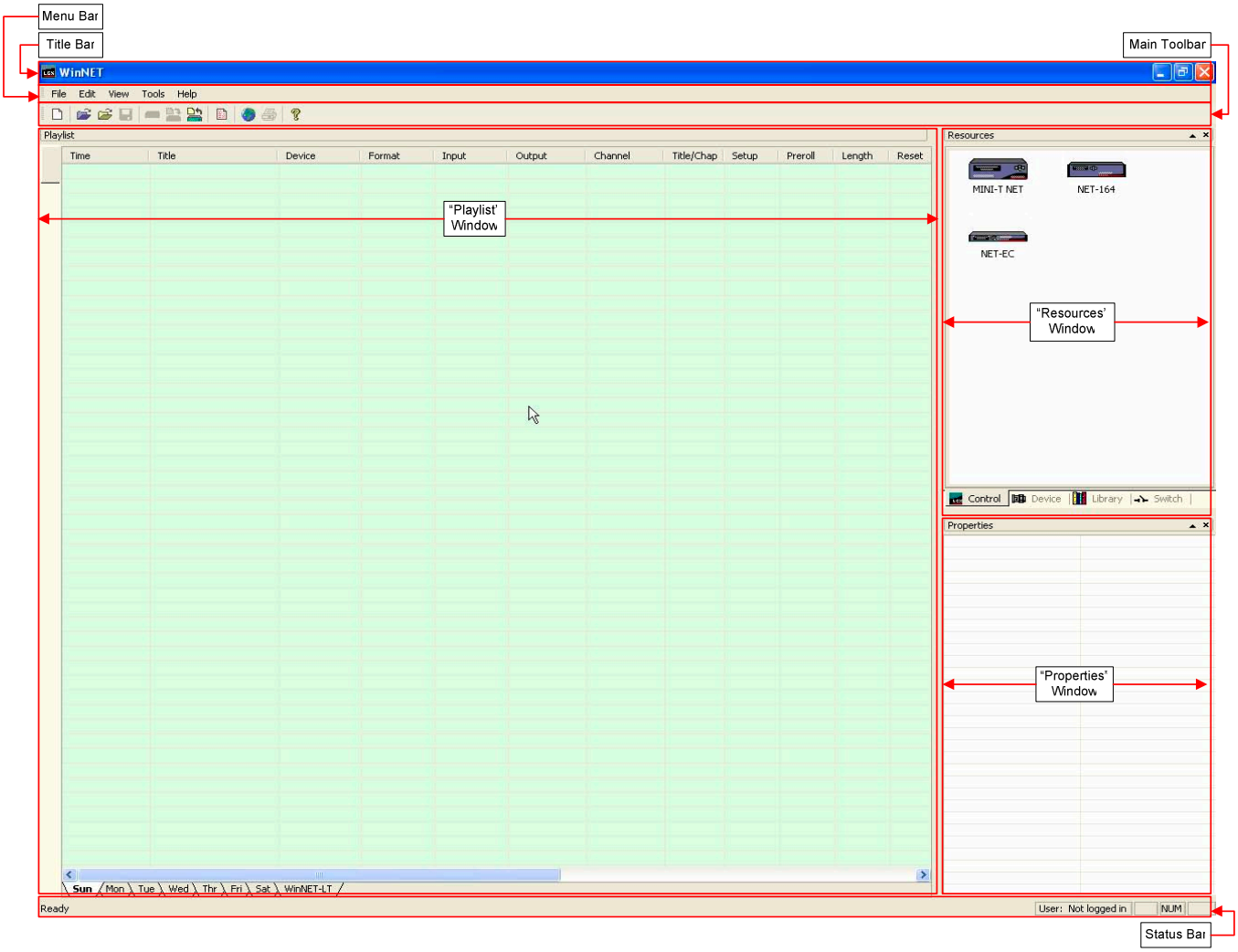
b. Click “OK” to complete login or “Cancel” to abort. Once you are logged in, you will not be prompted the next time a remote connection is attempted. The login status appears in the lower right on the status bar.

3. To switch between user accounts, select “Login user” in the “File” menu. Click “OK” to log in with a new user account or “Cancel” to stay with the current user account.

ABOUT THE MAIN WINDOW COMPONENTS

Icons to run the WinNET software are installed on the Windows desktop and in the "Start Menu\Programs\Leightronix, Inc." folder. Choosing either of these icons opens the WinNET main window shown in Illustration 51.

Illustration 51, WinNET Main Window



The components of the main window are as follows:

- "Playlist," "Resources," and "Properties" Windows: discussed in depth later in this manual.
- Status bar: gives descriptions of various WinNET functions, including user login status.
- Title bar: contains the program name, as well as buttons for minimizing, restoring/maximizing, and closing WinNET.

- Menu bar: contains drop-down menus of WinNET operations (see Illustration 52, Menu Bar and Table 13, Menu Bar Items).

Illustration 52, Menu Bar

Table 13, Menu Bar Items

MENU ITEM	FUNCTION
"File"	Click on this menu item to display the following options: • "New": returns window to default settings and removes any user scheduling settings (see page 47) • "Open": opens file selection dialog box for selecting image files (see page 48) • "Open as New": opens file selection dialog box to open an image file with a blank playlist (see page 49) • "Save": saves a Controller image that was previously saved as a file or opens file dialog box for saving a Controller image under a user-specified name and folder (see page 114) • "Save as": opens file dialog box for saving a Controller image under a user-specified name and folder (see page 114) • "Send": select to send Controller image with a playlist to the NET Series Controller (see page 116) • "Receive": select to receive image from your default Controller (see page 50) • "Get log": select to obtain log file from the default Controller (see page 125) • "Page setup": opens window to configure playlist printout (see page 88) • "Print setup": opens window to configure the printer and paper settings (see page 60) • "Print": click to select print template and then print playlist (see page 89) • "Login User": displays login prompt for connecting to NET Series Controller (see page 79) • "Exit": closes WinNET program (see page 92)
"Edit"	Click on this menu item to display the following options (see page 98): • "Edit": use to edit an event in the playlist of a schedule • "Cut": select to remove an event from a playlist and send to WinNET's clipboard • "Copy": select to copy an event in the playlist to WinNET's clipboard • "Paste": select to paste a copied event into the playlist • "Delete": select to remove an event from a playlist

MENU ITEM	FUNCTION
“View”	Check the following options to display the corresponding toolbar, window, or playlist columns (see page 85): • “Schedule Columns” • “Resources” • “Properties” • “Toolbar” • “Status Bar”
“Tools”	Click on this menu item to display the following options: “Control Panel”: opens control panel window (see “ • Performing Unscheduled Device and Switch Actions,” beginning on page 117) • “Controller”: opens window for configuring Controller information (see page 51) • “Set front panel password”: opens window for setting front panel password (see page 45) • “Mail server”: opens window for configuring mail server settings (see page 55) • “Export/Print Templates”: opens window for creating templates that determine the playlist information that is exported or printed (see page 57) • “User defined data”: opens window for configuring user-defined playlist event columns (see page 50) • “Locations”: opens window to add, edit, or delete Controller locations (see page 43) • “User accounts”: opens window to configure user account settings (see page 51) • “Options”: use to configure WinNET viewing and configuration options, including time format, playlist colors, sorting filter for library and switch resource items, and display of playlist columns (see page 63)
“Help”	Click on “About WinNET” to display a window with the WinNET version number

- Main Toolbar: contains icons for some of the most frequently used operations (see Illustration 53 and Table 14, Toolbar Items).

Illustration 53, Main Toolbar

Table 14, Toolbar Items

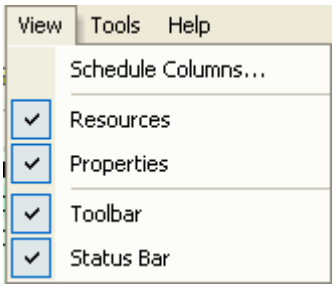
TOOLBAR BUTTON	FUNCTION
	Returns main window to default settings and removes any user scheduling settings (see page 47)
	Opens file selection dialog box to open an image file with a blank playlist (see page 49)
	Opens file selection dialog box for selecting image files (see page 48)
	Saves a Controller image that was previously saved as a file or opens file dialog box for saving a Controller image under a user-specified name and folder (see page 114)
	Displays control panel window (see “ Performing Unscheduled Device and Switch Actions,” beginning on page 117)
	Sends Controller image with a playlist to the NET Series Controller (see page 116)
	Receives image from your default Controller (see “Loading Event Controller Images,” beginning on page 47)
	Obtains log file from the default Controller (see page 125)
	Displays window to add, edit, or delete Controller locations (see page pages 43 and 45)
	Displays window for selecting an export or print template (see page 89)
	Displays a window with the WinNET version number (see page 87)

CONFIGURING THE MAIN WINDOW COMPONENTS

- Hiding/Displaying Toolbars, Windows, and Playlist Columns

  The "View" menu, shown in Illustration 54, may be used to hide or show the playlist column headings, "Resources" window, "Properties" window, main toolbar, and status bar.

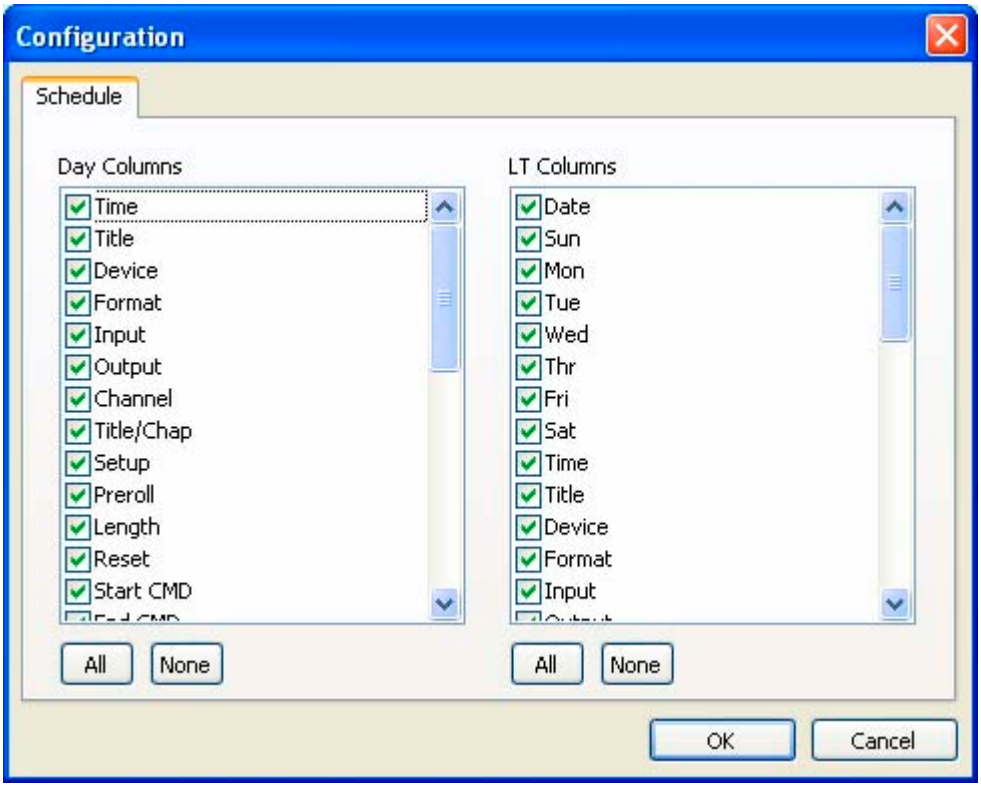
Illustration 54, "View" Menu



➢ To hide/display a window or toolbar item, click on the desired checked item in the "View" menu to hide it on the main window or on an unchecked item to display it. The toolbar/window show/hide function may also be accessed by right clicking on the menu bar, the main toolbar or the "Playlist," "Resources," or "Properties" window title bars. Once the "Resources" and "Properties" windows are removed from their original positions, they may also be hidden by right clicking on each window's title bar and selecting "Hide" in the context menu that appears.

- To hide/display playlist columns, click on “Schedule Columns” in the “View” menu or the “Schedule” tab in the “Configuration” window under “Options” in the “Tools” menu (see “Setting WinNET Viewing and Communication Options,” on page 63). In the “Schedule” tab of the “Configuration” menu that appears (see Illustration 55, Schedule Columns “Configuration” Menu), note that the “Day Columns” listing corresponds to the columns in the playlist day tabs and the “LT Columns” listing corresponds to the columns in the playlist WinNET-LT tab. Perform the following steps:

Illustration 55, Schedule Columns “Configuration” Menu



1. Click on the desired combination of the following:
   - Checked column heading if you want to hide the corresponding column on the playlist or on an unchecked item if you want to display it
   - “All” button to display all of the columns for the corresponding playlist tabs
   - “None” button to remove all columns from corresponding playlist tabs
2. When all selections have been made, click “OK” to displays changes on playlist or “Cancel” to abort changes.

- Moving Windows

The “Resources” and “Properties” windows may be moved to any location on the main window by clicking on the windows’ title bars and dragging the windows to the desired position on the main window. To re-dock the windows in their original positions, click on the windows’ title bars and drag to the far right side of the main window.

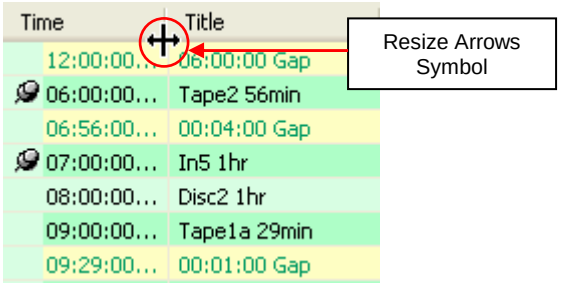
- Rearranging Playlist Column Headings

  To rearrange the order of the playlist column headings, click on the desired heading and drag it over the heading you would like it to displace. The displaced heading will shift to the left of the newly positioned heading.

- Resizing Playlist Column Widths

  To resize a column heading, move the mouse pointer over the right-side border of the column you wish to resize. When the pointer changes to the resize arrows symbol (see Illustration 56, Resizing Playlist Column), you may perform one of the following:

Illustration 56, Resizing Playlist Column



- ➢ Drag the column border to the desired width.
- ➢ Double click to resize the column so it is only wide enough to accommodate the column’s largest field item.

DISPLAYING WINNET VERSION NUMBER

Select “About WinNET” in the “Help” menu or clicking its main toolbar icon to open a window with the WinNET version number (see Illustration 57). Click on the window to close it.

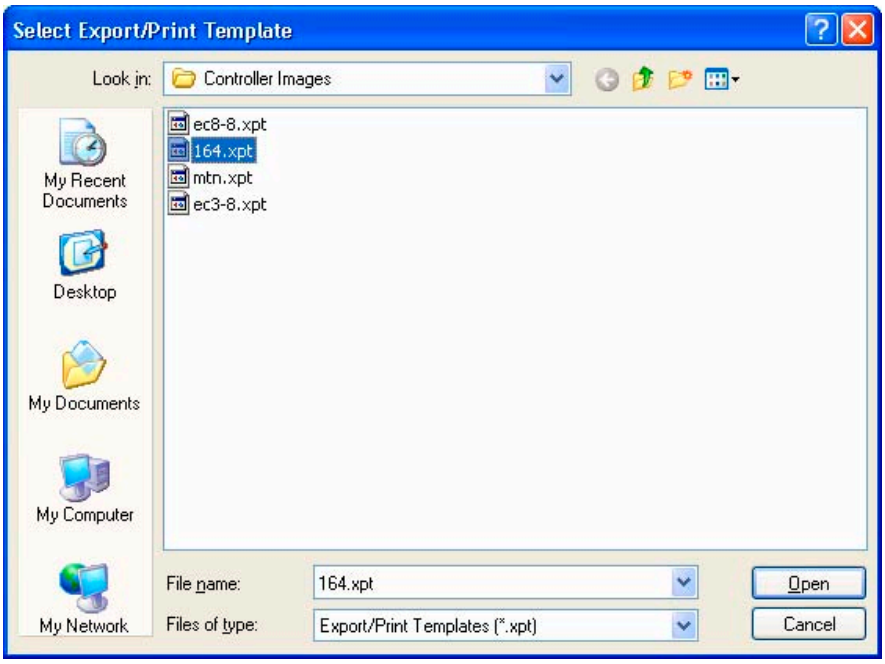
Illustration 57, About WinNET Window

PRINTING PLAYLISTS FROM WINNET

Perform the following steps to print the current playlist from WinNET:

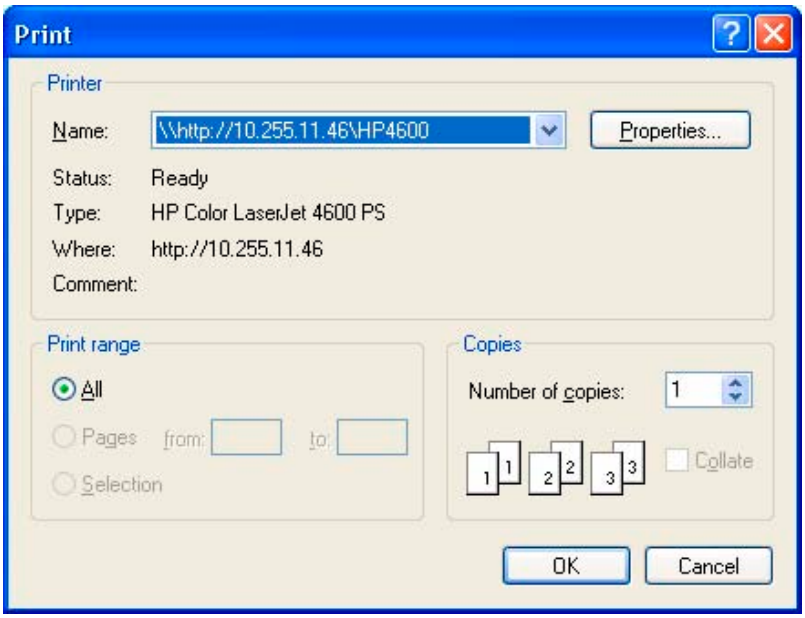
1. Create a print template to select the desired playlist information for printing (see “Creating Templates for Exporting or Printing Playlists,” on page 57).
2. Determine the page layout of your playlist printout (see “Configuring Page Layouts For Playlists Printed from WinNET,” on page 59).
3. Select “Print” in the “File” menu or click the icon on the main toolbar to open the template selection window shown in Illustration 58, “Select Export/Print Template” Window.

