



Surround Panner Option Guide

Version 9.0

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Documentation Feedback

At Avid, we are always looking for ways to improve our documentation. If you have comments, corrections, or suggestions regarding our documentation, email us at **techpubs@avid.com**.

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chapter 1

Introduction

The Pro Tools® Surround Panner Option from JL Cooper provides a touch-sensitive Joystick for surround panning, along with other output and panner controls.


What's Included

- Surround Panner unit
- Surround Panner Option disc
- Registration Information Card

System Requirements and Compatibility

The Surround Panner Option requires:

- A qualified Pro Tools|HD or Pro Tools|HD Native system, or Pro Tools system with the Complete Production Toolkit 2 option.
- The Surround Panner Option Controller Personality File installed in the Controllers folder. (See Chapter 2, "Installation.")
- Available MIDI In and Out connections on a MIDI interface, to communicate with Pro Tools.

 *The Surround Panner option is not compatible with other Joystick panner options.*

Avid can only assure compatibility and provide support for hardware and software it has tested and approved.

For complete system requirements and a list of qualified computers, operating systems, hard drives, and third-party devices, visit:

www.avid.com/compatibility

Registration

Review the enclosed Registration Information Card and follow the instructions on it to quickly register your purchase online. By registering, you become eligible to receive the following:

- Technical support information
- Software update and upgrade notices
- Hardware warranty information

Conventions Used in This Guide

All of our guides use the following conventions to indicate menu choices and key commands:

Convention	Action
File > Save	Choose Save from the File menu
Control+N	Hold down the Control key and press the N key
Control-click	Hold down the Control key and click the mouse button
Right-click	Click with the right mouse button

The names of Commands, Options, and Settings that appear on-screen are in a different font.

The following symbols are used to highlight important information:



User Tips are helpful hints for getting the most from your system.



Important Notices include information that could affect your data or the performance of your system.



Shortcuts show you useful keyboard or mouse shortcuts.



Cross References point to related sections in this guide and other Pro Tools guides.

About www.avid.com

The Avid website (www.avid.com) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

Product Registration Register your purchase online.

Support and Downloads Contact Avid Customer Success (technical support); download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Knowledge Base or join the worldwide Pro Tools community on the User Conference.

Training and Education Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

Products and Developers Learn about Avid products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

News and Events Get the latest news from Avid or sign up for a Pro Tools demo.

chapter 2

Installation

The following are basic instructions for installing and configuring the Surround Panner Option for use in your Pro Tools system.

Installing the Surround Panner Option

To install the Surround Panner Option:

- 1 Connect the double-ended MIDI cable to the appropriate In and Out ports on your MIDI Interface.
- 2 Make sure the Surround Panner Option Controller Personality File is correctly installed in the Controllers directory (folder), as follows:
 - Mac OS X:
Applications/Digidesign/Pro Tools/Controllers
 - Windows: Program Files/Common Files/Digidesign/DAE/Controllers

If the Surround Panner Option Controller Personality File is not installed, install it using the Surround Panner Option disc.

Configuring MIDI and Pro Tools for the Surround Panner Option

Your MIDI setup and Pro Tools must be configured to support the Surround Panner Option.


Configuring MIDI Studio with AMS (Mac Only)

On Mac systems, use Audio MIDI Setup (AMS) to check MIDI communication with the Surround Panner Option.

To update AMS for the Surround Panner Option:

- 1 Do one of the following:
 - Launch the Apple Audio MIDI Setup (Applications/Utilities).
 - or –
 - In Pro Tools, choose Setup > MIDI > Studio Setup.
- 2 If the MIDI Studio window is not showing, choose Window > MIDI Studio.
- 3 Choose MIDI > Add New External Device.
- 4 Double-click the New External Device icon.
- 5 Enter a name for the device (such as “Surround Panner”).
- 6 Click Properties.

- 7 Enable the appropriate Channels for the Receives and Transmits options.
- 8 Click Apply and close the Properties window.
- 9 In the MIDI Studio window, drag a connection from the MIDI In of the Surround Panner Option device to the MIDI Out port on the interface that represents the physical connection between your interface and the Surround Panner.
- 10 In the MIDI Studio window, drag a connection from the MIDI Out of the Surround Panner Option device to the MIDI In port on the interface that represents the physical connection between your interface and the Surround Panner.
- 11 Choose Audio MIDI Setup > Quit Audio MIDI Setup.

