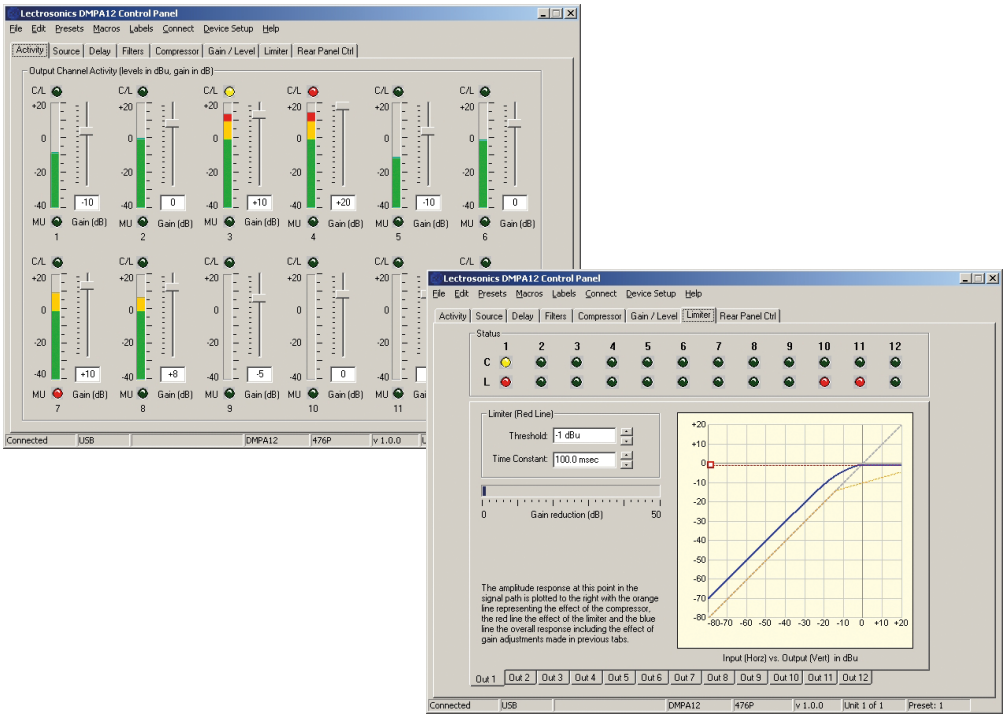
HARDWARE and SOFTWARE INSTALLATION GUIDE

DMPA12

Digital Power Amplifier



Fill in for your records:

Serial Number:

Purchase Date:

LECTROSONICS®
Rio Rancho, NM, USA
www.lectrosonics.com

Important Safety Instructions

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure -- voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with a 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 apparatus (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 third grounding prong. The wider 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 the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus 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 apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) **WARNING** -- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
16) The AC mains plug, or appliance coupler shall be readily available to the operator as a means of power disconnection.
17) Unit shall be connected to a MAINS socket outlet with a protective earthing connection.

Table of Contents

Important Safety Instructions..... 3
Introduction..... 5
Unpacking the Unit..... 5
Items Included in the box:..... 5
Hardware Installation 6
Rack Installation..... 6
Cables and Power Cord 6
Audio Inputs 6
Speaker Outputs 6
DMPA12 Rear Panel 8
Programmable Inputs..... 8
Programmable Outputs..... 8
Programmable Inputs and Outputs Wiring 9
Control System Interconnections 9
Installing LecNet2 Software and USB Driver 10
LecNet2 Software Installer..... 10
Driver Installer..... 11
Control System Interconnections 13
Initial Setup 14
Connect..... 14
Select the Signal Source..... 15
Initial Setup Hints..... 16
Additional Settings and Functions 17
Compressor and Limiter..... 17
Front Panel Gain Controls..... 17
Front Panel Output Activity Indicators..... 18
Output Fault Indications 18
Expansion Mode Setup..... 18
RS-232 Baud Rate Adjustment..... 18
Connect Options 19

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 not expressly approved by Lectrosonics, Inc. could void the user's authority to operate the equipment.

This device complies with Part 15 of the 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.

Introduction

The purpose of this guide is to assist in the correct installation and initial setup of a DMPA12 digital power amplifier in a sound system utilizing other DM Series components. This guide assumes familiarity with the DMPA12 amplifier and other components and software used in the system. To get the most out of this power amplifier, it is suggested that you review the information presented in the Reference Manual, available on the supplied CD or downloaded from the web site at:

http://www.lectrosonics.com/LecNet2/

A detailed online Help is also available to assist in the setup and operation of this power amplifier using the USB interface and a computer system running Windows XP, Vista and 7 operating systems. In addition to assistance setting up and operating this amplifier, the Help includes a complete listing of Commands. These commands can be used to setup and operate the amplifier via external devices using either the USB or RS232 serial port.

Unpacking the Unit

Compare the packing list enclosed with the unit with the original order. Inspect all items for damage. Immediately call 1-800-821-1121 to report any items that are missing or damaged. The sooner we get notified, the sooner we can get any needed replacement items shipped to your location.

Items Included in the box:

Description	Quan.	Part Number
Installation Guide	1	M-DMPA12-I
Warranty Card	1	
Power cable	1	21499
5-pin Phoenix connector	6	21580
25-pin connector	1	21558
LecNet serial cable, black DB-9 to 3.5mm stereo plug	1	21529-1
LecNet serial cable, red DB-9 to 3.5mm stereo plug for AMX, Crestron	1	21710-1
USB interface cable	1	21713
CAT-5 interconnect cable	2	21716
Small screwdriver	1	35679

Rack Mount Support Kit:

Siderail	2	26693
Screws	6	28505
Washers	6	28402

If there are any problems or items missing, immediately call 1-800-821-1121 and ask for anyone in sales or service.

Hardware Installation

Rack Installation

The DMPA12 occupies a single rack space and there are no special ventilation requirements. Mount with 4 rack screws through the ears on the front panel.It is recommended to use nylon washers to prevent damage to the front panel's finish when tightening the screws.

While it is not mandatory, it is good practice to leave an empty rack space above the amplifier.

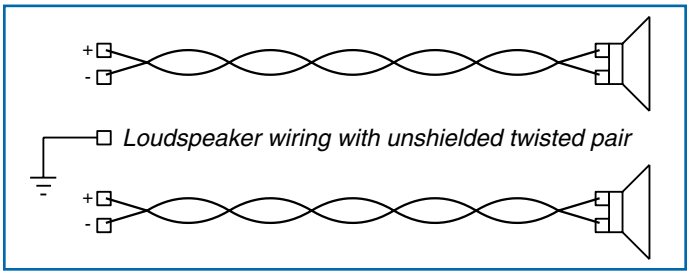
The amplifier should be mounted in a rack with rear support rails. Adjustable brackets are provided.

Rear support brackets are included with the amplifier

Cables and Power Cord

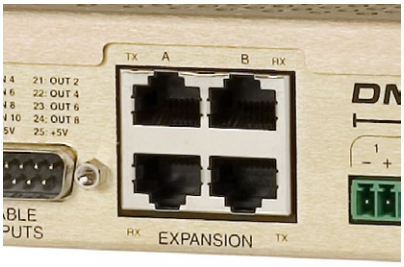
It is recommended to use lacing bars for cable strain relief when mounting in a rack. Use only professional grade audio, either a twisted pair type or two conductors plus ground/shield.

The power input jack is a standard 3-pin type that accepts commonly available cords with IEC 60320 C13 connectors – the same type 3-pin socket typically used on computers and peripherals with built in power supplies. The internal switching power supply will handle voltages ranging from 100 VAC to 240 VAC for use with power sources outside of North America.