Illustration 58, “Select Export/Print Template” Window



4. Choose the desired template from the “File name” list in the “Select Export/Print Template” Window (see Illustration 58) and click “Open,” or double click the template file to open the “Print” window shown in Illustration 59. Click “Cancel” to abort the print.

Illustration 59, “Print” Window



5. In the “Print” window (see Illustration 59), configure the printer and copy settings according to the following steps. Click “OK” to print or “Cancel” to abort the print.

NOTE: You may have already performed these steps through the “Print Setup” window. See “Configuring Printer and Paper Settings for Playlists Printed from WinNET,” on page 60.

- “Printer” section: lets you choose the desired printer from a list of your PC’s available printers. When a printer is chosen, its status appears below the printer “Name” field.
- “Properties” button: click to open a dialog box specific to the printer, so that detailed printer settings can be made.
- “Print range” is fixed at “All.”
- “Copies” section: choose the number of playlist copies you wish to print. If you choose more than one, checking “Collate” causes the printer to print each copy’s pages together and in order. If “Collate” is unchecked, all of the first pages will be printed together, the second pages will be printed together, etc.

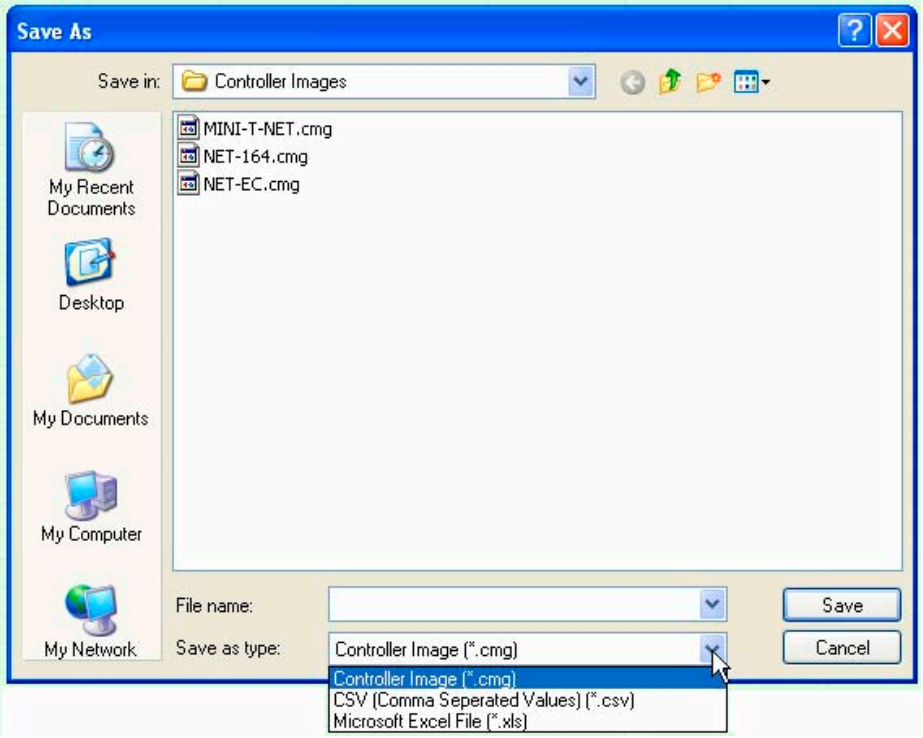
EXPORTING PLAYLISTS INTO MICROSOFT EXCEL® OR A COMMA DELIMITED FORMAT

Perform the following steps to export playlists into comma delimited or Microsoft Excel® formats:

1. Create a template (see “Creating Templates for Exporting or Printing Playlists,” on page 57).

2. Select “Save as” in the “File” menu to open the window shown in Illustration 60, which allows you to export the loaded playlist under a new name and a Microsoft Excel® or comma delimited file format as follows:

Illustration 60, “Save As” Window



a. Select a folder in the “Save in” field. The default is “Controller Images.”

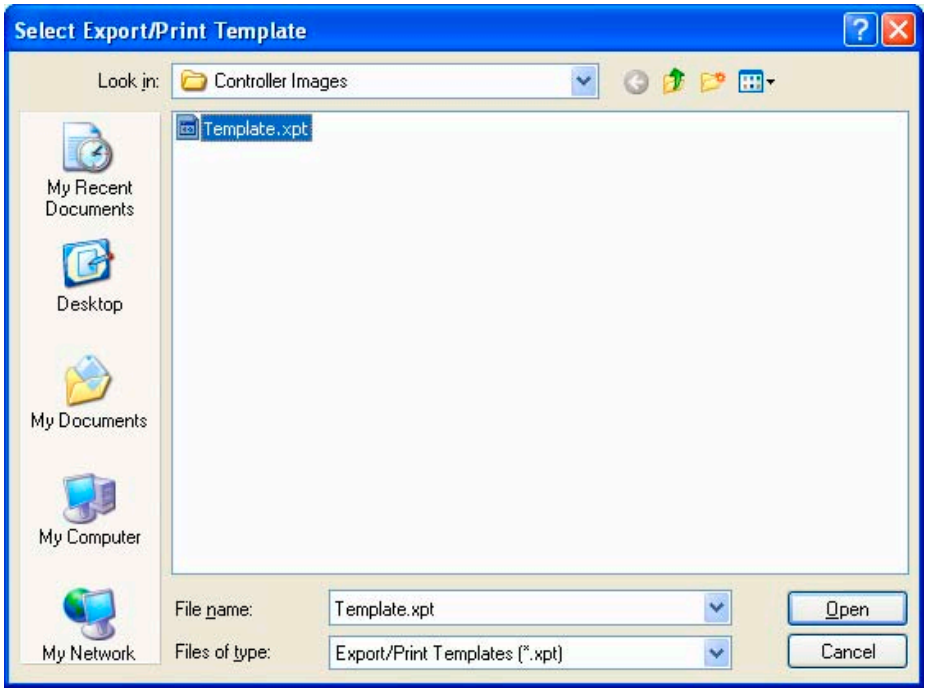
b. Type a name for the exported file in the “File name” field. If you leave the extension off, WinNET puts it on for you.

NOTE: If you enter a name of a file that already exists, WinNET will ask you if you want to overwrite it.

c. Select the export format (Comma Separated or Excel®) in the “Save as type” field.

d. Click “Save” to open the template selection window shown in Illustration 61, “Select Export/Print Template” Window.

Illustration 61, “Select Export/Print Template” Window



3. Choose the desired template from the “File name” list in the “Select Export/Print Template” Window (see Illustration 61) and click “Open” or double click the template file to create the export playlist file. The file can then be opened in your favorite database program and manipulated and printed as desired. Click “Cancel” to abort the export.

LOGGING OUT OF AND EXITING WINNET

To log out and prevent someone from connecting with your rights, you must exit WinNET.

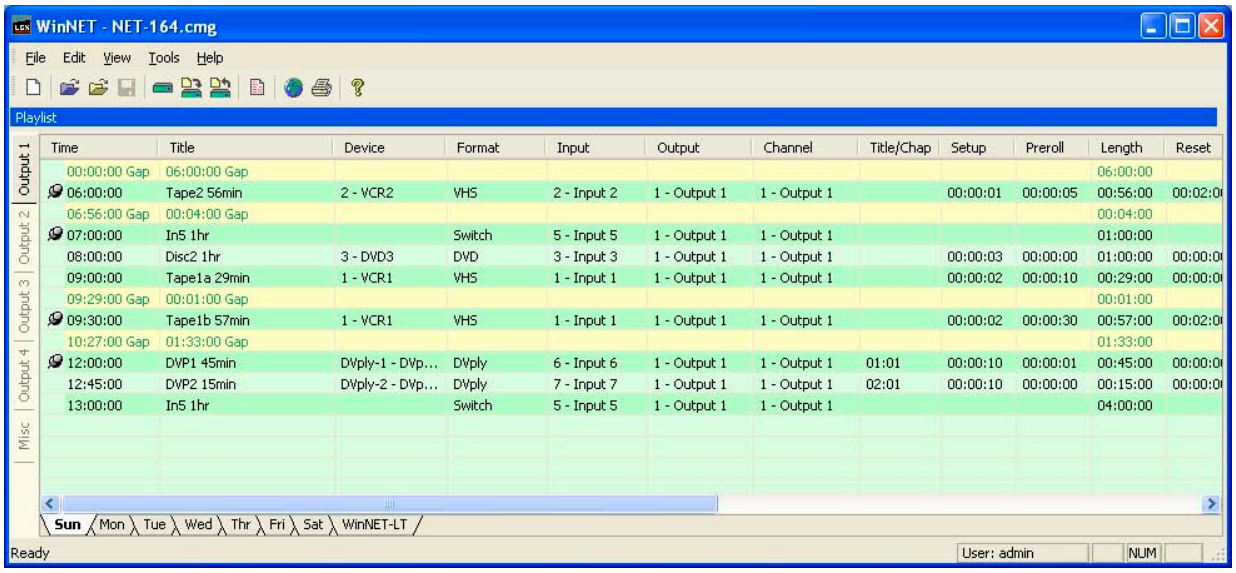
1. Select “Exit” in the “File” menu or click the in the upper right corner of the main window to log out and close WinNET.

2. If a Controller image has not been saved, a box appears asking if you want to discard changes. Click “Yes” to close WinNET, or “No” to abort the exit so you can save.

SCHEDULING A PLAYBACK EVENT

The “Playlist” window, shown in Illustration 62, with the sample image NET-164.cmg loaded, is where an event schedule is created.

Illustration 62, Playlist Window



ABOUT PLAYLIST WINDOW COMPONENTS

Channel Tabs

- Output channel tabs: used to schedule events that contain switches to the selected tab’s assigned output.
- “Misc” channel tab: used to schedule events that do not have a switch.

  If you assign output names in the “Control” tab “Properties” window, they will appear on the channel tabs after the Event Controller image is saved.

  NOTE: The **NET-EC**’s number of outputs and channel/output assignments are entered in the “Control” tab “Properties” window and appear once the Event Controller’s image is saved.

Day Tabs

Day tabs are used to schedule events on specified days. The day tabs perform output and device conflict checking across all of the channel tabs, so that an output or a device can never have more than one event scheduled at the same time.

Each event contains all the starting and ending actions for a program, and thus uses up a block of time for the length of the program. WinNET orders these blocks vertically in the playlist window, one row per event, so that for a particular output on a particular day, you can see the day’s 24 hours divided into programs.

- Locked Events

  If an event is locked, its “Time” is fixed. This allows it to be scheduled away from the end of the previous event or away from the beginning of the day. If this is done, a gap is placed between the events, or at the beginning of the day. Each gap equals the length of time separating the preceding event from the next scheduled event. Gap rows appear in a different color (yellow by default).

- Unlocked Events

  Unlocked events are unfixed, which means they will float upward from where they are dragged in the schedule until their “Time” equals the “End” time of the last scheduled event. If an added or edited event’s time or length cause it to overlap an unfixed event, the unfixed event will move downward in the schedule if it can.

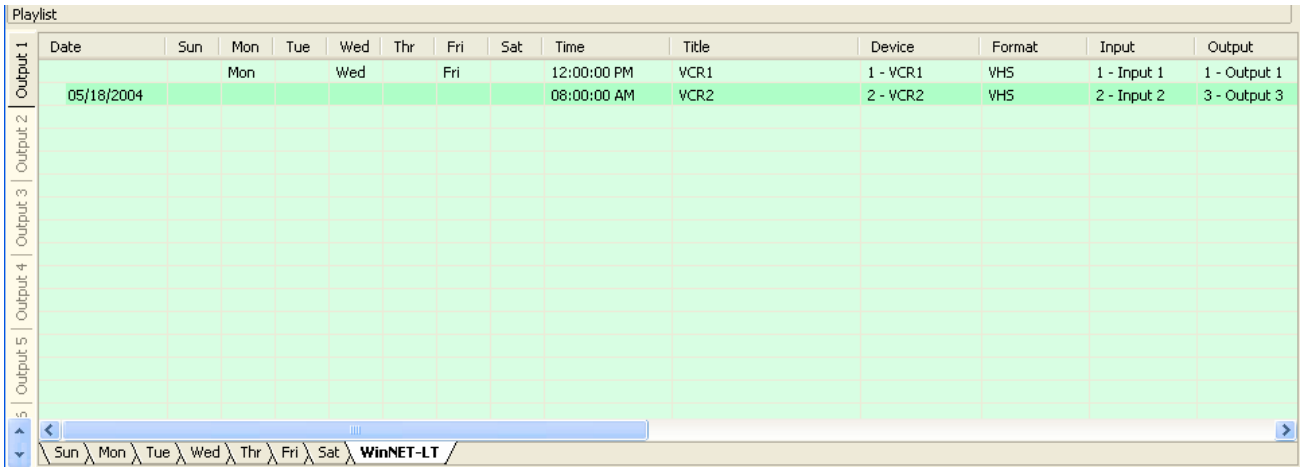
  Open the Sample Controller images included with WinNET to view locked events, unlocked events, and gaps.

NOTE: If adding, editing, or deleting an event causes two events to conflict, an error message appears. If the added/edited event is one of the conflicting events, the event it conflicts with is listed, the error is described, and the outcome is given. If the added/edited/deleted event is not one of the conflicting events, the two conflicting events are listed, the error is described, and the outcome is given. Use this information to correct the conflict.

WinNET-LT Tab

The WinNET-LT tab has its own date/day and time entry and does not assign blocks of time in a linear fashion like the day tabs (see Illustration 63, WinNET-LT Tab Event Pane).

Illustration 63, WinNET-LT Tab Event Pane



The WinNET-LT tab is useful in the following situations:

NOTE: The WinNET-LT tab does not prevent two events from occupying the same time.

- When you would like to use the same event on multiple days, schedule the event on the WinNET-LT tab once and avoid having to recreate or copy the event on multiple day tabs.
- If you would like to create a schedule that encompasses more than the next seven days, use the WinNET-LT tab and schedule according to date.
- Schedule a device-only event without a switch on the WinNET-LT tab to test a device-only event action before sending it to the destination or to perform nonplayback events such as recording.
- Schedule event device, library, and switch event actions on the WinNET-LT tab to edit resource properties and, if desired, ripple changes to all affected playlist events (you must enable the "global resource property changes" option—see "Setting WinNET Viewing and Communication Options," on page 63 for more details).

  NOTE: Resource properties may be edited if the corresponding device, switch, or library item is scheduled **only** on the WinNET-LT tab.

Channel and Day/WinNET-LT Tab Configurations

Each pair of channel and day tabs displays its own event pane. In addition, the WinNET-LT tab displays a single event pane, regardless of the channel. Selecting one of the channel tabs merely causes its output to be the default when adding an event, with the ability to select a different output. The channel tabs will appear as follows based on the Event Controller model (see Table 15, Event Controller Tab Configurations).