 See the User Guide that came with your system for more information about Audio MIDI Setup.

Configuring MIDI Studio Setup

(Windows Only)


On Windows systems, use MIDI Studio Setup to configure MIDI communication with the Surround Panner Option.

MSS automatically finds the MIDI ports on Surround Panner Option, and lets you specify a custom name for each port on the Surround Panner Option within the MIDI Studio Setup document.

To define a MIDI port on the Surround Panner Option with MIDI Studio Setup:

- 1 Launch Pro Tools.
- 2 Choose Setup > MIDI > MIDI Studio.
- 3 Click Create.


- 4 Enter a name in the Instrument Name field and press Enter.
- 5 From the Input Port pop-up menu, select the MIDI In of the Surround Panner Option.
- 6 From the Output Port pop-up menu, select the MIDI Output of the Surround Panner Option.

 See the User Guide that came with your system for more information about MIDI Studio Setup.

Enabling the Surround Panner Option in Pro Tools

To enable the Surround Panner Option in Pro Tools:

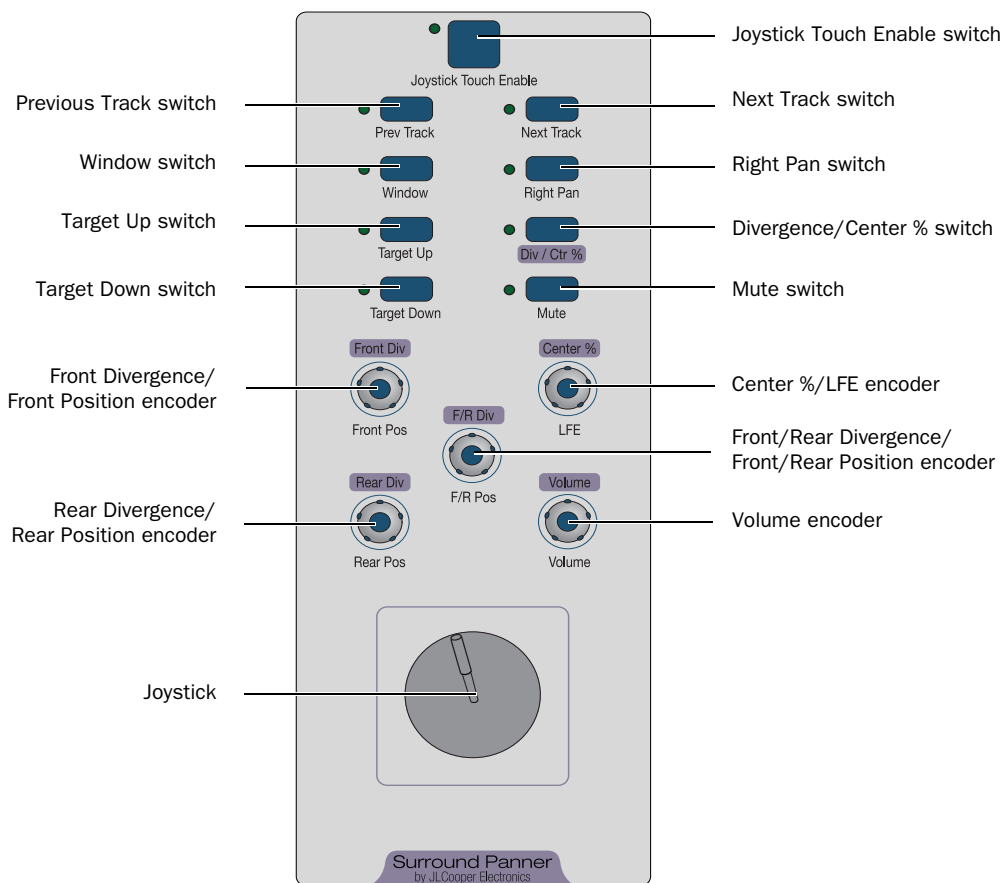
- 1 Launch Pro Tools.
- 2 Choose Setup > Peripherals and click the MIDI Controllers tab.
- 3 From the Type pop-up menu, select Surround Panner.
- 4 Choose the Surround Panner (or its MIDI ports) in the Receive From and Send To pop-up menus.
- 5 Click OK.