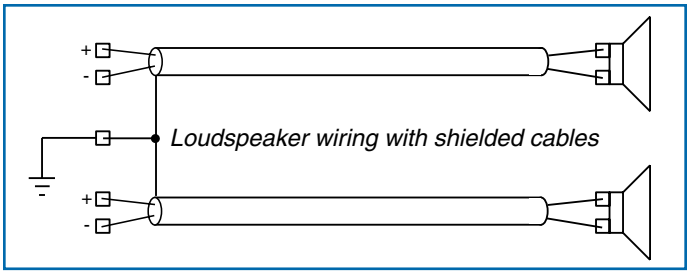


Audio Inputs

Input signals are delivered from DM Series processors into the power amp via the DANI (digital audio network interface) bus using the supplied CAT-5 cables connected to the Expansion ports.



There are no analog audio inputs to the amplifier

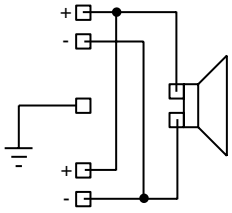


Speaker Outputs

All outputs are a balanced differential configuration and can be used with shielded or unshielded cabling. Two adjacent outputs can be combined to double the power delivered to a loudspeaker by wiring them in parallel.

NOTE: The design of the Class D amplifier requires that adjacent channels be wired in parallel in order to combine them. This is different than the wiring used to bridge the outputs on a conventional analog power amplifier.

WARNING: DC voltage is present on the outputs, which are designed to operate ONLY in a balanced configuration. If either the (+) or (-) pins are grounded, the outputs that share that connector will automatically shut down and a fault will be indicated on the front panel (blinking orange LEDs).



Two adjacent outputs can be combined to double the available power for one loudspeaker by wiring two adjacent outputs in parallel.

NOTE: When the outputs are wired this way, the same signal source and DSP processing must be selected for both outputs. See the Source Tab in the software GUI for this selection.

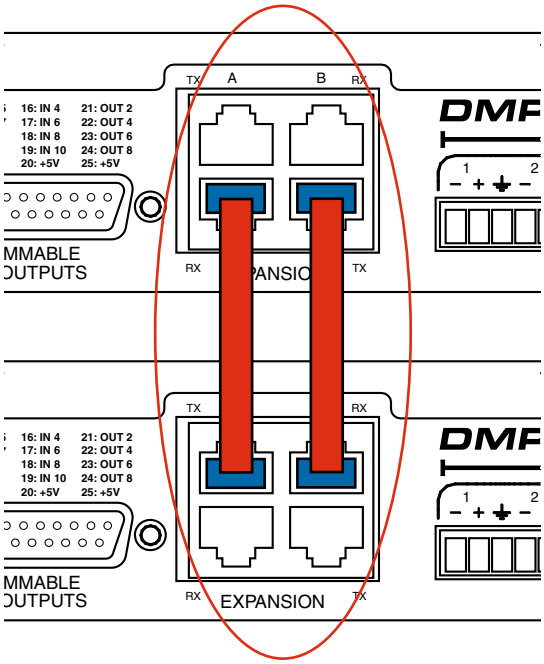
DANI Bus (expansion ports)

Expansion I/O ports

The four RJ45 connectors on the rear panel are used to interconnect LecNet2™ units together. These ports are only used to transfer digital audio information via the Digital Audio Network Interface (DANI) between the DM Series processors that are interconnected.

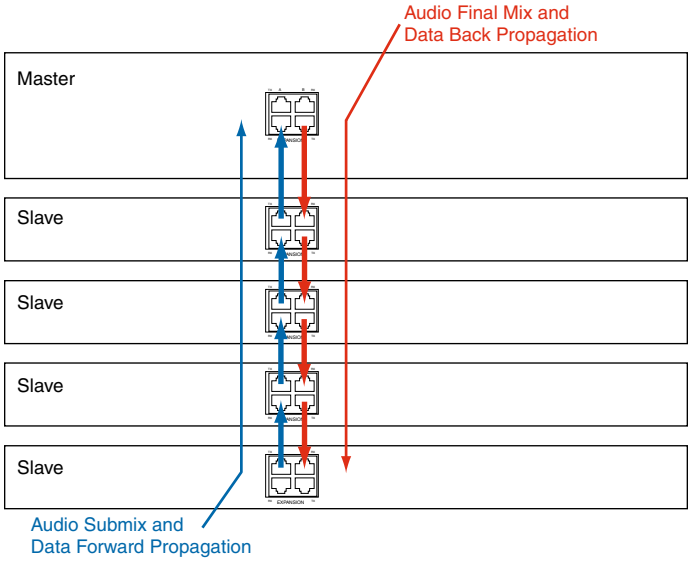
WARNING: The Expansion I/O connectors are *NOT* EtherNet, CobraNet or any other network based device interconnects. Connecting them to Ethernet, CobraNet or other network based device may cause damage to either unit.

To connect the Master/Slave units, plug one end of a 12 inch Cat5e cable (two are supplied with each with unit) to the transmit (TX) port on the Master unit, and connect the other end to the corresponding receiver (RX) port on the Slave unit immediately below the Master. Repeat this procedure with the second Cat5e cable. (See **Expansion Port Digital Audio Network Interface Interconnection Diagram**.)



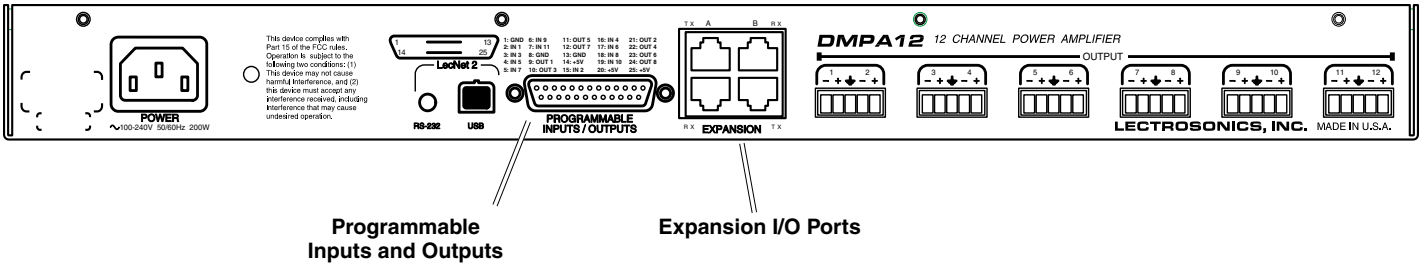
Interconnection Diagram

The DMPA12 amplifier, like all DM Series processors, are interconnected via the Expansion ports on the rear panel. The correct wiring to stack multiple units is shown here. To ensure proper signal and data flow, the TX port on a slave connects to the RX port directly above it in the stack. The TX port on the upper unit connects to the RX port on the unit below it.



Audio signals and data are propagated through the DANI bus via Cat5e cables connected to the Expansion ports on the rear panel.

DMPA12 Rear Panel

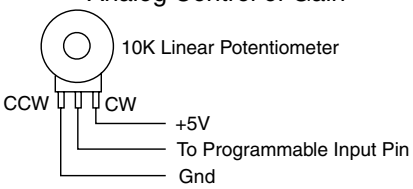


Programmable Inputs

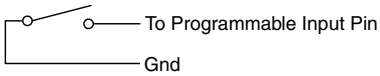
Programmable inputs are provided to enable external control over a variety of parameters. Each input can respond to either a contact closure or a continuous voltage. The following illustrates common connections to the programmable input pins. (See also **Programmable Inputs and Outputs Wiring Diagram**.)

No external pull-up resistors are necessary because each programmable input is internally pulled up through a 100K resistor to +5V. When using a continuous voltage with one of the programmable inputs, the function of the programmable input must be set to ***Analog Output RP Gain Control*** on the **Programmable Inputs** control tab in the Control Panel GUI. See the **Programmable Input** tab in the Control Panel software Help for setting all programmable input parameters.