Table 15, Event Controller Tab Configurations

LOADED EVENT CONTROLLER IMAGE	CHANNEL TABS	# OF EVENT PANES
No image loaded	1 blank tab	
MINI-T-NET	• Output 1 • Misc.	15 (2 channels x 7 days + 1 WinNET-LT tab)
NET-164	• Output 1–Output 4 • Misc.	36 event panes (5 channels x 7 days + 1 WinNET-LT tab)
NET-EC	• Output 1–Output 8 • Misc. (2–9 channels)	From 15 to 64 event panes (2 to 9 channels x 7 days + 1 WinNET-LT tab)

Event Display Columns

The playlist window columns display the events' fields, giving all the information and actions of the event. When the playlist window contains an event, the columns can be moved and resized by dragging the headers and header boundaries. A horizontal scroll bar at the bottom of the window is used to view all of the columns. For a listing of the fields, see Table 16, Event Display Column Fields.

Table 16, Event Display Column Fields

FIELD	DESCRIPTION
Time	Program's scheduled time: reflects time of any initial switch and the beginning of the program time block. If the event time is fixed (locked), this field will also contain a thumbtack symbol .
Title	Name of the event. If a library or switch item was used, it is the name of the item. Otherwise, it is the name given by the user when the event was added. If the row is a gap, the title is the gap length plus the word "Gap."
Device	Number and name of the event's device, if any.
Format	Format selected for the device/library/switch in the "Properties" window.
Input	Number and name of the device or switch input that will be taken to the output at the scheduled time (shown in "Time" field).
Output	Number and name of the output that is switched to the initial input at the schedule time (shown in "Time" field) and possibly to a fallback input at the end of the event.
Channel	Number and name of the channel in which the event resides.
Title/Chap	Disc title and chapter of a DVply program event.
Setup	• PRO-BUS devices: time the device takes to produce video after a play command • DVply devices: time it takes to cue a title:chapter

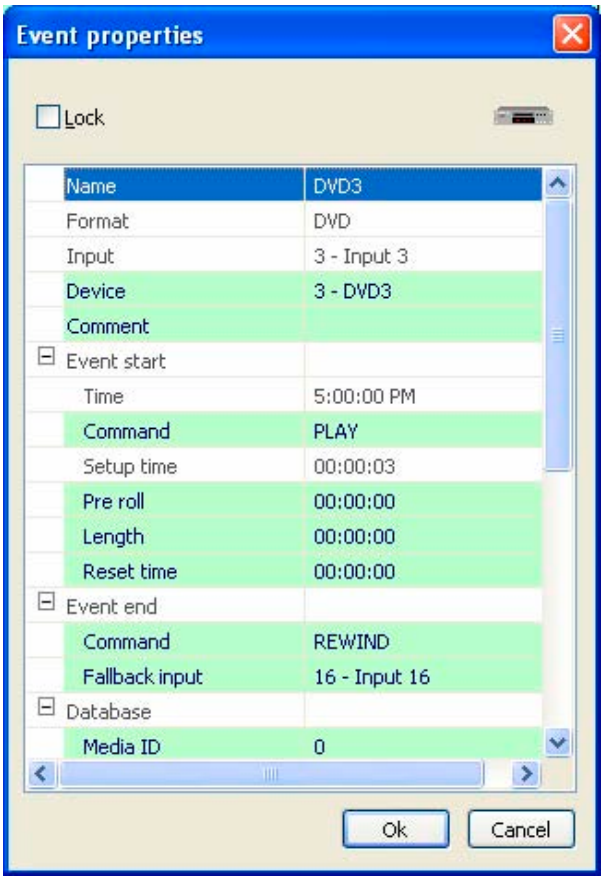
FIELD	DESCRIPTION
Preroll	Indicates amount of unwanted video (black, etc.) at the beginning of the program. "Setup" and "Preroll" are added together and then subtracted from "Time" to get "Start," which is the time of the device command. • For a typical VCR or DVD event, the time progression is as follows: 1. At "Start," a play command is issued. 2. The event waits for "Setup" and "Preroll" to complete before performing the initial switch. "Start" is not included in the time block used for vertical positioning. • For a typical DVply event the time progression is as follows: 1. At "Start" a cue command is issued. 2. The event waits for "Setup" to complete and then issues a play command. 3. The event then waits for "Preroll" to complete before performing the initial switch. "Start" is not included in the time block used for vertical positioning.
Length	Length of the program block, the time between initial and ending switches, if any, and the time from "Time" to "End" where ending actions occur.
Reset	Time the device is busy and unavailable for scheduling after the end of the block ("End"), usually due to "Rewind" time.
Start CMD	Device command that occurs at "Start" (usually "Play" or "Cue/Play" for DVply controlled devices).
End CMD	Device command that occurs at "End," (usually "Stop" or "Rewind").
Fallback	Indicates the input that is switched to the output at "End," if any. Back to back events have the "End" time of the first event equal the "Time" of the second event. This puts the first event's fallback switch at the same time as the second event's initial switch. If this occurs, the NET Series Event Controller cancels the fallback switch.
Start	Indicates time of the initial device command, found by subtracting "Setup" plus "Preroll" from "Time."
End	Indicates end of the Program block. It is the time of ending device command and fallback switch, if any. It is calculated by adding "Length" to "Time."
Print	Determines if the event will be included in a print operation.
Export	Determines if the event will be included in an export operation.
Comment	Used to enter an event comment up to 31 characters.
Media ID	Assigned by user as a library tracking number.
Field Name (1–11)	Playlist column headings that may be assigned by user.

ADDING/EDITING/DELETING ALL EVENTS

- **Adding an Event to the Day/Misc Tabs**

  Drag an icon from the “Resources” window’s “Device,” “Library,” or “Switch” tabs into a playlist window day or “Misc” tab event pane. This opens an “Event properties” box with editable event information like the one shown in Illustration 64, Day/Misc Tab Event Properties Box.

Illustration 64, Day/Misc Tab Event Properties Box



To add or change the event information, click on each of the desired editable fields (described on pages 101–110) and enter the new information. An icon can be dragged and dropped into the day/misc tabs in the following five ways:

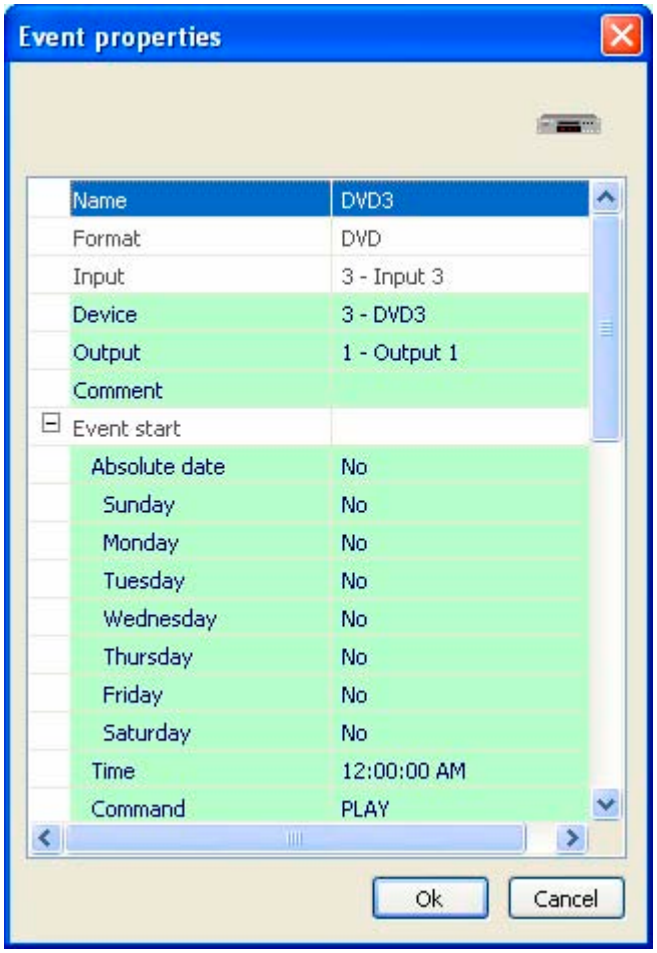
- Empty Window—the event is locked and given the initial time of 12:00 A.M. (Unless a previous day’s event overlaps midnight, in which case, its “End” time is used.)
- Initial Gap—if an event is dragged into a gap at the start of the day (1st row), it is locked and given the initial time of 12:00 A.M. (Unless a previous day’s event overlaps midnight, in which case, its “End” time is used.)
- Any Other Gap—the event is initially an unlocked event with a “Time” equal to the “End” time of the previous event.

- On Top of an Unlocked Event—the new event is initially an unfixed event and is given the “Time” of the event on which it was dragged. The existing event is pushed downward out of the way if possible. If not, an error box appears. Dragging on top of a locked event instantly generates an error.
- Below the Bottom Event—the event is initially an unfixed event with a “Time” equal to the “End” time of the previous event.

- **Adding an event to the WinNET-LT Tab**

  Drag an icon from the “Resources” window’s “Device,” “Library,” or “Switch” tabs into the playlist window WinNET-LT event pane. This opens an event properties box like the one shown in Illustration 65, WinNET-LT Event Properties Box.

Illustration 65, WinNET-LT Event Properties Box



To add or change the event information, click on each of the desired editable fields (described on pages 101–110) and enter the new information. The WinNET-LT event properties box is the same as the event edit box displayed for the day/misc tabs with the following exceptions.

1. There is no Lock/Unlock checkbox; all events must have a time entered.

2. If an output assignment is desired, the output must be selected from the drop down menu.
3. A date and/or day(s) must be selected as follows:

   NOTE: If a date is selected, the event happens on that date. If days are selected, the event happens on those days. If both are selected, the event happens on the date and on the days.

   a. To select a date, change “Absolute date” to “Yes.” A date field appears below to allow date entry.
   b. To enter a day, change the desired day field(s) to “Yes.” These fields can be toggled quickly by double clicking on the day name.
4. You may edit the properties of a resource that has **ONLY** been dragged into the “Playlist” of the WinNET-LT tab by performing the following steps:

   a. Select “Option” under the “Tools” menu.
   b. Select the “Application” tab of the “Configuration” window. Check the “Allow global resource property changes” checkbox.
   c. Click on the desired editable fields in the “Properties” window and make changes.
   d. WinNET displays a dialog box that gives you the option to merge the resource editing changes into all events in the WinNET-LT tab that were created from the same resource.

- **Copying/Cutting/Pasting an Event**

  To move or replicate an event or group of events to another location on the playlist, select the desired event(s). Copy, cut (if you wish to move event), and paste by selecting the function you wish to perform from either the “Edit” menu or in the right-click popup menu.

  In the “Event Properties” box that appears once the paste has been completed, click “Ok” if one event was pasted or “Ok to all” if more than one event was pasted. In the day channel tabs, WinNET will abort the paste and display an error message specifying the problem if the events surrounding your chosen location conflict in date or time with the pasted event.

- **Editing an Event**

  To edit an event in the playlist, double click event or right click event and choose “Edit” in the popup menu that appears. Edit the event information in the “Event properties” box that appears. To add or change the event information, click on each of the desired editable fields (described in the following sections) and enter the new information.

- **Deleting an Event**

  To delete an event, select it and press the “Delete” key, or right click the event and choose “Delete” in the popup menu that appears. You will be prompted for confirmation before the event is deleted. If the first event in the window is deleted, the next event is locked in place, if necessary. If any other event is deleted, any unlocked events immediately below it will float up until they rest against the event above (unless this causes a device conflict, in which case the first unlocked event will be locked in place).

ADDING/EDITING DEVICE EVENTS

Adding or editing events from the “Resources” “Device” tab opens boxes like the ones shown in this section. Click “OK” to submit the event or “Cancel” to abort the add/edit.

- PRO-BUS-Controlled Devices

  If the device is a VCR or DVD format, the box in Illustration 66, PRO-BUS-Controlled Device Event Properties Window appears. Refer to Table 17, Editable PRO-BUS-Controlled Device Event Fields, for a description of the editable event information fields for a PRO-BUS-controlled device.

Illustration 66, PRO-BUS-Controlled Device Event Properties Window

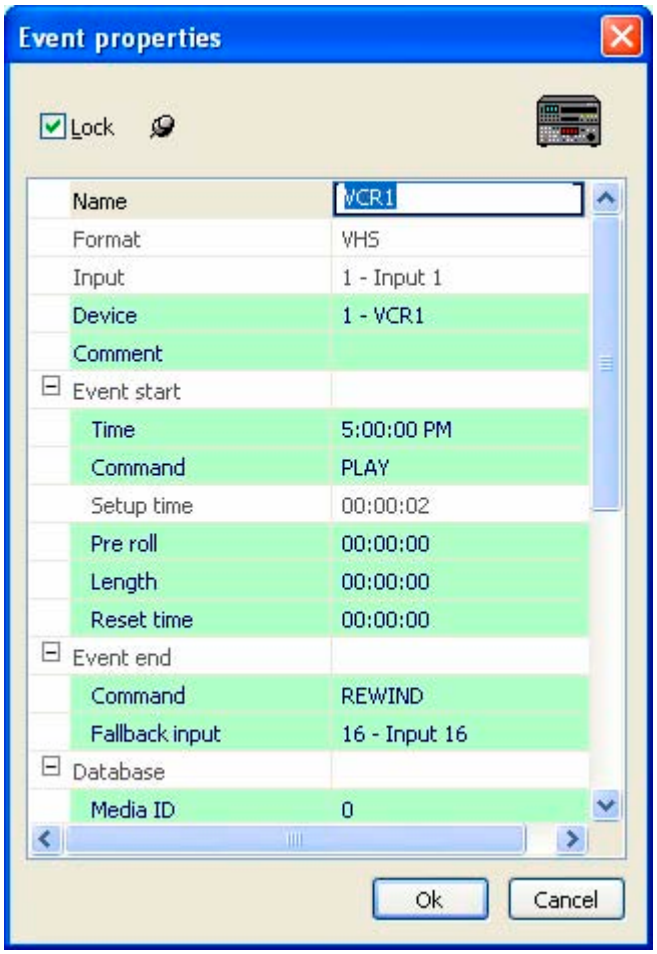


Table 17, Editable PRO-BUS-Controlled Device Event Fields

FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event's time is fixed and can be edited. Checking this box enables the "Time" field.
Name	Allows a name of up to 31 characters to be entered.
Device	Allows a different device of the same format to be chosen. Its associated input will appear in the "Input" field.
Comment	Allows up to 31 characters to be entered.
Time	If the event is locked, the event "Time" can be modified. This is the scheduled "On-Air" time of the event.
Event Start Command	Can be chosen from the following commands: "Play," "Stop," "Rewind," and "Record." It will almost always be "Play."
Preroll	Enter as needed. Indicates amount of video at start of a program that you do not want playing on air.
Length	This must be entered to indicate the duration of the event.
Reset time	Enter as needed. Only implemented if the end command is "Rewind." Indicates how long a playback device will be busy and unavailable for scheduling after the end of a program.
Event End Command	Can be chosen from the following commands: "Play," "Stop," "Rewind," and "Record." It will usually be "Rewind" or "Stop." For DVD, check your interface manual and switches to determine the actions performed by the "Rewind" and "Stop" commands. By default, "Rewind" does a DVD full stop (back to beginning), and "Stop" stops the DVD at the current location.
Fallback input	Used to enter the input to be taken to the output at the end of the event.
Media ID	Assign as a library tracking number.
Field Name 1–x	Playlist column headings you may assign.
Print	Select "Yes" to enable record for printing. If "No" is selected, then the record can only be printed by checking the "Export/print all records" option under the "Export/Print templates" window.
Export	Select "Yes" to allow record to be exported into comma delimited or Microsoft Excel® formats. If "No" is selected, then the record can only be printed by checking the "Export/print all records" option under the "Export/Print templates" window.

- GPI Device

  If the device is a GPI format, the box in Illustration 67, GPI Device Event Properties Window, appears. Click “OK” to submit the event or “Cancel” to abort the add/edit. Refer to Table 18, Editable GPI Device Event Fields, for a description of the editable event information fields for a GPI device.