 Once the Surround Panner has been enabled in the Peripherals dialog, you can also disable (and re-enable) it in the Input Devices dialog (Setup > MIDI > Input Devices). See the Pro Tools Reference Guide for more information.

chapter 3

Surround Panner Controls

Surround Panner Top Panel



Surround Panner controls


Switch Section

The Surround Panner Option has nine switches. Each switch has an LED.

Joystick Touch Enable Switch and LED


The Joystick Touch Enable switch enables Touch Enable mode. The switch's LED is lit when the switch is enabled (Touch Enable mode).

In this mode, Pro Tools responds to Joystick moves (Touch On and Off messages) on the Surround Panner Option. A Touch On message is sent when the Joystick is touched and a Touch Off message is sent when the Joystick is released.

 *When focusing to a new track or output, the Joystick needs to be let go and retouched. This is to avoid accidentally changing the panning location on an adjacent output.*

Prev Track Switch and LED


The Prev Track (Previous Track) switch moves panner focus to the track above (Edit window) or on the left (Mix window). The switch's LED is momentarily lit while it is pressed.

 *Targeting a track or send output with the Prev Track or Next Track switches does not change the focused track on an ICON worksurface.*

Window Switch and LED

The Window switch lets you open and close the Panner window of the targeted main output or send.

The switch's LED is lit when the Panner window is open and unlit when the Panner window is closed.

 *If the Panner window is open when moving the panner focus with the Prev Track, Next Track, Target Up, or Target Down switches, the Panner window will update with each newly-focused track.*

Target Up Switch and LED


The Target Up switch lets you step upwards through the main output and send panners on the focused track (so that you can select a panner to control). The switch's LED is lit while it is pressed.

Target Down Switch and LED

The Target Down switch lets you step downwards through the main output and send panners on the focused track (so that you can select a panner to control). The switch's LED is lit while it is pressed.

Next Track Switch and LED

The Next Track switch moves panner focus to the track below (Edit window) or on the right (Mix window). The switch's LED is lit while it is pressed.

 *Targeting a track or send output with the Prev Track or Next Track switches does not change the focused track on an ICON worksurface.*

Right Pan Switch and LED

The Right Pan switch toggles focus between panners on a stereo track. The switch's LED is lit when the right channel panner is focused.

⚠ *If a mono track is targeted after selecting Right Pan on a stereo track, you will need to manually deselect the Right Pan switch to enable the Joystick to control the panner on the mono track.*

Divergence/Center % Switch and LED

When the Div/Ctr % switch is enabled, rotary encoders control the Divergence and Center % parameters. When the switch is disabled, rotary encoders control Position/LFE.

The switch's LED is lit in Div/Ctr % mode.

Mute Switch and LED

The Mute switch mutes either the track or send output that the panner is assigned to. The switch's LED is lit when the track or switch is muted.

Rotary Encoder Section

The Rotary Encoder section consists of five rotary encoders.

The Volume encoder controls the track's volume if the track's Output window is targeted. When any of the track's sends is targeted, the Volume encoder will control the send's volume.

The other encoders are mapped to control either Divergence/Center % or Position/LFE parameters, depending on whether the Divergence/Center % switch is enabled or disabled.

Divergence/Center % Mode Mapping

(Div/Ctr % Enabled)

In Div/Ctr % mode (Div/Ctr % switch enabled), the encoders determine the width of the panned signal with respect to neighboring speakers, as follows:

Front Div (Front Divergence) Provides separate divergence control over the front speakers.

F/R Div (Front/Rear Divergence) Provides separate divergence control between front and rear speakers.

Rear Divergence Provides separate divergence control over the rear speakers.

Center % Controls how much of a signal is routed to the center speaker.

Volume Controls the track's volume if the track's Output window is targeted. When any of the track's sends is targeted, the Volume encoder will control the send's volume.

Position/LFE Mode Mapping

(Div/Ctr % Switch Disabled)

In Position/LFE mode (Div/Ctr % switch disabled), the encoders function as follows:

Front Pos (Front Position) Controls the current front X-axis (left-to-right) position of the panner.

F/R Pos (Front/Rear Position) Controls the current Y-axis (front-to-rear) position of the panner.

Rear Pos (Rear Position) Controls the current rear X-axis (left-to-right) position of the panner.

LFE (Low Frequency Effects) Controls how much of the current track's signal will be routed to the LFE channel. This control is only available in ".1" surround formats (5.1, 6.1, and 7.1)

Volume Controls the track's volume if the track's Output window is targeted. When any of the track's sends is targeted, the Volume encoder will control the send's volume.