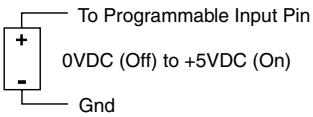
Potentiometer Connection for Analog Control of Gain



Contact Closure as Programmable Input



DC Voltage Source as Programmable Input



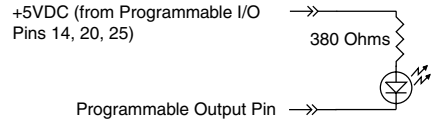
Programmable Outputs

Programmable outputs are used to indicate the current state of a programmable input or to indicate some other feature of the DMPA12. Each programmable output is the electrical equivalent of a contact closure to ground. When a programmable output is "active", it conducts current to ground. When the programmable output is "inactive", no current flows to ground. The maximum usable voltage for the programmable outputs is 40 V and they will safely conduct up to 100 mA DC continuous. Following are some typical uses for the programmable outputs.

Note: The diagram shows an external DC source powering the relay coil. This is necessary whenever coil voltages exceed 5 V.

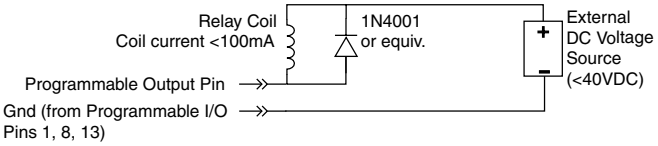
Both LEDs and 5V relay coils can be powered by the +5 V DC pins on the programmable input connector, as long as the maximum combined current for all LEDS and relay coils does not exceed 100 mA.

LED is on when the programmable output is active



LED is off when the programmable output is active

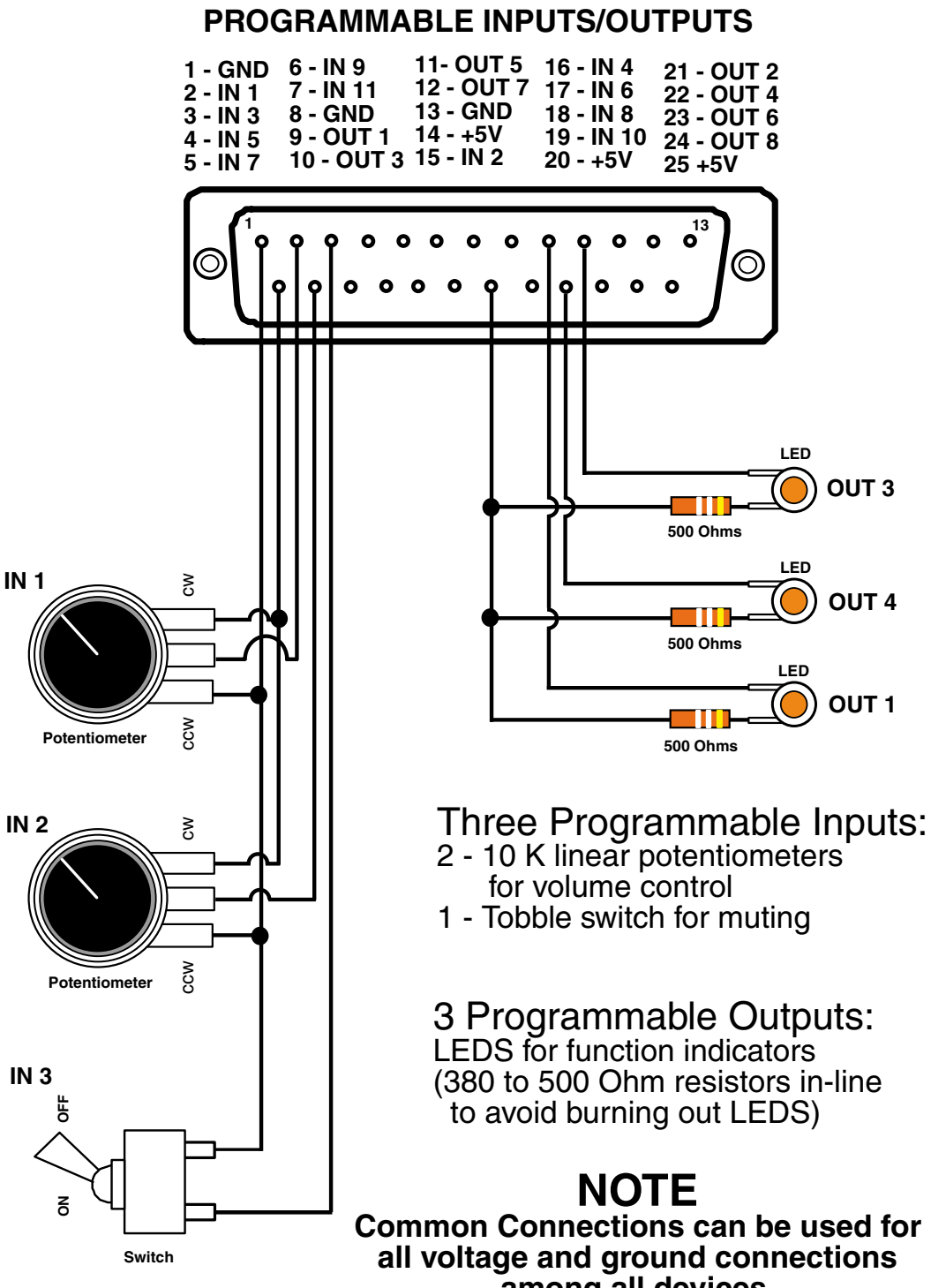
Relay is on when the programmable output is active



Programmable Inputs and Outputs Wiring

Remote control with external pots and switches is provided with Programmable Inputs on a standard DB-25 connector on the rear panel. Programmable Outputs are used to provide external LED indicators and to trigger other events.

Examples of the wiring are shown below.



Three Programmable Inputs:
2 - 10 K linear potentiometers
for volume control
1 - Tobble switch for muting

3 Programmable Outputs:
LEDS for function indicators
(380 to 500 Ohm resistors in-line
to avoid burning out LEDS)

NOTE

Common Connections can be used for all voltage and ground connections among all devices.

* *Windows* Vista and XP or are trademarks of Microsoft Corporation.

Installing LecNet2 Software and USB Driver

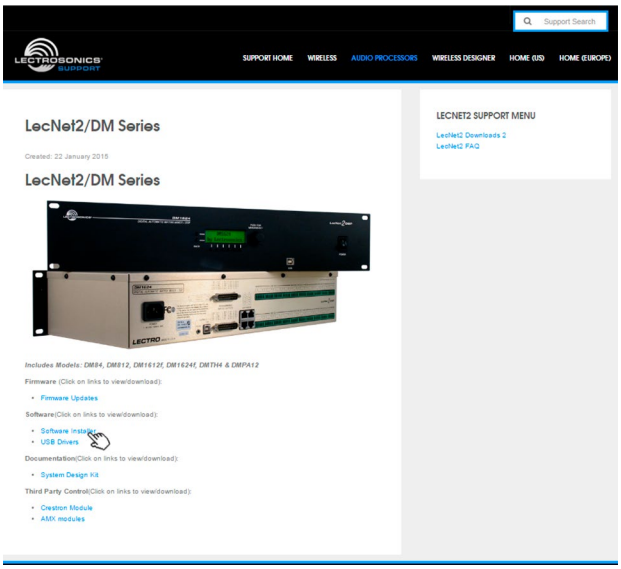
Software Installer - Windows Installation

The example shown her illustrates the installation procedure using a Windows operating system. The screens that appear at each step using another operating system will vary, but the general steps are very similar.