Illustration 67, GPI Device Event Properties Window

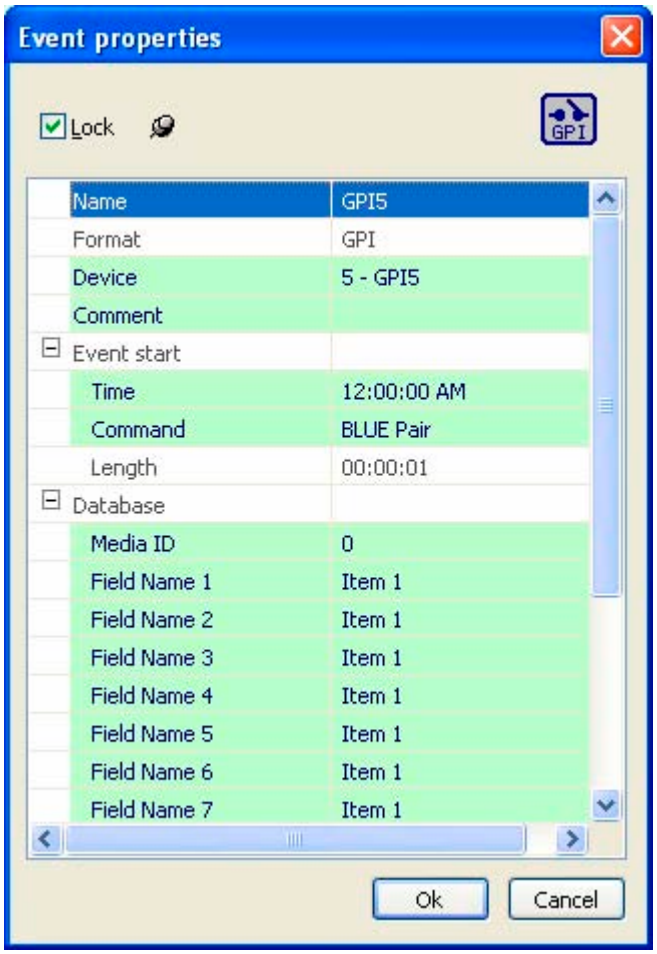


Table 18, Editable GPI Device Event Fields

FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event’s time is fixed and can be edited. Checking this box causes the “Time” field below to become enabled.
Name	Allows a name up to 31 characters to be typed.
Device	Allows a different device of the same format to be chosen.

FIELD	DESCRIPTION
Comment	Allows up to 31 characters to be typed. If the event is locked, the event "Time" can be modified. This is the scheduled "On-Air" time of the event.
Start Command	Allows you to choose the pair of wires on the PRGPI interface that will be closed, the blue, orange, green, or brown pair.
Length	Fixed at 1 second

- DVply-Controlled Device

  If the device is a DVply format, the box in Illustration 68, DVply-Controlled Device Event Properties Window, appears. Click "OK" to submit the event or "Cancel" to abort the add/edit. Refer to Table 19, Editable DVply-Controlled Device Event Fields, for a description of the editable event information fields for a DVply-controlled device.

Illustration 68, DVply-Controlled Device Event Properties Window

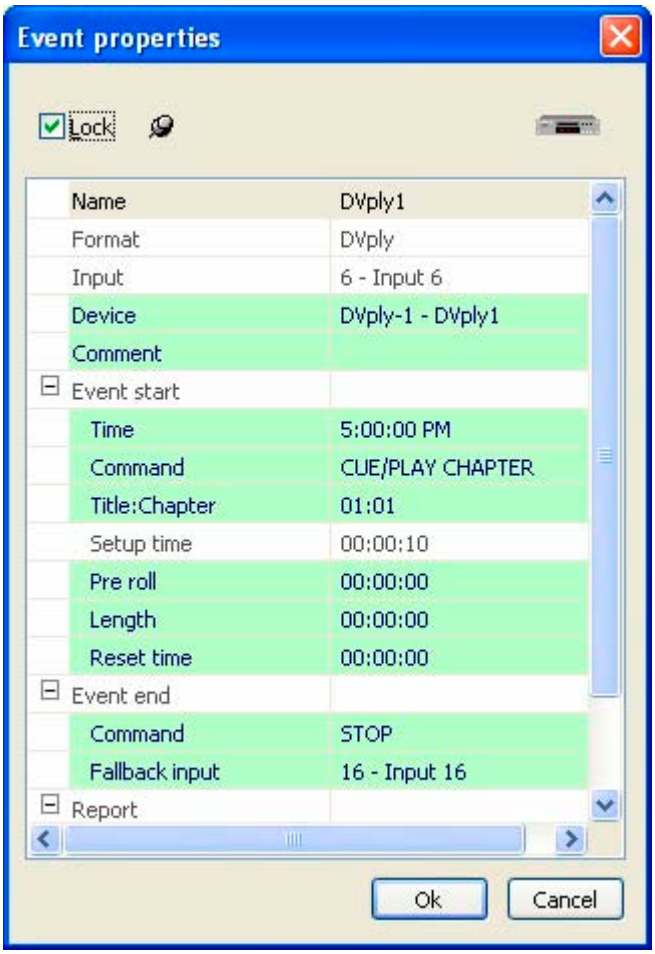


Table 19, Editable DVply-Controlled Device Event Fields

FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event's time is fixed and can be edited. Checking this box causes the "Time" field below to become enabled.
Name	Allows a name up to 31 characters to be typed.
Device	Allows a different device of the same format to be chosen. Its associated input will appear in the Input field.
Comment	Allows up to 31 characters to be typed. If the event is locked, the event "Time" can be modified. This is the scheduled "On-Air" time of the event.
Start Command	Choose from the following commands: "Play," "Stop," "Cue/Play," "Pause," and "Record." It will almost always be "Cue/Play." Title:Chapter is the program location on the disc. Setup is fixed in the device properties.
Preroll	Enter as needed.
Reset time	Reset time is unused.
Length	Enter duration of the event.
Event End Command	Choose from the following commands: "Play," "Stop," "Cue/Play," "Pause," and "Record." It will usually be "Stop."
Fallback input field	If desired, enter the input to be taken to the output at the end of the event.

ADDING/EDITING LIBRARY EVENTS

Adding or editing events from the “Library” tab opens boxes like the ones shown in this section.

- PRO-BUS-Controlled Device Media

  If the library item is a VCR or DVD format, the box in Illustration 69, PRO-BUS-Controlled Device Media Event Properties Window, appears. Click “OK” to submit the event or “Cancel” to abort the add/edit. Refer to Table 20, Editable PRO-BUS-Controlled Device Media Event Fields, for a description of the editable event information fields for PRO-BUS-controlled device media.

Illustration 69, PRO-BUS-Controlled Device Media Event Properties Window

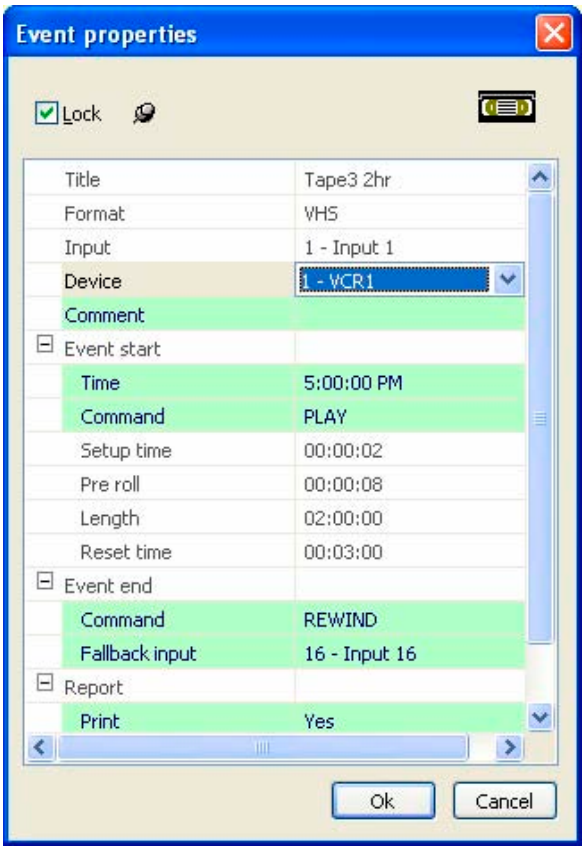


Table 20, Editable PRO-BUS-Controlled Device Media Event Fields

FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event’s time is fixed and can be edited. Checking this box causes the “Time” field below to become enabled.
Device	Allows a same format device to be chosen. Its associated input will appear in the “Input” field.

FIELD	DESCRIPTION
Comment	Allows up to 31 characters to be typed. If the event is locked, the event “Time” can be modified. This is the scheduled “On-Air“ time of the event.
Event Start Command	Choose from the following commands: “Play,” “Stop,” “Rewind,” and “Record.” It will nearly always be “Play.”
Setup, Preroll, Length, and Reset time	Fixed in the device and library item properties. Reset time is only used if the end command is “Rewind.”
Event End Command	Choose from the following commands: “Play,” “Stop,” “Rewind,” and “Record.” It will usually be “Rewind” or “Stop.” For DVD, check your interface manual and switches to determine the actions performed by the “Rewind” and “Stop” commands. By default, “Rewind” does a DVD full stop (back to beginning), and “Stop” stops the DVD at the current location.
Fallback input field	Enter the input to be taken to the output at the end of the event.

- DVply-Controlled Device Media

  If the library item is a DVply format, the box in Illustration 70, DVply-Controlled Device Media Event Properties Window, appears. Click “OK” to submit the event or “Cancel” to abort the add/edit. Refer to Table 21, Editable DVply-Controlled Device Media Event Fields, for a description of the editable event information fields for DVply-controlled device media.

Illustration 70, DVply-Controlled Device Media Event Properties Window

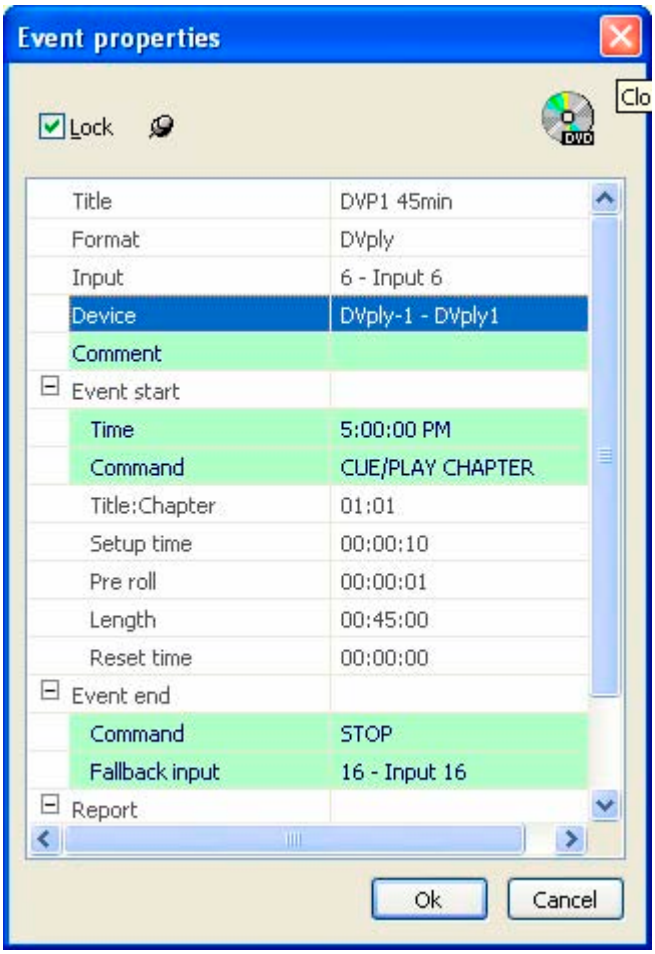


Table 21, Editable DVply-Controlled Device Media Event Fields

FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event’s time is fixed and can be edited. Checking this box causes the “Time” field below to become enabled.
Device	Allows a same format device to be chosen. Its associated input will appear in the Input field.
Comment	Allows up to 31 characters to be typed. If the event is locked, the event “Time” can be modified.

FIELD	DESCRIPTION
Time	Scheduled “On-Air“ time of the event.
Event Start Command	Choose from the following commands: “Play,” “Stop,” “Cue/Play,” “Pause,” and “Record.” It will almost always be “Cue/Play.”
Title:Chapter, Setup, Preroll, and Length	Fixed in the device and library properties. Reset time is unused.
Event End Command	Choose from the following commands: “Play,” “Stop,” “Cue/Play,” “Pause,” and “Record.” It will usually be “Stop.“
Fallback input field	Enter the input to be taken to the output at the end of the event.

ADDING/EDITING SWITCH EVENTS

Adding or editing events from the Switch tab opens the box shown in Illustration 71, Switch Event Properties Window. Click “OK” to submit the event or “Cancel” to abort the add/edit. Refer to Table 22, Editable Switch Event Fields, for a description of the editable event information fields for switches.

Illustration 71, Switch Event Properties Window

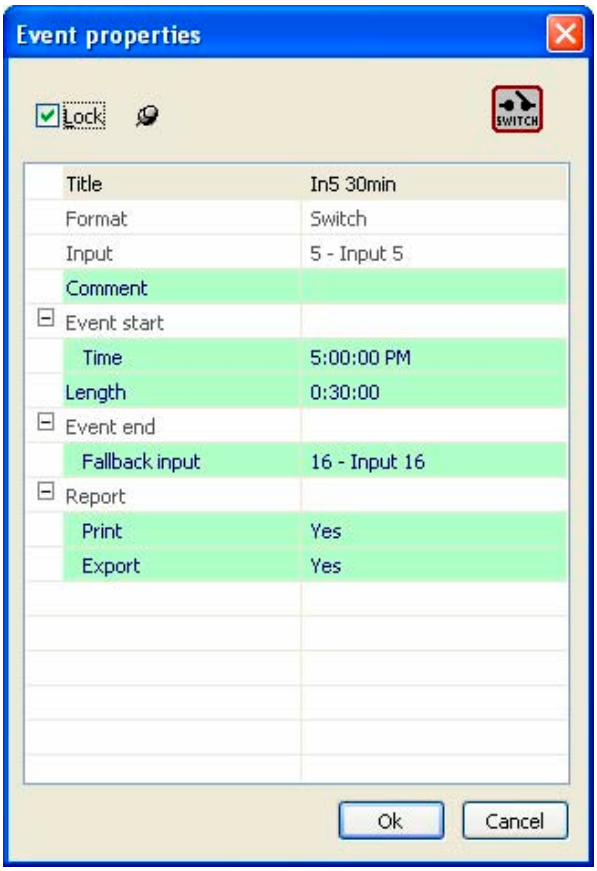


Table 22, Editable Switch Event Fields

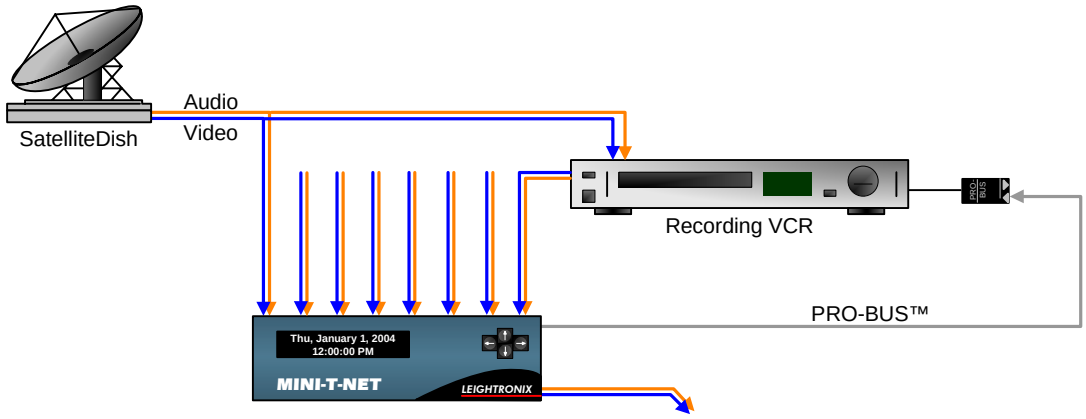
FIELD	DESCRIPTION
Lock Box	At the top is a checkbox for locking or unlocking the event. A locked event's time is fixed and can be edited. Checking this box causes the "Time" field below to become enabled.
Comment	Allows up to 31 characters to be typed.
Time	If the event is locked, the event "Time" can be modified. This is the scheduled "On-Air" time of the event.
Length	Defaults to the value in the switch item, but it can be changed to any desired event duration.
Fallback input field	Enter the input to be taken to the output at the end of the event.

SCHEDULING A RECORDING EVENT

RECORDING WITHOUT A SWITCH

Refer to Illustration 72, Example of Typical Setup for Recording Signal Feed without Switch, throughout the following steps. While Illustration 72 shows a MINI-T-NET system, the setup is similar for the NET-164 and NET-EC.

Illustration 72, Example of Typical Setup for Recording Signal Feed without Switch



1. Select the WinNET-LT tab.
2. Schedule the device action by dragging desired recording device icon onto playlist. In the "Event Properties" window that appears, perform the following steps:
   a. Change "Output" field to one of the following options:
      - If you only wish to record, select "<None>."
      - If you wish to record while a signal is transmitting on-air, select the on-air output on the MINI-T-NET/NET-164 or the NET-EC's switcher.