Joystick

The Joystick on the Surround Panner Option is touch-sensitive. There is no visual feedback for positional movement when the panner is not engaged.



Enable the Joystick Touch Enable switch to "take over" (and begin using) the Joystick for panner automation.

Joystick behavior is based on the current Automation mode.

Touch Automation Mode

In Touch Automation mode, you must enable the Joystick Touch Enable switch in order for Pro Tools to respond to your Joystick moves (Touch On and Off messages).

If the Joystick is already being touched when the Joystick Touch Enable switch is pressed, the Surround Panner Option will send a Touch On message immediately and begin writing pan automation moves.

When you release the Joystick, a Touch Off occurs, and Pro Tools will revert back to reading existing automation. You can touch the Joystick again to resume writing panner moves.

To avoid "jumps" in automation data when re-touching the Joystick, disable Touch Enable mode, place the Joystick where needed, and then re-enable Touch Enable mode and touch the panner.

Latch Automation Mode

In Latch Automation mode, you must enable the Joystick Touch Enable switch in order for Pro Tools to respond to your Joystick moves (Touch On and Off messages).

If the Joystick is already being touched when the Joystick Touch Enable switch is pressed, the Surround Panner Option will send a Touch On message immediately and begin writing pan automation moves.

When you release the Joystick, a Touch Off occurs, and automation will continue to be written at the Joystick location. You can touch the Joystick again to resume writing panner moves. All automation continues to be written, whether you are touching the Joystick or not.


Write Automation Mode

In Write Automation mode, you must enable the Joystick Touch Enable switch in order for Pro Tools to respond to your Joystick moves (Touch On and Off messages).

If the Joystick is already being touched when the Joystick Touch Enable switch is pressed, the Surround Panner Option will send a Touch On message immediately and begin writing pan automation moves.

When you release the Joystick, a Touch Off occurs, and automation will continue to be written at the Joystick location.

You can touch the Joystick again to resume writing panner moves. All automation continues to be written until the Transport is stopped.

 *The rotary encoders on Surround Panner Option are not touch-sensitive. An encoder will drop out of writing automation if the encoder is stationary for a set amount of time, even if you are still touching it. The set amount of time is defined in the Touch Timeout setting in the Automation Preferences page. See the Pro Tools Reference Guide for more information.*

chapter 4

Using the Pro Tools Surround Panner


Targeting Panners

To target a track's main output or send panners:

- Press the Target Up or Target Down switch to scroll through the track's currently available main output and send panners.

To focus the previous or next track:

- Press the Prev Track or Next Track switch.

 *You can also focus a track by clicking on the Output window of the track or send with a mouse.*

Display of Targeted Panners

The currently targeted output or send is indicated with a colored outline.

When only one peripheral (such as a Surround Panner Option or a control surface) has targeted a panner, the outline color is based on the position in which the peripheral was declared in the Peripherals dialog.

When more than one peripheral targets the same Output or Send, its display will be outlined in white.

Display Behavior when One Peripheral Targets a Panner

Outline Color (for Panner Targeted by One Peripheral)	Order Peripheral Was Declared in the Peripherals Dialog
Blue	First declared peripheral
Yellow	Second declared peripheral
Purple	Third declared peripheral
Green	Fourth declared peripheral

Working with Stereo Tracks and Panners

When panning stereo tracks, left and right sides can be panned independently (unlinked).

To temporarily unlink stereo panners:

- 1 Release the Joystick.
- 2 Press and hold the Control key and use the Joystick again.

Panning with the Joystick

The Surround Panner Option features a Joystick for 360° surround panning. Once the desired Panner or Output window is targeted, panning can be input using the Joystick (explained below) or the rotary encoders (explained in “Panning with the Rotary Encoders” on page 12).

To pan with the Joystick:

- 1 Target the output you want to pan (see “Targeting Panners” on page 11).
- 2 Press the Joystick Touch Enable switch and begin panning with the Joystick.

Panning with the Rotary Encoders

The Surround Panner Option rotary encoders provide direct control of Front, Rear, and Front/Rear Divergence, Center percentage, LFE level and channel Volume.



Each Surround Panner Option encoder is dual-purpose except for the Volume encoder.

The Surround Panner Option supports the following Pro Tools panning modes: X/Y mode, 3-Knob mode, and Divergence Editing. The Surround Panner Option does not support Auto-Glide mode.