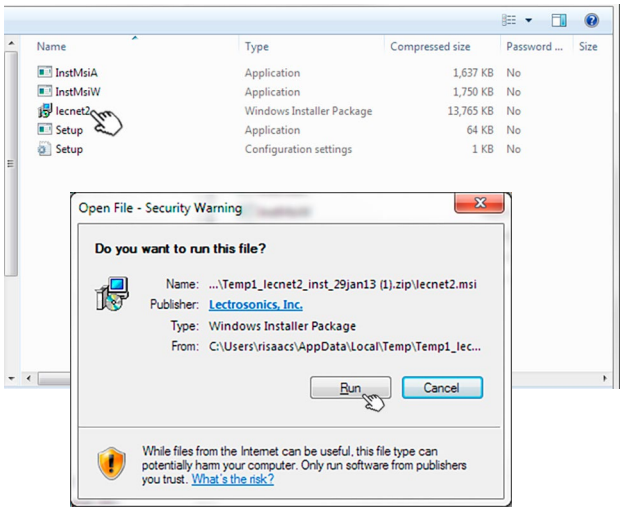
Download the LecNet2/DM Series Support software installer from the web sites under the SUPPORT tab at:

http://www.lectrosonics.com/US

http://www.lectrosonics.com/europe/

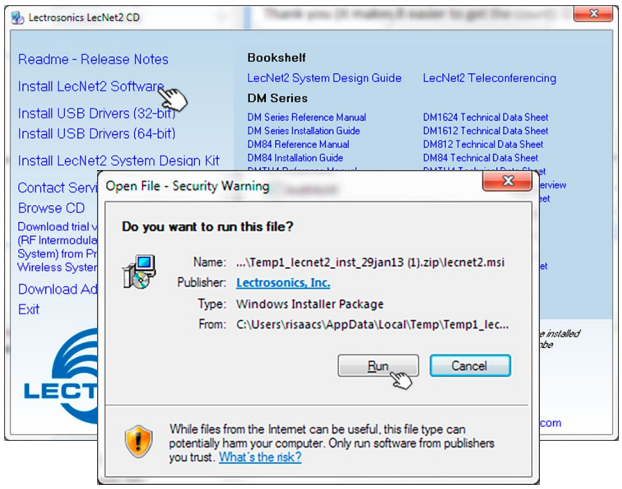


1. Launch the installer and follow the screen prompts.

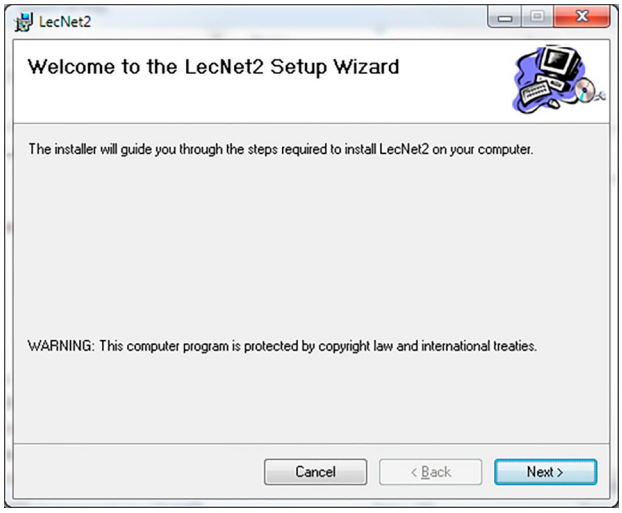


Or use the flash drive supplied with the processor.

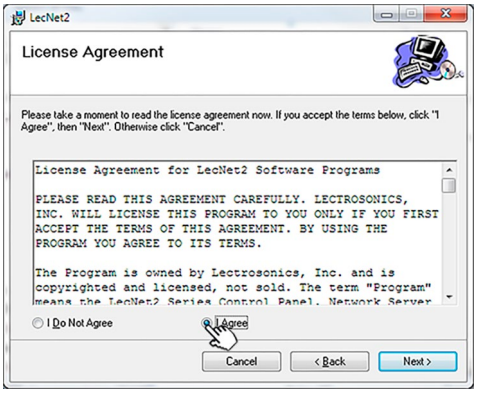
WDDISK



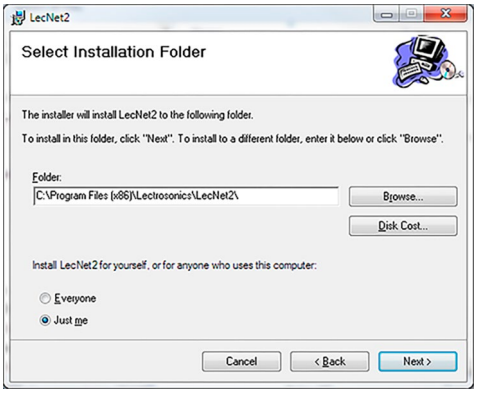
2. Follow the prompts to run the LecNet2 Setup Wizard.



3. The End User License Agreement screen appears. Click on **I Agree** to continue.

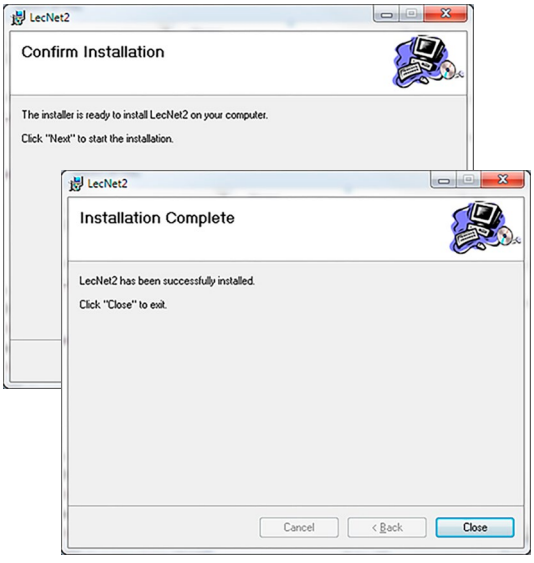


4. The installer will automatically download to a folder on your PC, or you can choose which folder it should be stored in.



5. Click on **Next** to complete the installation.

   When the installation is complete, the confirmation screen will appear.



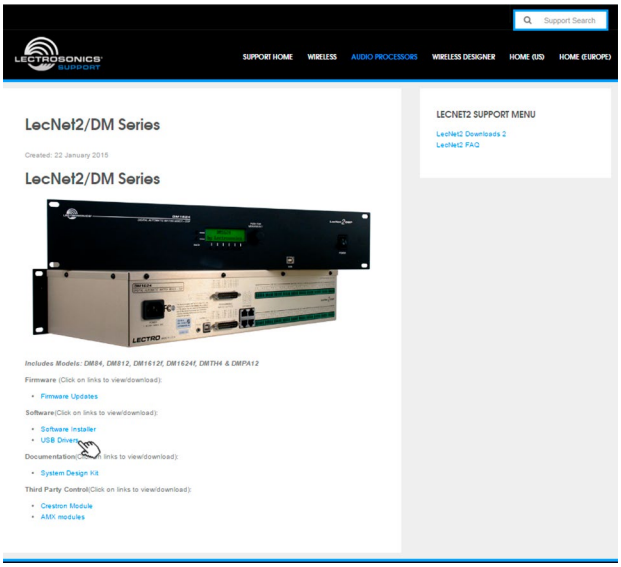
USB Driver Installer - Windows Installation

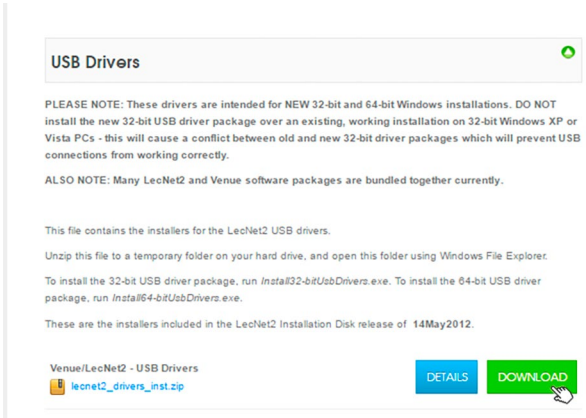
The example shown her illustrates the installation procedure using a Windows operating system. The screens that appear at each step using another operating system will vary, but the general steps are very similar.