- **NET-164** and **NET-EC** only—if you wish to record and display video on a monitor, select the monitor output on the NET-164 or the NET-EC's switcher.

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

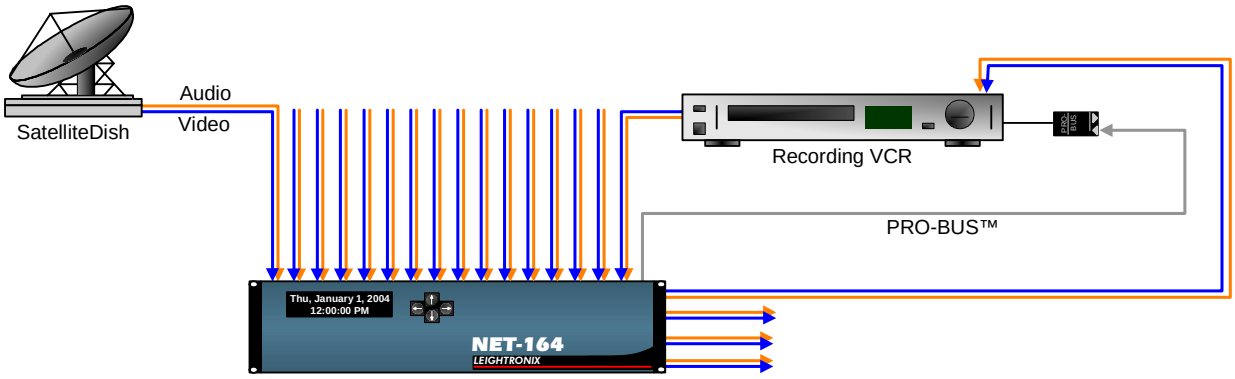
f. Select "Record" in "Command" field.

RECORDING WITH A SWITCH

NOTE: The following steps only apply to the **NET-164** and **NET-EC**.

Refer to Illustration 73, Example of Typical Setup for Recording Signal Feed with Switch, throughout the following steps.

Illustration 73, Example of Typical Setup for Recording Signal Feed with Switch



1. Select the WinNET-LT tab.

2. Schedule a device action by dragging desired recording device icon onto playlist. In the "Event Properties" window that appears, perform the following steps:

a. Change "Output" field to one of the following options:

- If you only wish to record, select "<None>."
- If you wish to record while a signal is transmitting on-air, select the on-air output on the NET-164 or the NET-EC's switcher.
- **NET-164** and **NET-EC** only—if you wish to record and display video on a monitor, select the monitor output on the NET-164 or the NET-EC's switcher.

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

f. Select “Record” in “Command” field.

3. If necessary, create a new switch under the “Switch” tab for the feed source.

4. Drag feed source switch icon onto playlist. In the “Event Properties” window that appears, perform the following steps:

a. In the “Output” field, select the NET-164 or NET-EC’s switcher output connected to your recording device.

b. Select day/date of event.

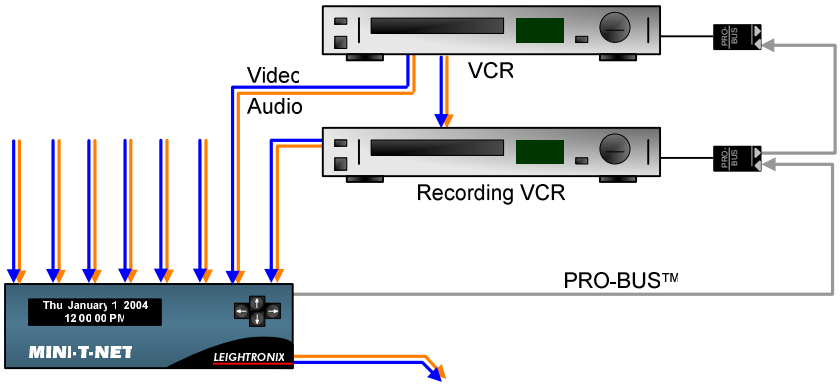
c. Select time of event.

d. Set length of event.

DUBBING WITHOUT A SWITCH

Refer to Illustration 74, Example of Typical Setup for Dubbing without Switch, throughout the following steps. While Illustration 74 shows a MINI-T-NET system, the setup is similar for the NET-164 and NET-EC.

Illustration 74, Example of Typical Setup for Dubbing without Switch



1. Select the WinNET-LT tab.

2. Schedule a recording device action by dragging desired recording device icon onto playlist. In the “Event Properties” window that appears, perform the following:

a. Change “Output” field to one of the following options:

- If you only wish to record, select “<None>.”
- If you wish to record while a signal is transmitting on-air, select the on-air output on the MINI-T-NET/NET-164 or the NET-EC’s switcher.
- **NET-164** and **NET-EC** only—if you wish to record and display video on a monitor, select the monitor output on the NET-164 or the NET-EC’s switcher.

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

f. Select “Record” in “Command” field.

3. Schedule a playback device action by dragging icon of playback device hardwired to recording device onto playlist. In the “Event Properties” window that appears, perform the following:

a. Change “Output” to “<None>.”

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

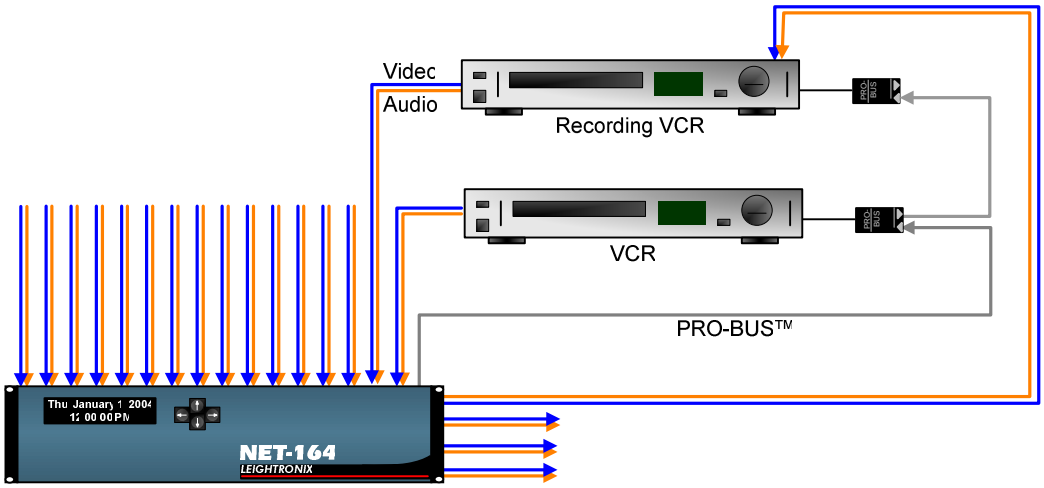
f. Select “Play” in “Command” field.

DUBBING WITH A SWITCH

NOTE: The following steps only apply to the **NET-164** and **NET-EC**.

Refer to Illustration 75, throughout the following steps.

Illustration 75, Example of Typical Setup for Dubbing with a Switch



1. Select the WinNET-LT tab.

2. Schedule a recording device action by dragging desired recording device icon onto playlist. In the “Event Properties” window that appears, perform the following:

a. Change “Output” field to one of the following options:

- If you only wish to record, select “<None>.”

- If you wish to record while a signal is transmitting on-air, select the on-air output on the NET-164 or the NET-EC's switcher.
- **NET-164** and **NET-EC** only—if you wish to record and display video on a monitor, select the monitor output on the NET-164 or the NET-EC's switcher.

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

f. Select "Record" in "Command" field.

3. Schedule a playback device action by dragging desired playback device icon onto playlist. In the "Event Properties" window that appears, perform the following:

a. In the "Output" field, select the NET-164 or NET-EC's switcher output connected to your recording device.

b. Select day/date of event.

c. Select time of event.

d. Set length of event.

e. Set preroll, if desired.

f. Select "Play" in "Command" field.

SAVING CONTROLLER IMAGES

- **"Save" Option**

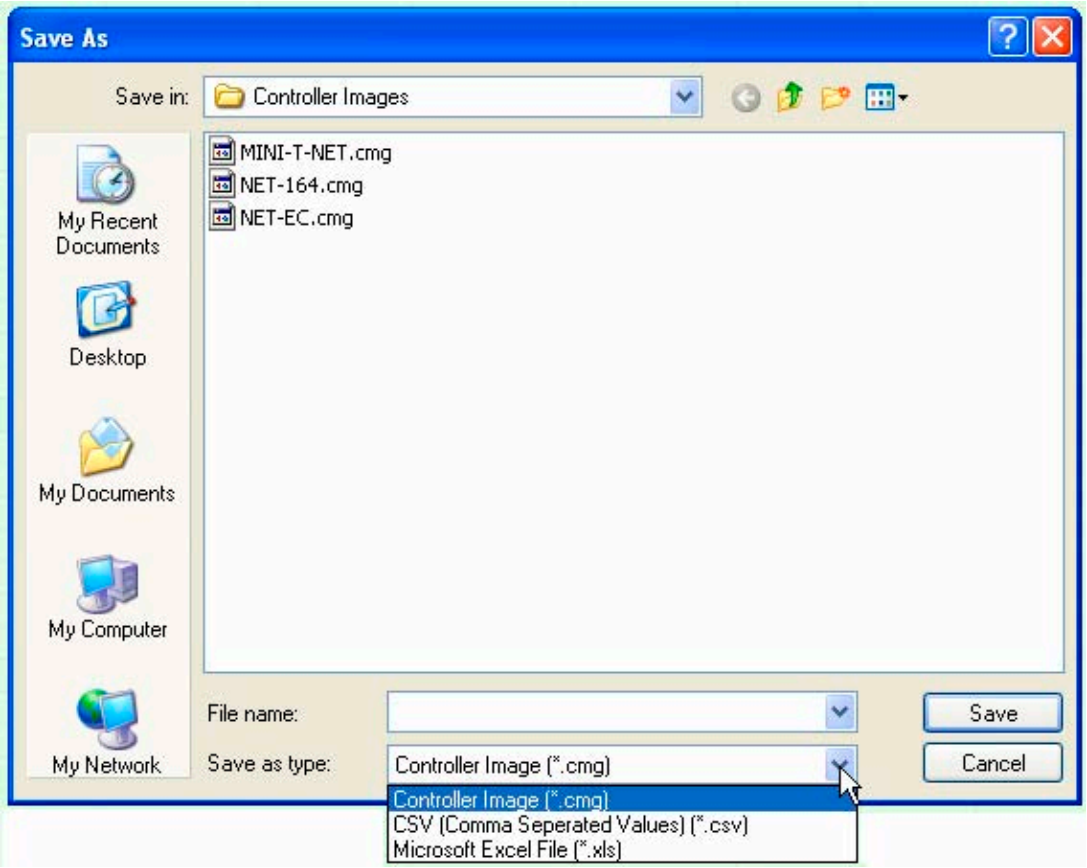
  If a loaded Controller image has been modified, or not saved locally in the case of a received image or a new image, the "Save" option becomes enabled. Select "Save" from the "File" menu or by clicking its icon.

  - If the Controller image already has a local name, visible in the title bar (WinNET – image.cmg), "Save" saves the loaded image to that name without prompting, overwriting the old file.
  - If the image does not have a name, "Save" opens the "Save as" box shown in Illustration 76, "Save As" Window, allowing a name and folder to be specified.

- **"Save as" Option**

  The "Save as" option allows you to save the loaded Controller image under a new name and, if desired, a template filter of your choosing. Select "Save as" in the "File" menu to open the box shown in Illustration 76, "Save As" Window, and perform the following steps:

Illustration 76, "Save As" Window



1. From the "Save in" field, select a folder in which to save the Controller image file. The default folder is "Controller Images."
2. Type a name for the image in the "File name" field.
3. Ensure the "Controller Image (*.cmg)" option has been selected in the "Save as type" field.
4. Click "Save" to save the image under the entered name or "Cancel" to abort the "Save as." If you enter a name of a file that already exists, WinNET will ask you if you want to overwrite it.

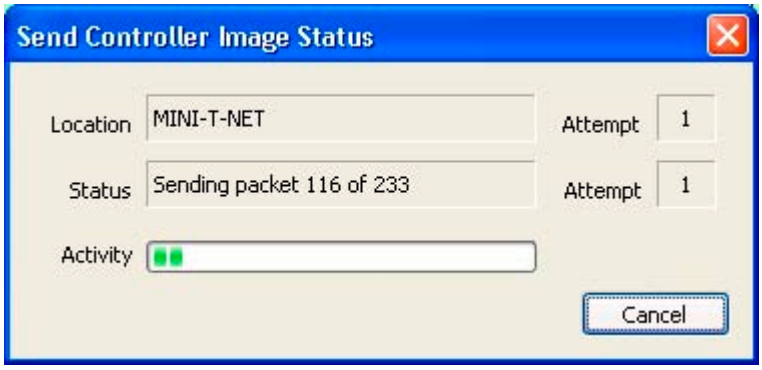
SENDING CONTROLLER IMAGES

After creating an Event Controller image with a playlist of event actions, the image must be sent to the NET Series Controller to run the scheduled programs as follows:

1. Select “Send” in the “File” menu or click its toolbar icon to open a box confirming that you want to send the loaded image to the default Controller.

2. Click “Yes” to open the status box shown in Illustration 77, which lists location name, send status, progress bar, and connection and send attempts.

Illustration 77, “Send Controller Image Status” Window



NOTE: To interrupt the send, click the “Cancel” button. If the send appears to be stalled, cancel it and check your default location IP address and your network connections.

3. “Send Completed” appears when transfer is finished. The Controller will now contain and execute the image data.

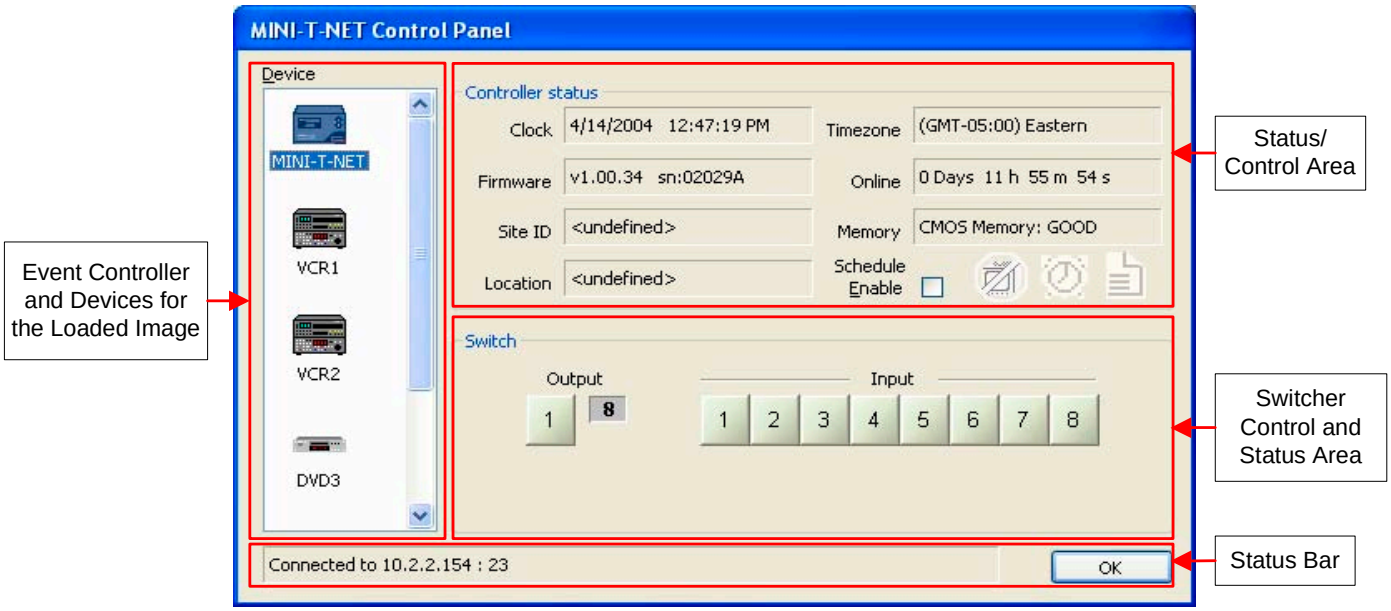
PERFORMING UNSCHEDULED DEVICE AND SWITCH ACTIONS

Use the control panel to control devices and perform switching actions without scheduling as follows:

NOTE: An image must be loaded to enable the control panel window.

1. Open the control panel window (see Illustration 78) by clicking “Control Panel” under the “Tools” menu or icon on main toolbar.