Position/LFE and Divergence/Ctr % Modes

All of the Surround Panner Option encoders (except for the Volume encoder) are dual-functional controls. They can be used for encoder-based panning (Position/LFE mode), or for divergence and parameter editing (Div/Ctr % mode). The desired mode is selected with the Div/Ctr % switch.

Fine-Adjust Mode

The Surround Panner Option supports fine-adjust mode for all encoders, using the standard Pro Tools command.

To pan in fine-adjust mode:

- Press Control (Windows) or Command (Mac) and rotate any encoder.

To pan using the encoders (Position/LFE mode):

- 1 Focus the track that has the output you want to pan (See “Targeting Panners” on page 11).
- 2 Target the output you want to pan (see “Targeting Panners” on page 11).
- 3 Enable Position/LFE mode by pressing the Div/Ctr % switch, so that the Div/Ctr % switch LED is not lit.
- 4 Adjust the Front Pos (Front Position), Rear Pos (Rear Position), or F/R P (Front/Rear Position) encoders.

Adjusting Other Parameters

The Surround Panner Option rotary encoders can adjust channel volume, LFE contribution, Divergence parameters, and Center Percentage.

Volume

To adjust volume:

- Use the Volume encoder in either Position/LFE or Div/Ctr % mode.

The Volume encoder controls the track's volume if the track's Output window is targeted. When any of the track's sends is targeted, the Volume encoder will control the send's volume.

LFE

To adjust the LFE slider:

- Use the LFE encoder while in Position/LFE mode.

Adjusting Divergence and Center Percentage

The Surround Panner Option can adjust a panner's divergence and center parameters.

To adjust divergence:

- 1 Enable Div/Ctr % mode by pressing the Div/Ctr % switch, so that the Div/Ctr % switch LED is lit.
- 2 Adjust the Front Div (Front Divergence), Rear Div (Rear Divergence), or F/R Div (Front/Rear Divergence) encoders as appropriate.

To adjust Center Percentage:

- 1 Enable Div/Ctr % mode by pressing the Div/Ctr % switch, so that the Div/Ctr % switch LED is lit.
- 2 Rotate the Center % encoder.

appendix a

Compliance Information

Environmental Compliance

Disposal of Waste Equipment by Users in the European Union



This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

Proposition 65 Warning

⚠ *This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.*

Perchlorate Notice

This product may contain a lithium coin battery. The State of California requires the following disclosure statement: "Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

Recycling Notice



EMC (Electromagnetic Compliance)

Avid declares that this product complies with the following standards regulating emissions and immunity:

- FCC Part 15 Class A
- EN55103 – 1, environment E4
- EN55103 – 2, environment E4
- AS/NZS 3548 Class A
- CISPR 22 Class A
- ICES-003 Class A

FCC Compliance for United States

Radio and Television Interference

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.

DECLARATION OF CONFORMITY

We, Avid, 75 Network Drive
Burlington, MA 01803, USA
650-731-6300

declare under our sole responsibility that the product
Surround Panner Option
complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Communication Statement

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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or locate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any modifications to the unit, unless expressly approved by Avid, could void the user's authority to operate the equipment.

Australian Compliance



Canadian Compliance

This Class A digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada

Taiwan Compliance

警告使用者:

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

CE Compliance

(EMC and Safety)



Avid is authorized to apply the CE (Conformité Européenne) mark on this compliant equipment thereby declaring conformity to EMC Directive 89/336/EEC and Low Voltage Directive 2006/95/EEC.

Safety Compliance

Safety Statement

This equipment has been tested to comply with USA and Canadian safety certification in accordance with the specifications of UL Standards; UL6500 and Canadian CSA standard; CSA C22.2 No.1-M90. Avid Inc., has been authorized to apply the appropriate UL & CUL mark on its compliant equipment.

Warning



Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this equipment near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect power cords from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
- 11) Only use attachments/accessories specified by the manufacturer.

12) For products that are not rack-mountable: Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.

13) Unplug this equipment during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) For products that are a Mains powered device:
The equipment shall not be exposed to dripping or splashing and no objects filled with liquids (such as vases) shall be placed on the equipment.

Warning! To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

16) For products containing a lithium battery:
CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

17) The equipment shall be used at a maximum ambient temperature of 40° C.



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Technical Support (USA)
Visit the Online Support Center at
www.avid.com/support

Product Information
For company and product information,
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