Download the LecNet2/DM Series USB drivers from the web sites under the SUPPORT tab at:

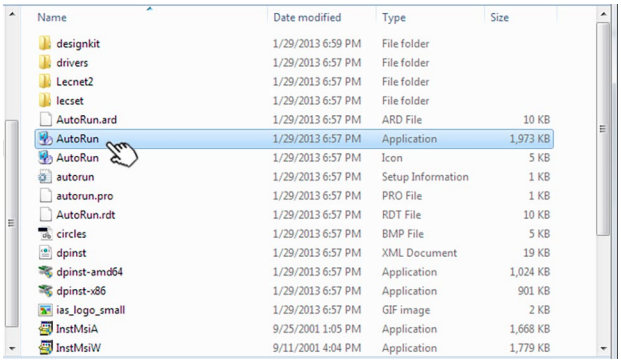
http://www.lectrosonics.com/US

http://www.lectrosonics.com/europe/





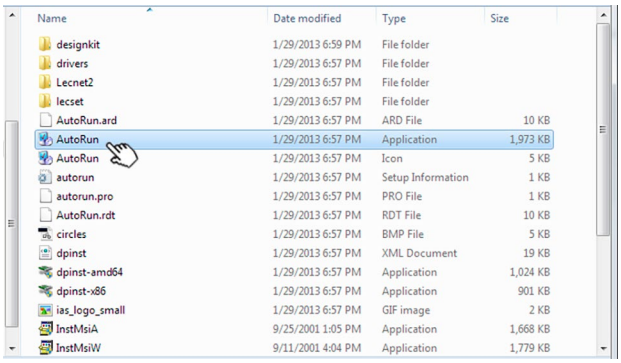
1. Launch the installer and follow the screen



WDDISK

Or use the flash drive supplied with the processor.

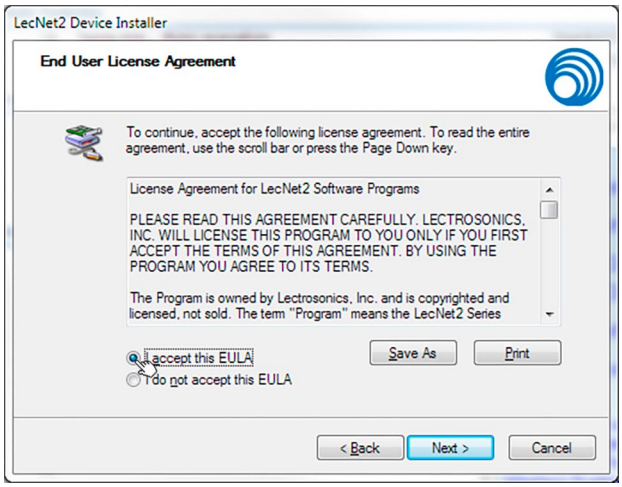
Navigate to the USB folder and click on AutoRun.



2. Click on Install USB Drivers (The installer will alert you if you choose the wrong bit size.)

3. Follow the prompts to run the installer.

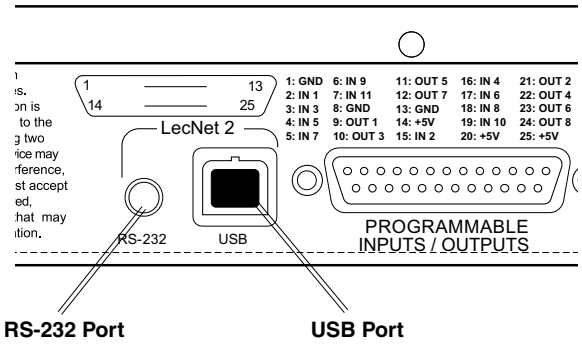
4. The End User License Agreement screen appears. Click on **I Agree** to continue.



5. The installer will walk you through installation. When complete, the final screen will appear. Click on Finish to close the installation.

Control System Interconnections

In addition to a Windows® based computer system, the DM84 can be controlled by external serial control system using the RS-232 interface, such as those from Crestron® and AMX®.



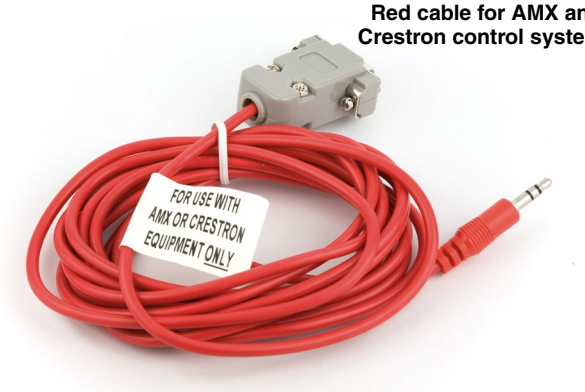
Two RS-232 serial cables are provided.

The cable with the **BLACK** TRS connector is an RS-232 cable wired for use with a laptop computer system.

Black cable for computer connection

The cable with the **RED** TRS connector is designed to be used with a control system such as those from Crestron® or AMX®.

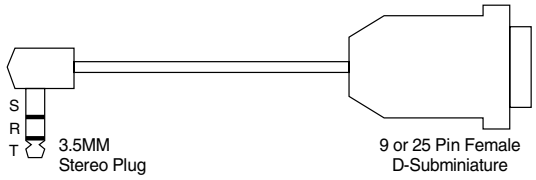
Red cable for AMX and Crestron control systems



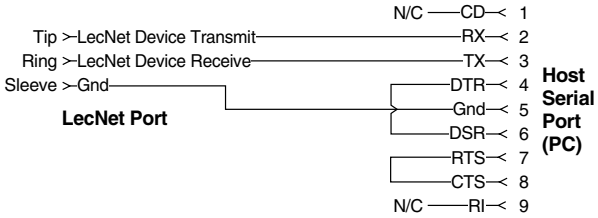
NOTE: Crestron® is a trademark of Crestron Electronics, Inc. AMX® is a registered trademark of AMX Corp.

Part# 21529-1 (Black Cable)

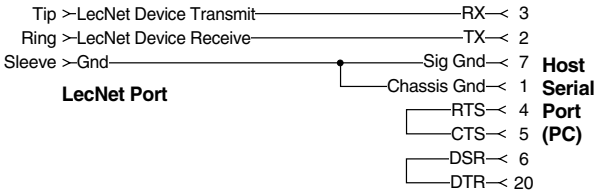
Device to PC



Wiring Diagram, 9 Pin D-Sub

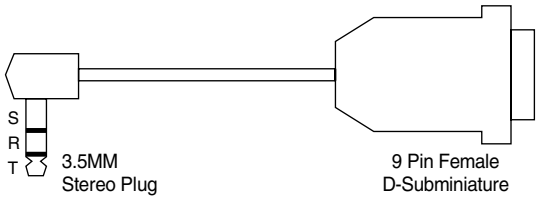


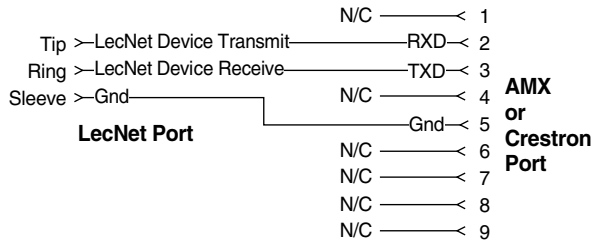
Wiring Diagram, 25 Pin D-Sub



Part# 21710-1 (Red Cable)

Device to AMX or Crestron





Initial Setup

The initial setup of a DMPA12 system is a simple four step process:

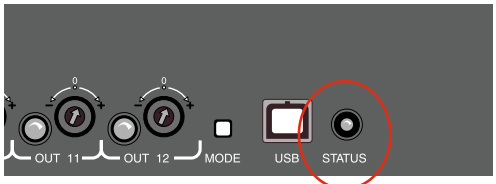
- Set the unit to the **Master** mode, if necessary
- **Connect** the unit to the computer
- Select the signal **Source**
- Set the **Gain / Level**

LecNet2™ Software and the USB Driver must be installed before these steps can be completed.