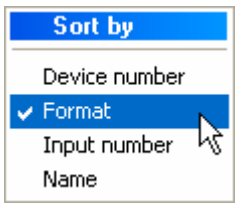
Illustration 78, Control Panel Window



The Control Panel will attempt to connect to the default Controller. If it succeeds, the status bar at the bottom says “Connected.” If it fails, it says “Connecting.” Check the IP address and network connections. WinNET uses the properties and devices of the loaded Event Controller image as an integral part of the control panel. **For this reason, it is important that the loaded Event Controller image match the default Event Controller**.

2. If desired, sort the device icon order of appearance by right-clicking in the “Device” column and selecting one of the sorting filters in the popup menu that appears (see Illustration 79, Control Panel Device Sorting Menu).

Illustration 79, Control Panel Device Sorting Menu



3. Perform one of the following:

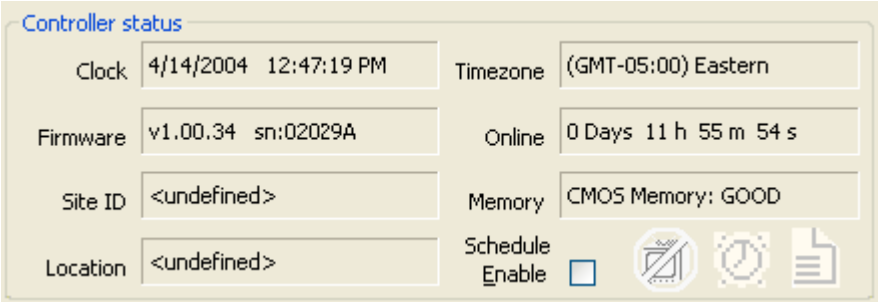
- View Event Controller status (see page 118).
- Enable/disable schedule (see page 118).
- Control devices and view device statuses (see page 119).
- Perform a forced switch and view switcher status (see page 121).

4. When finished, click “OK” to close the control panel window.

VIEWING STATUS OF EVENT CONTROLLER

When the Event Controller is selected in the control panel window’s “Device” list, the “Controller status” section shows the following Controller status items (see Illustration 80, Control Panel: Controller Status Display):

Illustration 80, Control Panel: Controller Status Display



- Controller clock and time zone
- Firmware version and serial number
- “Online”: Controller time since last boot
- Site ID and location
- Memory status
- Schedule Enable (see “Disabling/Re-Enabling Schedule” on page 118)
- Status LEDs: correspond to the Event Controller’s front panel LEDs (see “LEDs” on page 15, for a list of the status LED descriptions)

DISABLING/RE-ENABLING SCHEDULE

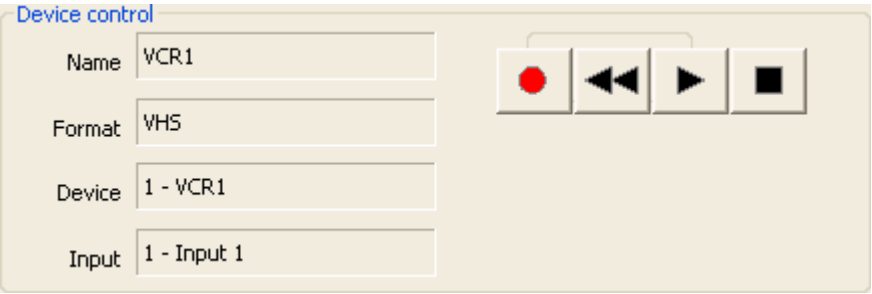
If you have sent an Event Controller image with scheduled event actions to your Event Controller, you may disable the schedule from the control panel window by clicking on the “Schedule Enable” box (the displayed checkmark will disappear; see Illustration 80, Control Panel: Controller Status Display). To re-enable the schedule, click the “Schedule Enable” box (the checkmark will reappear).

CONTROLLING DEVICES AND VIEWING DEVICE STATUSES

- **VCRs**

  When a VCR is selected in the control panel window's "Device" list, the "Device control" section shown in Illustration 81, Control Panel: VCR Device Control, is displayed.

Illustration 81, Control Panel: VCR Device Control



  - Device status: the left side of the section displays the name, format, device number, and input number given to the device in the loaded image. The "Device" number is the PRO-BUS address set via switches on the PRO-BUS interface.
  - Control options: on the right side of the section (from left to right) are the record, rewind, play, and stop buttons for controlling the VCR.

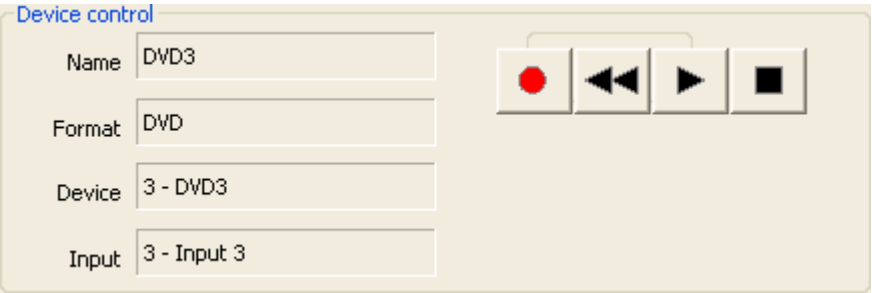
    1. To rewind, play, or stop, click the corresponding button.

    2. To record, click the record button and then click the play button.

- **DVD Players**

  When a DVD player is selected in the control panel window's "Device" list, the "Device control" section shown in Illustration 82, Control Panel: DVD Player Device Control, is displayed.

Illustration 82, Control Panel: DVD Player Device Control



  - Device status: the left side of the section displays the name, format, device number, and input number given to the device in the loaded image. The "Device" number is the PRO-BUS address set via switches on the PRO-BUS interface.

- Control options: on the right side of the section (from left to right) are the record, rewind, play, and stop buttons for controlling the DVD player.

  1. To rewind, play, or stop, click the corresponding button.

  NOTE: Consult the DVD PRO-BUS interface manual and switches to determine the actions performed by the “Rewind” and “Stop” commands. By default, “Rewind” does a full stop (back to start of disc) and “Stop” stops at the current disc location.

  2. To record, click the record button and then click the play button.

- **GPI Device**

When a GPI device is selected in the control panel window’s “Device” list, the “Device control” section shown in Illustration 83, Control Panel: GPI Device Control, is displayed.

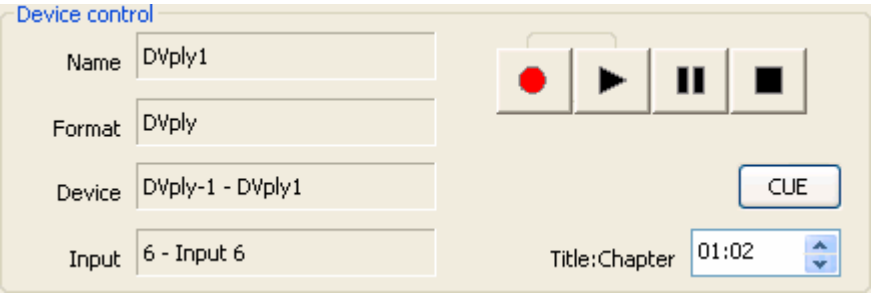
Illustration 83, Control Panel: GPI Device Control

- Device status: the left side of the section displays the name, format, and device number given to the device in the loaded image. The “Device” number is the PRO-BUS address set via switches on the PRO-BUS interface.
- Control options: on the right side of the section are buttons for closing the contacts of the indicated colored pairs of wires.

- **DVply Device**

  When a DVply device is selected in the control panel window's "Device" list (**NET-164** and **NET-EC** only), the "Device control" section shown in Illustration 84, Control Panel DVply Device, is displayed.

Illustration 84, Control Panel DVply Device



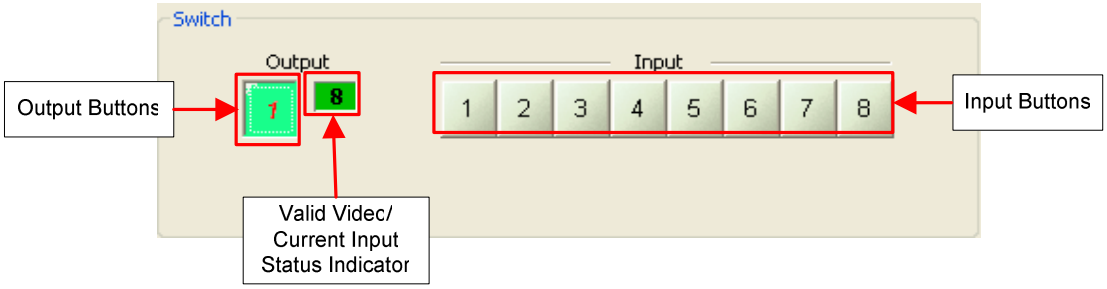
- ➢ Device status: the left side of the section displays the name, format, device number, and input number given to the device in the loaded image. "Device" is the DVply port on the back of the Controller.
- ➢ Control options: on the right side of the section (from left to right) are the record, play, pause, stop, and cue buttons for controlling the DVply device.
  1. To play, pause, or stop, click the corresponding button.
  2. To record, click the record button and then click the play button.
  3. To cue, enter the desired title and chapter in the "Title:Chapter" field and then click the "CUE" button.

PERFORMING FORCED SWITCHES AND VIEWING SWITCHER STATUS

- **MINI-T-NET**

  When the Controller is a MINI-T-NET, the lower right switcher section appears in the control panel window as shown in Illustration 85.

Illustration 85, MINI-T-NET Forced Switch Control



To take a switch:

1. Click the output button to select it (as shown in Illustration 85, the number turns red). The output button toggles each time you click it.

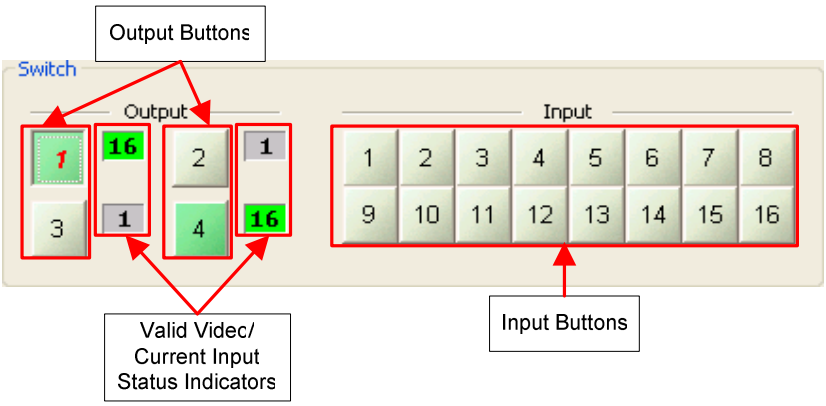
2. Click the desired input button.

To the right of the output button is a box showing the current input and valid video status. Green means valid video present, while gray indicates no valid video.

- **NET-164**

For a NET-164, the lower right switcher section appears in the control panel window as shown in Illustration 86.

Illustration 86, NET-164 Forced Switch Control



To take a switch:

1. Click the output button(s) to select the desired output(s) (as shown in Illustration 86, the output 1 number turns red). The output buttons toggle each time you click them.
2. Click the desired input button to take that input to the selected output(s).

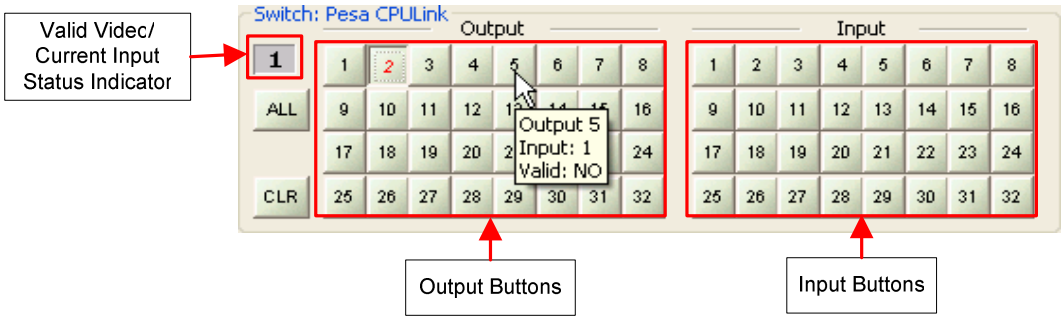
To the right of each output button is a box showing the current input and valid video status. Green means valid video present, while gray indicates no valid video.

- **NET-EC**

  When the Controller is a NET-EC, the lower right switcher section in the control panel window will be one of the three panels shown in Illustration 87, Illustration 88, and Illustration 89.

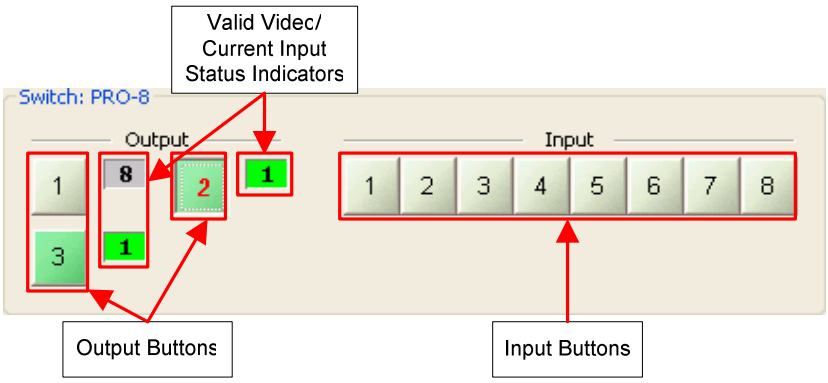
  - Third party switchers (see Illustration 87): when the mouse pointer is placed over an output button, a box appears in the upper left showing the current input status of that output. This information also appears in a small flyover help box below the pointer, as shown.

Illustration 87, NET-EC: Third Party Switcher Forced Switch Control



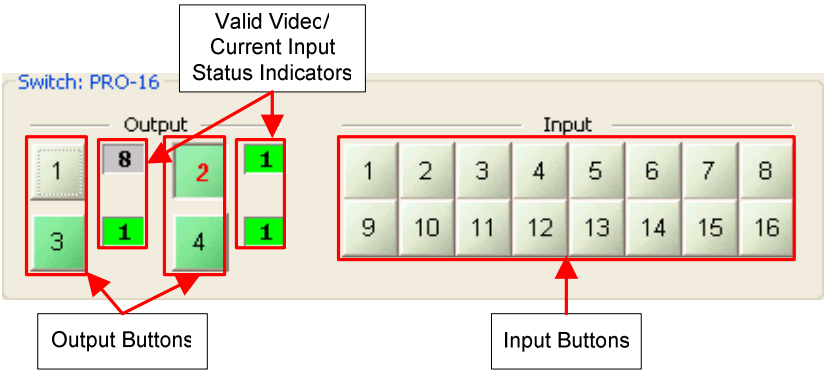
  - PRO-8 (see Illustration 88)

Illustration 88, NET-EC: PRO-8 Forced Switch Control



➢ PRO-16 (see Illustration 89)

Illustration 89, NET-EC: PRO-16 Forced Switch Control



To take a switch:

1. Click the output button(s) to select the desired output(s) (as shown on output 2 in Illustration 87, Illustration 88, and Illustration 89, the number turns red). The output buttons toggle each time you click them.

   For the NET-EC only: click the “ALL” button to select all outputs or “CLR” to de-select all outputs (see Illustration 87, NET-EC: Third Party Switcher Forced Switch Control).