Master/Slave Configuration

IMPORTANT: When operated as a "stand alone" unit, the amplifier must be configured as a Master before it will communicate with a computer for setup.

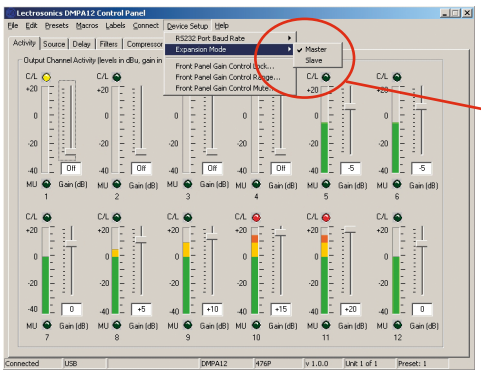
First, connect ONLY the computer and a power cable to the processor. Turn the power on and observe the Status LED on the front panel. If the LED is blinking, the unit is in the Slave mode and cannot start up because it does not detect the presence of a Master unit.



The STATUS LED will blink if the unit is turned on and in the Slave mode and there is no DM Master processor connected to it.

If the STATUS LED blinks at power up, press the MODE button to reset the unit temporarily to the Master mode. The unit can then be connected to a computer and configured as needed for operation.

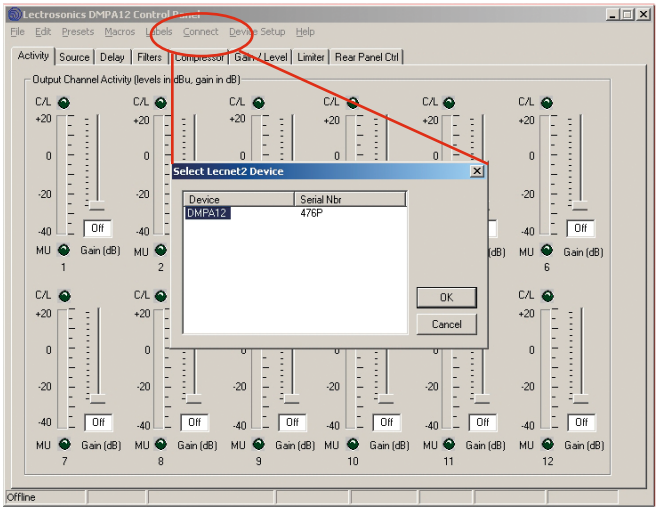
Permanent changes to the Master/Slave status must be made with the GUI interface. The front panel MODE button is temporary only.



Use the GUI to make permanent changes to the Master/Slave status.

Connect

For simplicity, the instructions shown on this page include only USB and RS-232 connections for setup using a computer connected directly to the amplier. For additional methods of connecting to the unit including network and offline use, see page 17.



Connecting via a USB port.

Connect the computer system to the DMPA12 unit using either the USB cable or the BLACK DB9 to stereo mini (TRS 1/8") cable for RS-232 communications. (Both cables are included with the unit.)

NOTE: Only one DMPA12 unit at a time can be connected to a serial port using the RS-232 cable. Multiple units may be connected to a USB port using a USB hub.

Turn the computer system on. After the boot sequence is complete, click **Start**, then **All Programs**.

Select **LecNet2**, then select the DMPA12 control panel from the list.

If the **"Just a Reminder"** dialog appears, click **OK** to continue.

Click **Connect** on the Main Menu bar, then select the type of connection between the computer system or external control system and the DMPA12 unit.

USB - A standard interface that launches automatically when the unit is connected and turned on. Front and rear USB ports are provided.

Serial->COM1 - An RS-232 port for RS-232 communications between the DMPA12 and the computer sytsem, or for connecting the DMPA12 to an external Crestron® or AMX® control system.

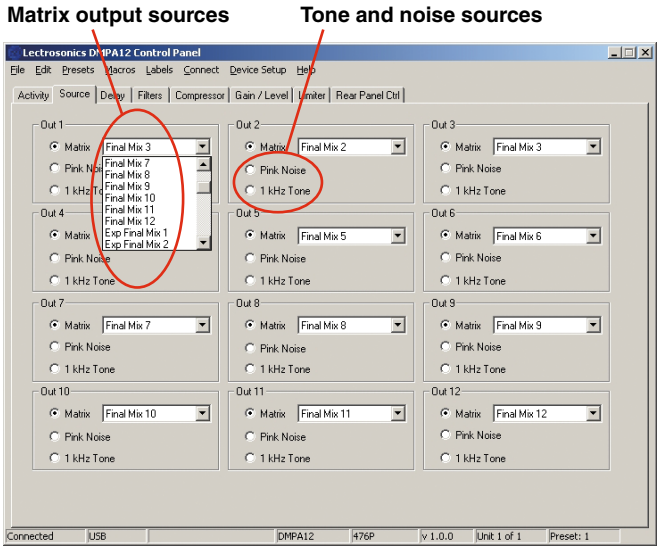
NOTE: The menu will list all serial ports detected on the PC. However, many newer PCs have no RS232 serial ports at all, so no serial connection options will be listed.

For additional methods of connecting to the unit including network and offline use, see page 18.

Select the Signal Source

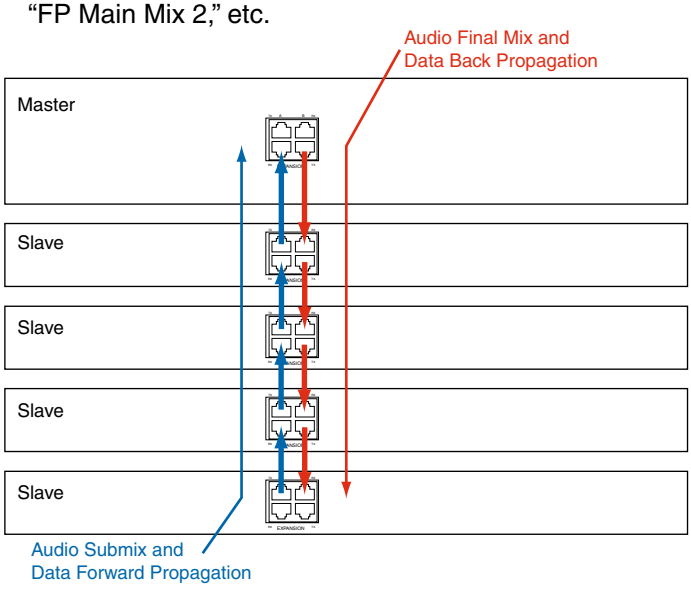
The input signal to the amplifier is taken from the DANI (digital audio network interface) or from a tone or pink noise source generated in the amplifier. It is useful to use the tone or pink noise source during initial setup to verify proper connections and signal routing to the loudspeakers.

With a DM processor installed and microphones or other audio sources are available, the sound system can be operated during setup. The signals in the system are delivered to the DMPA12 amplier via the DANI bus, back propagating from the Master to the Slaves, and forward propagating from Slaves to the Master. This bi-drectional signal flow allows for a variety of configurations in the setup.



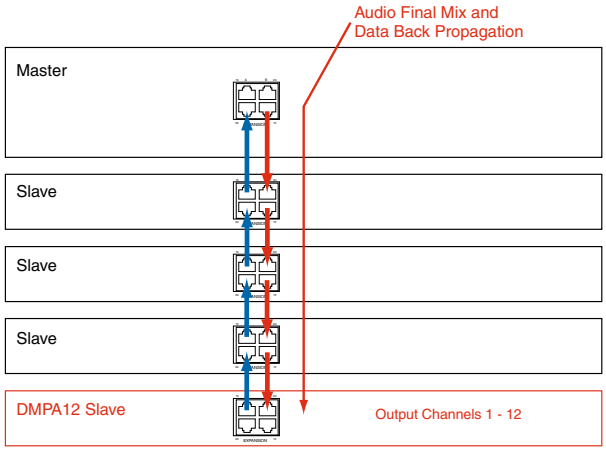
Back propagated signals from the Master to the Slaves on the DANI are labeled “Final Mix 1,” “Final Mix 2” and so on. The term Final Mix refers to the mix at each output of the Master unit in the system.

Forward propagated signals moving upward from the Slaves toward the Master are labeled “FP Main Mix 1,” “FP Main Mix 2,” etc.



There are also expansion buses that provide two additional sources for both the back and forward propagated sources. These include “Exp” in the source name in the pull down dialogue box.

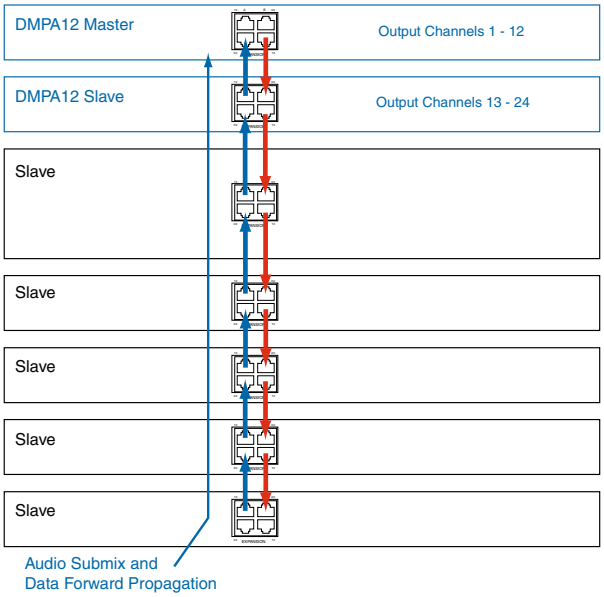
The DMPA12 is usually positioned at the bottom of the stack, configured as a Slave, with inputs coming from the back propagated signals from the Master.



This will provide Final Mixes 1 through 12, plus the two Exp Final Mix signals from the Master unit.

NOTE: The DMPA12 must first be connected directly to a computer to allow the signal sources and levels to be set. This is mandatory to allow signal flow through the unit, as the factory default settings have no source selected and the outputs are turned off.

If the system design utilizes 24 Final Mix signals at the output of the Master, two DMPA12 amplifiers must be positioned at the top of the stack, one as the Master and the other as a Slave just below the Master.



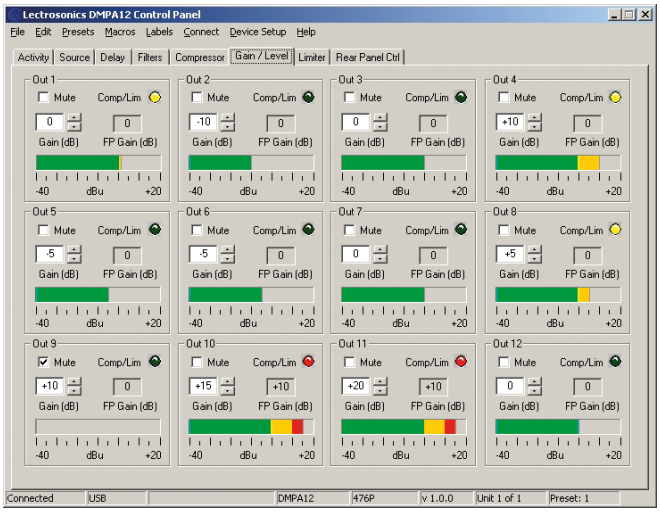
In this configuration the Master and the Slave just below it will have access to FP Main Mix signals 1 through 24, plus the Exp bus signals, which will include all signals from all slave units in the system.

Adjust the Gain / Level

The default setting on the amplifier is OFF, so no signal will be passed to the outputs until a value is selected.

Values can be entered directly into the field, or the values can be scrolled up and down with mouse clicks.

The multi-colored bar graphs indicate the signal levels at the outputs. The LEDs indicate yellow for compression and red for limiting.



The Gain / Level tab is used to to adjust and monitor the outputs. The GUI presents a multi-color bar graph and LED for each of the 12 outputs.

About the Level Meter

The bar graph is a true RMS level meter which displays the output audio level in dBu after digital signal processing is complete. The range of the meter is -40dBu to +20dBu, referenced to the internal voltage scale prior to digital to analog conversion and power amplification. Note: The relationship between output level as indicated on the level meter and power output into an 8 ohm load is determined by these facts:

The maximum output of the digital to analog converter (DAC) is 1 Vrms. So a full scale (+20 dBu) signal, after digital to analog conversion, results in a 1 volt signal at the input of the power amplifier.

The gain of the power amplifier stage is 20dB (for voltages, a tenfold increase).

So a 1 kHz test tone shown by the level meter to have a level of +20 dBu (full scale) will result in in a power output of 12.5 watts into an 8 ohm resistive load. This is because the full scale signal, after conversion, results in a 1 volt input to the power amplifier. Since it has a gain of 20dB, the power amplifier output is 10 volts, developed across the 8 ohm load. From “power equals voltage squared divided by resistance” we get 100/8 or 12.5 watts. A +10 dBu test tone will result in 1.25 watts, a 0 dBu test tone will result in 0.125 watts, and so on. Note: These numbers are based on “ideal” components, including the load resistance. Variations in real-world components will result in measured power varying by as much as 0.5dB from calculated figures.

Initial Setup Hints

1) The GUI interface is quite intuitive. As a recommended first step, we suggest you select Labels from the Menu Bar and type in a description of each output. This will simplify further setup steps because you will be able to easily keep track of which output you are adjusting.
2) The right mouse click is handy in this interface by allowing Copy, Paste, Delete, Undo and Select All operations on the values presented in the fields.
3) Store startup settings in a startup default preset. (See **Storing and Recalling Presets** in the online HELP application.)
4) Presets will take about 3 seconds to switch due to the many parameters in the unit - audio will switch off temporarily during a preset switch to avoid feedback. If you need quicker response with no interruption to the audio, use macros instead - try using the macro recorder for making any changes. The only changes that cannot be made in a macro are filter adjustments. such as EQ.
5) Store presets after changes are made and not before they are made.
6) Help is always available by clicking **Help** on the Main Menu Bar. This Help is a comprehensive resource and includes the latest revisions to the software and firmware.

IMPORTANT: Any changes made during setup must be saved in the unit via the preset menu.

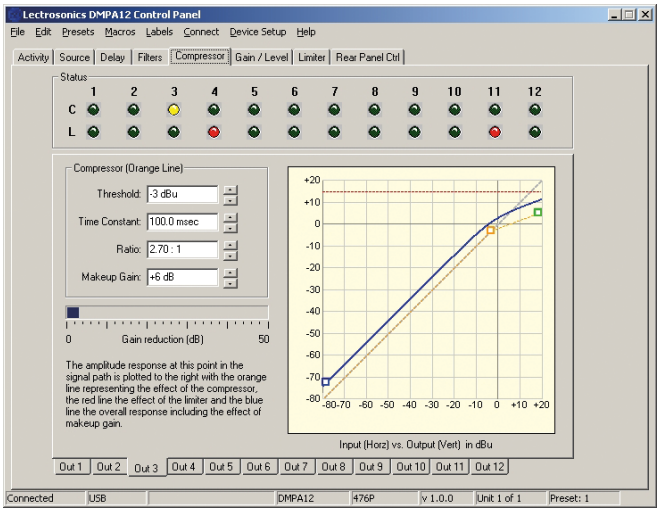
For direct support from the factory, call 1-800-821-1121. Ask for anyone in the SALES department. They will be able to answer your setup and/or technical questions or will get the correct person who can help on the phone.