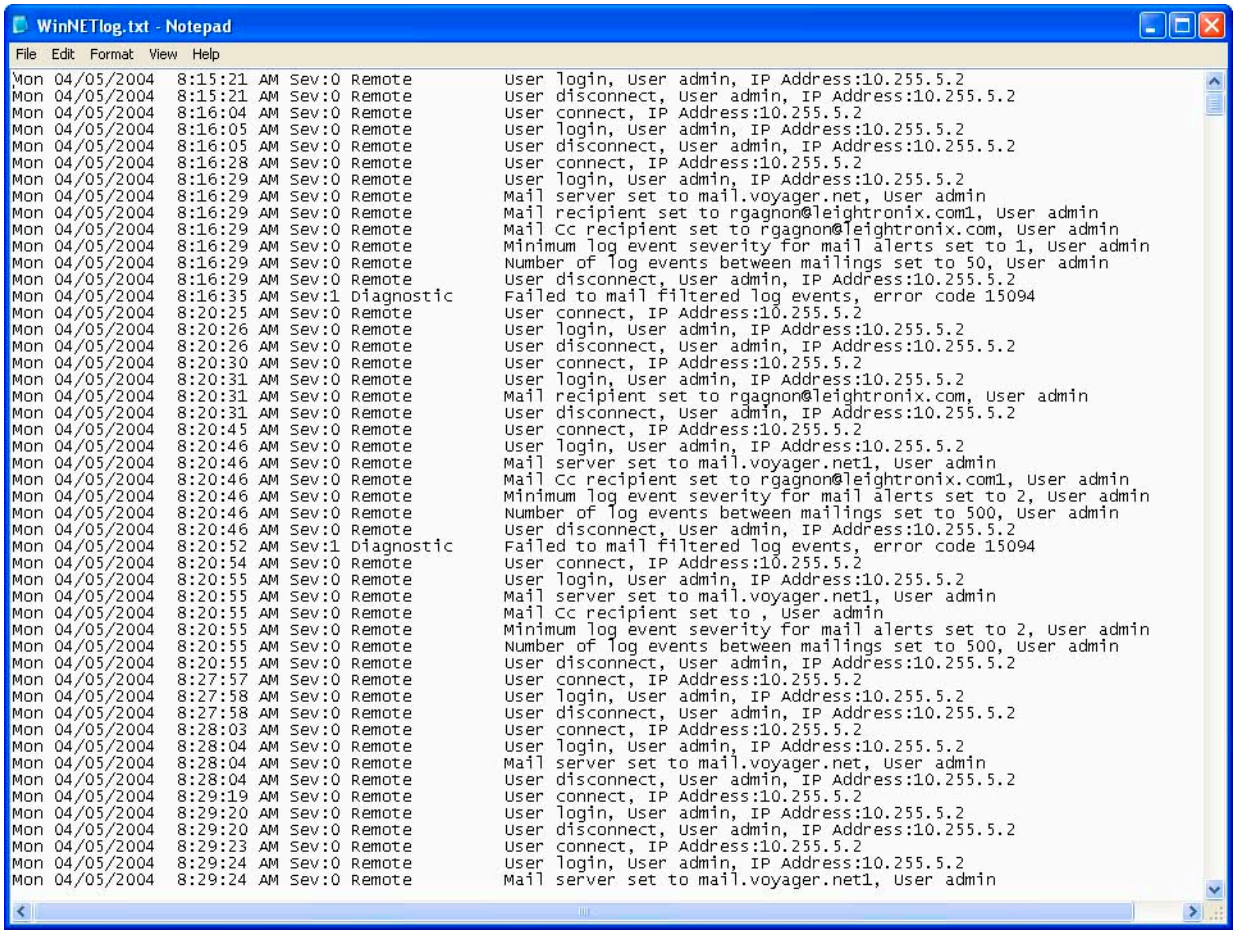
2. Click the desired input button to take that input to the selected output(s).

To the right of each output button is a box showing the current input and valid video status. Green means valid video present, while gray indicates no valid video.

RETRIEVING LOG FILES

Each Net Series Event Controller keeps track of all actions it performs in an internal log. Under the “File” menu, choose “Get log” or click the main toolbar icon to download the internal log into a local file and view all actions your Event Controller has performed in a text editor of your choosing (see Illustration 90, WinNET Log File Opened in Notepad). This will also turn off the log LED that appears on the NET Series front panel and in the WinNET control panel when a severity 1 or 2 event action is logged.

Illustration 90, WinNET Log File Opened in Notepad




```
Mon 04/05/2004  8:15:21 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:15:21 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:16:04 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:16:05 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:16:05 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:16:28 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         Mail server set to mail.voyager.net, User admin
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         Mail recipient set to rgagnon@leightronix.com1, User admin
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         Mail Cc recipient set to rgagnon@leightronix.com, User admin
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         Minimum log event severity for mail alerts set to 1, User admin
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         Number of log events between mailings set to 50, User admin
Mon 04/05/2004  8:16:29 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:16:35 AM Sev:1 Diagnostic     Failed to mail filtered log events, error code 15094
Mon 04/05/2004  8:20:25 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:20:26 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:26 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:30 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:20:31 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:31 AM Sev:0 Remote         Mail recipient set to rgagnon@leightronix.com, User admin
Mon 04/05/2004  8:20:31 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:45 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         Mail server set to mail.voyager.net1, User admin
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         Mail Cc recipient set to rgagnon@leightronix.com1, User admin
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         Minimum log event severity for mail alerts set to 2, User admin
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         Number of log events between mailings set to 500, User admin
Mon 04/05/2004  8:20:46 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:52 AM Sev:1 Diagnostic     Failed to mail filtered log events, error code 15094
Mon 04/05/2004  8:20:54 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         Mail server set to mail.voyager.net1, User admin
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         Mail Cc recipient set to , User admin
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         Minimum log event severity for mail alerts set to 2, User admin
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         Number of log events between mailings set to 500, User admin
Mon 04/05/2004  8:20:55 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:27:57 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:27:58 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:27:58 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:28:03 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:28:04 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:28:04 AM Sev:0 Remote         Mail server set to mail.voyager.net, User admin
Mon 04/05/2004  8:28:04 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:29:19 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:29:20 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:29:20 AM Sev:0 Remote         User disconnect, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:29:23 AM Sev:0 Remote         User connect, IP Address:10.255.5.2
Mon 04/05/2004  8:29:24 AM Sev:0 Remote         User login, User admin, IP Address:10.255.5.2
Mon 04/05/2004  8:29:24 AM Sev:0 Remote         Mail server set to mail.voyager.net1, User admin
```

NOTE: The default viewer is Notepad, but the viewer can be changed from the “Tools,” “Options” menu item (for more details, see “Setting WinNET Viewing and Communication Options,” beginning on page 63).

Each action performed through or by the Event Controller is recorded in the log file as a separate line containing the following information about the event action:

- Day
- Date

- Time
- Severity of event action—event actions are classified according to the following three levels of severity:
  - 0: events that occur during the course of normal operations
  - 1: warning events
  - 2: critical events or failures
- Type of action performed:
  - Diagnostic: Event Controller generated actions
  - Front Panel: actions performed based on commands given by user through the front panel of the Event Controller
  - Remote: actions performed based on commands given by user from the WinNET control panel
  - Schedule: actions performed based on user-created schedule
  - Switcher: actions based on switcher events and functions
  - PRO-BUS: actions based on PRO-BUS interface functions
  - DVply: actions based on DVply functions
- Description of action performed

FRONT PANEL OPERATION

VIEWING STATUS SCREENS

After the Event Controller has been booted up, press the up or down arrows on the Controller's keypad to display the following status screens:

SWITCHER STATUS/TYPE

- **MINI-T-NET**: the bottom line of the screen shows the switcher status (see Illustration 91, MINI-T-NET Switcher Status Screen). The number is the input number (the output number is not indicated as there is only one output). The triangle indicates the valid video status on the output (solid =valid video, hollow=lack of valid video).

Illustration 91, MINI-T-NET Switcher Status Screen

```
Thu Jul 31 12:00:00 PM
Switcher: 4▶          Menu→
```

- **NET-164**: the bottom line of the screen shows the switcher status (see Illustration 92, NET-164 Switcher Status Screen). The first number in each pair is the input number and the second is the output number. The triangle indicates the valid video status on the output (solid =valid video, hollow=lack of valid video).

Illustration 92, NET-164 Switcher Status Screen

```
Wed Oct 10 12:00:00PM
  3▷1   4▶2   5▶3   5▶4 →
```

- **NET-EC:** the bottom line of the screen indicates the switcher type that has been set and the NET-EC's serial communication status (see Illustration 93, NET-EC Switcher Type and Serial Communication Status Screen).

Illustration 93, NET-EC Switcher Type and Serial Communication Status Screen

```
Wed Oct 10 12:00:00PM
SW=PESA Com=OK        Menu→
```

IP ADDRESS

The IP address screen displays the Event Controller's IP address on the bottom line of the screen (see Illustration 94, NET Series IP Address Status Screen).

Illustration 94, NET Series IP Address Status Screen

```
Wed Oct 10 12:00:00PM
IP:10.2.1.197        Menu→
```

NET-164 AND NET-EC ONLY: DVPLY FIRMWARE VERSION

The DVply firmware version screen displays the DVply firmware version of a NET-164 or NET-EC Controller on the bottom line of the screen (see Illustration 96, NET Series Serial Number and Firmware Version Status Screen).

Illustration 95, NET-164 and NET-EC: DVply Firmware Version Status Screen

```
Wed Oct 10 12:00:00PM
DVply Ver: 1.0.1.0  Menu→
```

SERIAL NUMBER AND FIRMWARE VERSION OF EVENT CONTROLLER

The serial and firmware version of the Event Controller is displayed on the bottom line of this screen (see Illustration 96, NET Series Serial Number and Firmware Version Status Screen).

Illustration 96, NET Series Serial Number and Firmware Version Status Screen

```
Wed Oct 10 12:00:00PM
SN:0201C5  V1.00.28 Menu→
```

SITE ID

The site ID status screen displays the site ID on the bottom of the screen (see Illustration 97, NET-164 Site ID Status Screen Example).

Illustration 97, NET-164 Site ID Status Screen Example

```
Wed Oct 10 12:00:00PM
ID:NET-164          Menu→
```

Site ID is entered from the WinNET client software and allows you to define a name for your NET Series Controller. This is most useful in a multiple Controller system, as you can then identify each Controller by name in addition to its IP address.

REBOOTING EVENT CONTROLLER

Each NET Series Controller can be rebooted from the front panel. Simultaneously hold down the "↓" and "→" keys, and then press "↑." The schedule status remains the same as it was before the reboot.

FORCING AN EVENT

The force event function allows you to perform a PRO-BUS or DVply (only **NET-164** or **NET-EC**) control function and/or a switch from the Controller's front panel, with optional switch delay (see Table 23, Performing PRO-BUS/DVply Control Function and/or Switch from Front Panel).

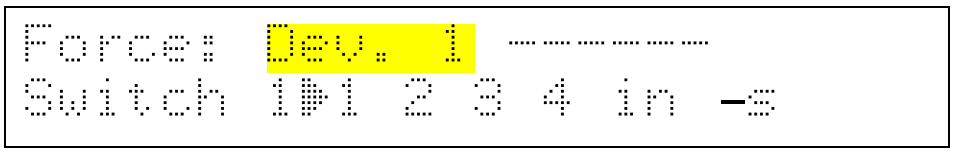
Table 23, Performing PRO-BUS/DVply Control Function and/or Switch from Front Panel

FORCE EVENT STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Force Event." 2. Press "→" to select "Force Event."	MAIN MENU Use ↑/↓ Force Event →
3. Press "→" or "←" to position the underscore under the editable fields and press "↑" or "↓" to edit the values. 4. Press "→" to enter next screen.	Force: Dev. 1 Play Switch 1▶- 2 3 4 in 3s **NOTE:** The force event editable fields are described in more detail following this table.
5. Either press "→" again to perform the force event or "←" to abort changes.	Press → to force event Switch 1▶- 2 3 4 in 3s

The following is a list of the editable force event fields as illustrated with NET-164 screen display examples. The highlighted parts of the illustrations indicate the various changes that may be made to the editable fields.

- *Device*
  - Device number (see Illustration 98)

Illustration 98, NET-164 Example: Device Number Selected for Forced Event



  - All devices (see Illustration 99)

Illustration 99, NET-164 Example: All Devices Selected for Forced Event

```
Force:  Dev. All  ------------
Switch 1▶1  2  3  4  in  -s
```

- DVply number (only **NET-164** or **NET-EC**) (see Illustration 100)

Illustration 100, NET-164 Example: DVply Number Selected for Forced Event

```
Force:  DVply 1  ------------
Switch 1▶1  2  3  4  in  -s
```

- All DVply (only **NET-164** or **NET-EC**) (see Illustration 101)

Illustration 101, NET-164 Example: All DVply Devices Selected for Forced Event

```
Force:  DVply All  ------------
Switch 1▶1  2  3  4  in  -s
```

- *Device Function*

  Refer to Illustration 102.

Illustration 102, NET-164 Example: Device Function Selected

```
Force:  Dev. 1 Play
Switch 1▶1  2  3  4  in  -s
```

- Play
- Stop
- Rewind
- Record
- Cue 01:01 (only **NET-164** or **NET-EC**)
- ------ (none)

- *Switch Input*
  Refer to Illustration 103.

Illustration 103, NET-164 Example: Switch Input Number Selected

```
Force:  Dev. 1 Play
Switch 1▶1  2  3  4  in  -s
```

- Input number
- - (none—only **MINI-T-NET**)

- *Switch Output* (only **NET-164** or **NET-EC**)

  NOTES:
  - The **MINI-T-NET** does not have a switch output field, as it is a single channel switcher.
  - The **NET-164** allows up to four switches for a single force, allowing the user to take the same input to any combination or all four outputs.
  - The **NET-EC** allows the entry of an output number from 1 to the configured maximum or none, but only one switch per forced event.

Illustration 104, NET-164 Example: Switch Output Number Selected

```
Force: Dev. 1 Play
Switch 1▶- 2 3 4 in -s
```

- ➢ Output number
- ➢ - (none)

- *Switch Delay Time*

Illustration 105, NET-164 Example: Switch Delay Time Selected

```
Force: Dev. 1 Play
Switch 1▶- 2 3 4 in 3s
```

PERFORMING SWITCH ACTIONS

The switcher control function allows forced switches to be performed from the Controller's front panel (see Table 24, Performing Forced Switches from Front Panel).

Table 24, Performing Forced Switches from Front Panel

FORCE EVENT STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Switcher Control." 2. Press "→" to select "Switcher Control."	`MAIN MENU  Use ↑/↓` `Switcher Control  →`

3. Press "↑" or "↓" to edit the underscored field.
 	
4. Press "→" to:
• **MINI-T-NET**: take the switch
• **NET-164** or **NET-EC**: proceed to the next screen
	MINI-T-NET
	`Control Switcher`
	`Input: 1  Use → to Take`

	NET-164
	`Control Switcher`
	`Switch: 1▶1 - 3 4`
	NOTE: The NET-164 is able to take a single input to all outputs or any combination of outputs.

	NET-EC
	`Control Switcher`
	`Input: 1  Output: 5`
	NOTE: The NET-EC will only allow a single input to switch to a single output.

5. For **NET-164** or **NET-EC only**, either press "→" again to save your changes or "←" to abort changes.	**NET-164**
	`Press → to Take . . .`
	`Switch: 1▶1 - 3 4`

	NET-EC
	`Press → to Take . . .`
	`Input: 1  Output: 5`

DISABLING/RE-ENABLING SCHEDULE

The schedule control function allows the NET Series Controller's active schedule to be disabled (suspended) or re-enabled (activated) from the Controller's front panel.

FORCE EVENT STEPS	CORRESPONDING SCREEN DISPLAYS
1. From the "MAIN MENU" screen, press "↑" or "↓" to proceed to "Schedule Enable/Disable." 2. Press "→" to select "Schedule Enable/Disable."	MAIN MENU Use ↑/↓ Schedule Enable/Disable →
3. Press "↑" or "↓" to toggle between "Enable" and "Disable." 4. Press "→" to enter next screen.	Schedule Enable/Disable Enable Event Schedule →
	Schedule Enable/Disable Disable Event Schedule →
5. Either press "→" again to save your changes or "←" to abort changes.	Press → confirm Schedule enable.
	Press → confirm Schedule enable.

FIRMWARE/SOFTWARE UPDATES

NOTES:

- All updates provided by LEIGHTRONIX through email or CD-ROM.
- WinNET version 1.0.2.01 or newer must be used with NET Series firmware version 1.00.38 or newer, as both of the newer firmware and software versions utilize an upgraded Event Controller image format. New Event Controller images will **not** be accepted by older firmware or correctly received by older WinNET versions, so be sure to update all PCs running WinNET and the firmware of the corresponding Event Controller at the same time.

UPDATING NET SERIES EVENT CONTROLLER AND/OR DVPLY FIRMWARE

Use the following steps to update both the Event Controller and DVply firmware.

1. Open the WinNET client software.
2. Log in to the NET Series Event Controller and choose “Controller” under the “Tools” menu.
3. Under “Firmware Update,” check “Reboot” box and click “Browse.”
4. Browse to the SOFTWARE&MANUALS\Net Series\FIRMWARE\ directory on your LEIGHTRONIX “PRODUCT RESOURCE DISC” and double click one of the following:
   - Eccore*.fmw: updates your NET Series Event Controller’s firmware
   - TascamDVply*.fmw: updates your DVply firmware
5. Click “Update” to continue the firmware update.
6. After about 2 minutes, the NET Series Event Controller should reboot and drop its connection.
7. Reconnect and confirm the firmware has been upgraded to V1.00.34 under “Controller Status” in the “Control Panel” window.

UPDATING WINNET SOFTWARE

1. If open, close WinNET.
2. Click your Windows “Start” button and choose “Run” from the menu.
3. Browse to the SOFTWARE&MANUALS\NET SERIES\WinNET\ directory on your LEIGHTRONIX “PRODUCT RESOURCE DISC” and double click WinNET v* Installer.EXE.
4. Click “OK” to continue WinNET update.
5. Follow the prompts to complete the installation.

TROUBLESHOOTING

This section discusses what to do if your NET Series Controller does not operate as expected. When troubleshooting, always ensure that the physical connections (power cable, video/audio cables, PRO-BUS, and Ethernet/Serial cables) are secure.

REPLACING THE BATTERY

Each NET Series Controller contains a user-replaceable lithium battery. Since removing the lid voids the NET Series warranty, the battery is guaranteed to last through the warranty period. When replacing the battery, observe the following guidelines:

1. Disconnect power from the NET Series Controller before removing the lid.
2. Ensure the replacement battery is of the same type as the original.
3. Note the polarity of the original battery and insert the new battery with the same polarity. Do not install the lithium battery upside-down.

WARNING	Danger of explosion if battery is installed incorrectly.

4. Replace lid and power.
5. Dispose of the old battery properly. Refer to local codes for disposal requirements.

CONTACTING LEIGHTRONIX TECHNICAL SUPPORT

If you are experiencing a problem that you are unable to resolve, you may:
Visit our Web site: www.leightronix.com
E-mail us at: support@leightronix.com
Call us at:
(800) 243-5589
(517) 694-1600 Fax
Our phone lines are open from 8:00AM – 5:00 PM Eastern Time Monday through Friday excluding holidays.
When you report a problem, please provide the following information:

- Your name, and your company name, address, and phone number
- Model number
- Serial number
- Software version

- Description of the problem
- Status of the unit when the problem occurred (please try to include information on user and network activity at the time of the problem)

Please contact the LEIGHTRONIX Technical Support Department at the number below for an RMA (Return Material Authorization) number before sending an item in for repair.

LEIGHTRONIX, INC.
2330 Jarco Drive
Holt, MI 48842
Phone: (800) 243-5589
Fax: (517) 694-1600

WARRANTY

LEIGHTRONIX, INC. warrants this NET Series Controller against defective workmanship or materials for a period of five (5) years from the original date of purchase.

During this warranty period, any parts found to be defective will be replaced at no charge. Labor to repair or replace defective parts will also be performed at no charge during the warranty period.

This warranty does not cover abuse, shipping damage, neglect, tampering by unauthorized personnel, acts of nature, damage inadvertently caused by the user, preventive maintenance, or any product whose serial number is removed or defaced.

The sole responsibility of LEIGHTRONIX shall be to repair or replace in accordance with this warranty. The seller's and manufacturer's only obligation shall be to repair or replace such quantity of the product proved to be defective.

The customer shall bear the cost of shipping products returned to LEIGHTRONIX for warranty repair. The cost for return shipment to the customer will be assumed by LEIGHTRONIX and shipped via an equal priority service shipper prepaid and insured.

Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of, or the inability to use the product. Before using, the user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.

The warranty and the obligations and liabilities thereunder shall replace all other warranties or guarantees, express or implied.

DECLARATION OF STANDARDS CONFORMITY

FCC NOTICE

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION: Changes or modifications to this device not expressly approved by LEIGHTRONIX, INC. **could void the user's authority to operate this device**.

This equipment is intended to be installed in a controlled environment with restricted access.

GNU GENERAL PUBLIC LICENSE

NET Series Controllers contain software derived from General Public License software. This gives you the right to receive the source code of this derived software from LEIGHTRONIX for no more than the cost of reproducing it. Contact LEIGHTRONIX at (517) 694-8000 to request the source code.

APPENDIX A: TCP/IP SETUP FOR PC WITH WINDOWS 98 OS

NOTE: The following instructions only apply to PCs with Windows 98 Operating Systems (OS). TCP/IP is the default network setup on all PCs with operating systems newer than Windows 98.

The NET Series Controller uses a communication protocol named TCP/IP, the same protocol used for the Internet. This appendix explains how to install and set up TCP/IP on a Windows 98 PC. This installation is intended for a stand-alone PC connected to a NET Series Controller, not a PC connected to a network. For network installations, consult the network administrator.

1. From the Windows "Start" menu, open the Control Panel.

2. In the Control Panel, double click on the network icon. The network configuration dialog is accessed, with the "Configuration" tab on top. When Windows installs software for the network card, it loads default values in this dialog. The Microsoft Client has already been installed, along with the data for the network card and a protocol named IPX.

3. Click on "IPX" and then click the "Remove" button. Click on Microsoft Client and then click the "Remove" button.

4. To install the TCP/IP protocol:

- **a.** Click the "Add" button, then double click on "Protocol."
- **b.** A dialog with two list boxes opens. The left list box contains protocol manufacturers. When a manufacturer is highlighted, the right list box shows protocols produced by that manufacturer. The TCP/IP protocol we need comes from Microsoft, so click on Microsoft in the left list, then on TCP/IP in the right list.
- **c.** Click the "OK" button to return to the Configuration screen. The list of installed items should now contain the network card and TCP/IP.
- **d.** Double click the TCP/IP item. A 6-tab dialog box opens, with the IP address tab on top. This is the only tab that needs to be accessed for this installation.
- **e.** Click on "Specify address." This highlights the 2 associated fields.
  - **i.** Click on the IP address field and enter 10.0.0.1.
  - **ii.** Click on the Subnet Mask field and enter 255.0.0.0.
  - **iii.** Click the "OK" button.
- **f.** Click the "OK" button on the main Network dialog. Windows asks for the Windows installation CD-ROM, and then loads the files necessary to add TCP/IP and perform the other changes.

5. The computer must be restarted to have these changes take place. Afterward, the NET Series Controller should be accessible from the computer.

APPENDIX B: PRO-BUS INTERFACE CONNECTIONS

Each NET Series Event Controller comes equipped with a LEIGHTRONIX PRO-BUS control output. By connecting addressable PRO-BUS interfaces to your NET Series Event Controller, you can use pre-programming or immediate remote control to operate one or all of your devices (play, rewind, record, and stop). Control up to 8 devices with the MINI-T-NET and up to 16 devices with the NET-164 and the NET-EC.

PRO-BUS interfaces use standard phone cables with RJ-11 connectors that loop between each interface. The NET Series Controllers provide both control signals and power to your devices through PRO-BUS interfaces. Connect your PRO-BUS interfaces as follows (refer to Illustration 106, Example of PRO-BUS Interfaces Connected to a NET-164 and Devices and Illustration 107, PRO-BUS Interface):

Illustration 106, Example of PRO-BUS Interfaces Connected to a NET-164 and Devices

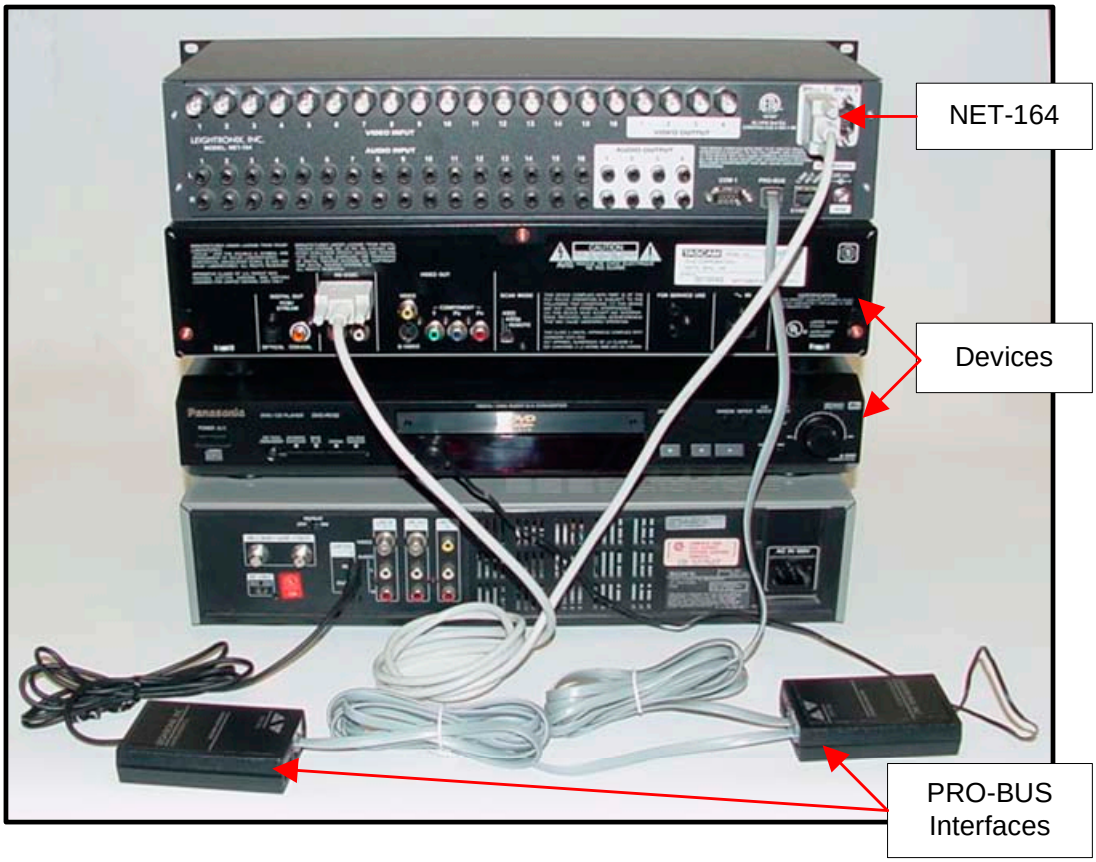
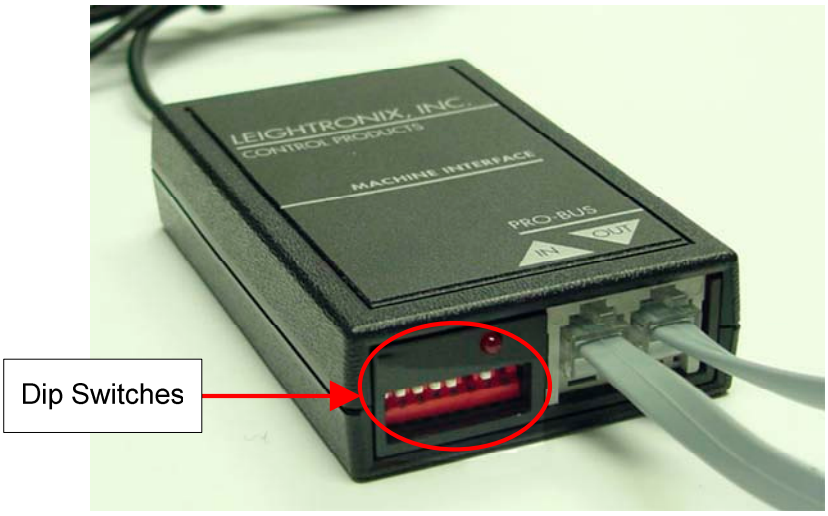


Illustration 107, PRO-BUS Interface



1. Connect an RJ-11 cable between the PRO-BUS output on your NET Series Controller (see Illustration 4, MINI-T-NET Rear Panel, Illustration 5, NET-164 Rear Panel, and Illustration 6, NET-EC Rear Panel) and the input of the first PRO-BUS interface.

   NOTE: An RJ-11 cable is provided with each interface.

2. Using the cable attached to your PRO-BUS, connect your PRO-BUS interface to your device.

   NOTE: LEIGHTRONIX PRO-BUS interfaces are sold separately for many brands and models of professional video equipment and are available with infrared, mini-jack, and multi-pin connectors.

3. If there is another device connected to your NET Series Controller, connect another RJ-11 cable from the output of the first PRO-BUS interface to the input of the next.

CAUTION	Interfaces will not work and equipment may be damaged if the “IN” and “OUT” labels are not observed!

4. Repeat steps 2–3 for each device connected to your NET Series Controller. **The last interface on the PRO-BUS chain should have an OPEN “OUT” connector.**

5. LEIGHTRONIX recommends organizing and documenting your system according to the following steps to ensure each of your devices communicates with the appropriate PRO-BUS interface.

   a. Number the PRO-BUS interfaces consecutively, starting with 01 at the interface connected to the PRO-BUS connector on the Event Controller.

NOTE: Ensure your devices are connected to the Event Controller (MINI-T-NET and NET-164) or switcher (NET-EC) in succession from input 1 so the device input numbers will correspond to the PRO-BUS interface numbers.

b. Label both the device and PRO-BUS interface with the device and input numbers. Refer to each interface's manual for any other configuration settings.

6. Set each PRO-BUS interface's dip switches according to Table 25, PRO-BUS Interface Dip Switch Settings.

Table 25, PRO-BUS Interface Dip Switch Settings

DEVICE 01 1 2 3 4	**DEVICE 02** 1 2 3 4	**DEVICE 03** 1 2 3 4	**DEVICE 04** 1 2 3 4
DEVICE 05 1 2 3 4	**DEVICE 06** 1 2 3 4	**DEVICE 07** 1 2 3 4	**DEVICE 08** 1 2 3 4
DEVICE 09 1 2 3 4	**DEVICE 10** 1 2 3 4	**DEVICE 11** 1 2 3 4	**DEVICE 12** 1 2 3 4
DEVICE 13 1 2 3 4	**DEVICE 14** 1 2 3 4	**DEVICE 15** 1 2 3 4	**DEVICE 16** 1 2 3 4

GLOSSARY

The following terms are used throughout this manual.

TERM	DEFINITION
Baud Rate	Event Controller's data transmission rate in bits per second
Character Generator	Electronic device which produces graphics and characters for creating video titles
Client (software)	Software program that is used to contact and obtain data from a Server software program on another computer
Cross-Over Cable	A twisted pair patch cable wired to route the transmit signals from one piece of equipment to the receive signals of another piece of equipment, and vice versa.
Destination	Output
Device	Any source (input) controlled by a PRO-BUS interface or DVply; also referred to as "deck"
Direct Connect	Non-network connection
DHCP	Dynamic Host Configuration Protocol; protocol that automatically assigns IP addresses to devices as they are attached to a network
DNS	Domain Name Server; used to transfer character-based names into IP addresses
DVply	Serial device ports providing advanced control for DVD players with random title: chapter access
Ethernet	Method of networking computers in a local area network (LAN)
Event	Control element that holds information about "what" is supposed to happen and "when"
Event Action	Any switch or device function
Event Controller	Provides unattended, automatic control over a wide variety of video devices including digital video servers, digital disc recorders, DVD players, video/audio routing switchers, VCRs, and the like
Fallback Configuration	Input the **MINI-T-NET** or **NET-164** will switch to if valid video is lost on an output and a fallback time has been set
Firmware	Software contained in a hardware device

TERM	DEFINITION
FPTV	Full-power television
Gateway Address	IP address of computer or router that transfers communications from the local network to the broader network
GPI	General Purpose Interface; contact closures with two states—“on” or “off”
Host	IP-capable machine connected to an IP network
Image	Contains the Controller type and playlist along with the control, device, library, and switch properties
Immediate (control)	Control of Event Controller through front panel
IP Address	Internet Protocol; 4-byte address used to identify devices on a network
LAN	Local Area Network; computer network that covers a relatively small area (single building)
LED	Light-emitting diode
Locked Event	An event whose start time is manually entered by the user; also known as a fixed event
Log File	List of Event Controller actions and alarms
LPTV	Low-power television
MATV	Master-antenna television
Mb/s	Megabytes per second
Network	A group of connected computers that can communicate with one another. Networks enable computers to share files and resources and exchange messages.
NIC	Network Interface Card; Ethernet card used to connect to a network
OS	Operating System
PC	Personal Computer
Preroll	Amount of time playback device is scheduled to play before transmitting on-air (prevents the transmittal of black video or static found at beginning of a program)
PRO-BUS	Interfaces used to connect VCRs/DVD players to an Event Controller
Remote (control)	Control of Event Controller through WinNET

TERM	DEFINITION
SMTP	Simple Mail Transfer Protocol; protocol used to transfer email between or among servers
Source	Input
Subnet Mask	Separates IP address into network address and host address as assigned within the network
TCP/IP	Transmission Control Protocol/Internet Protocol
Unlocked Event	An event whose start time is entered by WinNET; also referred to as an unfixed event
VFD	Vacuum Fluorescent Display
WAN	Wide Area Network; local area networks (LANs) linked together across a large geographic area (multiple buildings, cities, states, or countries)

END OF MANUAL