Additional Settings and Functions

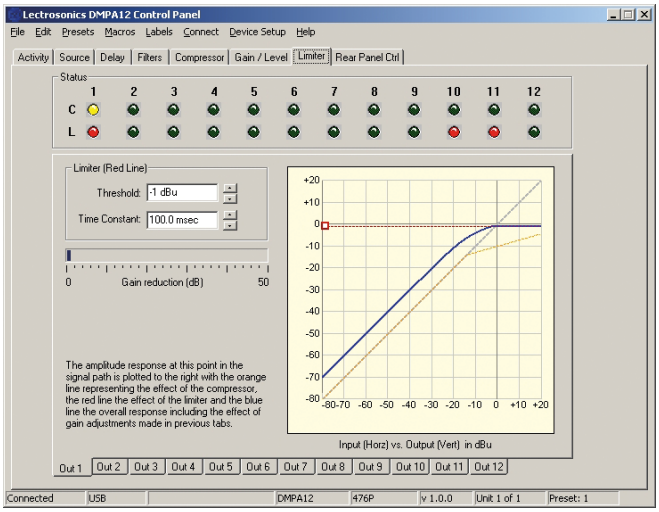
In many cases the installer is required to make additional settings and/or adjustments to enable functions such as auxiliary remote controls using pots and switches. Since some of these additional functions affect the basic signal flow and levels, it is important for the installer to understand what is available and how some of the most important processes work.

Compressor and Limiter

The Compressor and Limiter have individual tabs for setup, but since these functions are so closely related in operation, LEDs in the upper part of the GUI indicate the real time status of each process on every channel.



Compressor settings and parameters



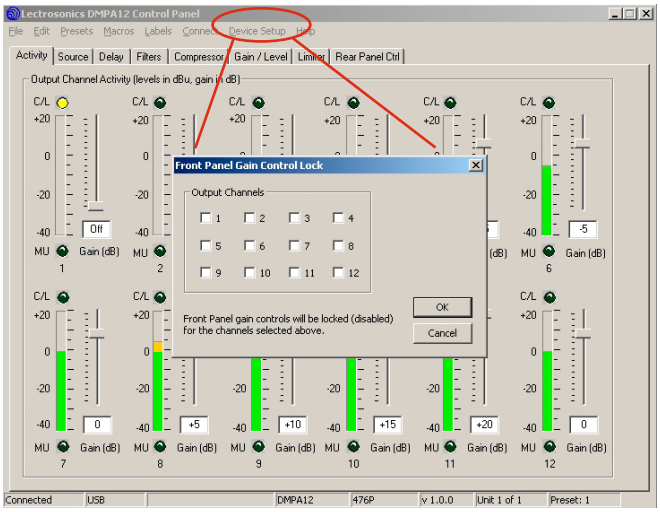
Limiter settings and parameters

For a full explanation of these functions, refer the help file included with the GUI or the Reference Manual included on the supplied CD.

Front Panel Gain Controls

The gain of input and output audio channels is adjustable from the front panel of the DMPA12. This feature is useful for system setup and adjustment, and may be left enabled to allow users to “touch up” gains as needed during operation.

Any or all of the front panel gain controls may be “locked out” to prevent unauthorized changes to the system. This is done using the Control Panel GUI (in Device Setup Menu) or LecNet2 serial commands. **Changes made to the gain control lock settings take effect immediately and are global in scope - the same settings are in effect no matter what memory “preset” is loaded.**



Front panel level controls can be locked out or enabled with check boxes in a dialogue box under Device Setup.

Also under Device Setup are dialogue boxes to adjust the range of the front panel control and a special option that mutes the channel when the control is fully counter-clockwise. The minimum gain position has a special meaning - the channel will be turned “off” when the control is rotated to the fully counter-clockwise position.

NOTE: When the Front Panel Mute feature is enabled, the minimum gain position has a special meaning. The channel will be muted and the associated activity indicator will blink RED to warn the user that no audio is being passed. This feature can be controlled using the supplied GUI control panel or the serial command “fpmten.”

Gain can be increased or decreased within a range which is centered around 0 dB (unity) gain. The range of adjustment for each channel is individually programmable using the Control Panel GUI (in Device Setup Menu) or LecNet2 serial commands. **Changes made to the gain range settings take effect immediately and are global in scope - the same settings are in effect no matter what memory “preset” is loaded.** The default range is 30 dB (+/- 15 dB).

Front Panel Output Activity Indicators

These indicators reflect activity on the output audio channels. Useful for setup and troubleshooting, these tri-color LEDs are interpreted as follows:

- DARK channel is inactive
- GREEN audio present (level greater than -35 dBu)
- ORANGE output compressor is active
- RED output is in limiting
- BLINKING RED output has been muted using front panel gain control
- BLINKING ORANGE a fault exists on the output - check wiring for short circuits, etc.

Output Fault Indications

The outputs are protected from shorts and thermal overload. When a fault exists, the output will shut down and the front panel activity LED will blink orange. Faults are automatically reset and the output restored when the cause of the fault is removed.

Since the outputs are paired, sharing a common ground connection, a fault on either output on the connector will cause both outputs to shut down and indicate on the front panel LEDs.

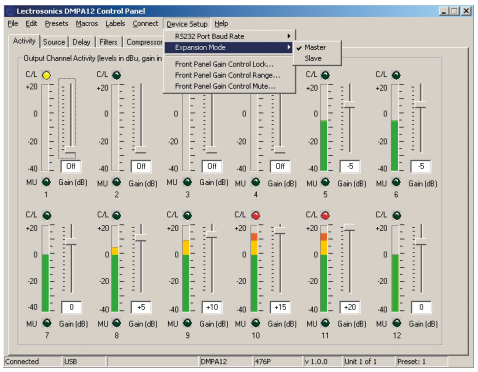
Expansion Mode Setup

When installed in a system of one or more DM series automixers, the DMPA12 must be configured to operate in Slave mode. However in Slave mode a Lecnet2 device cannot function as a standalone unit, unconnected to a system containing a Master device. For this reason the DMPA12 ships from the factory with the expansion mode set to Master so that it can be operated in a standalone manner. In this configuration it will capable of booting up normally so that it can be configured using the control panel program. Once configured, it will need to be switched to Slave mode prior to installation in the Lecnet2 system.

If inadvertently set to operate in Slave mode while being operated in a standalone manner, the DMPA12 will fail to boot up, so it is impossible to connect to it with the control panel in order to reverse the change. Recovery from this situation is simple. Pressing the recessed button on the front panel of the DMPA12 will temporarily set the expansion mode to Master, allowing it to boot up. At this point the DMPA12 can be set back to Master mode using the control panel program if desired.

Expansion mode changes do not take effect until power is cycled on the DMPA12.

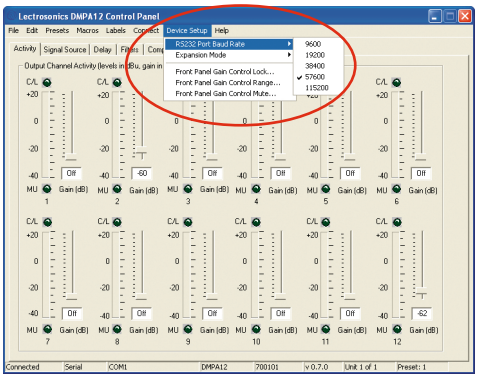
Of course, once configured as a Slave and installed into a system, the DMPA12 boots up normally since it detects the presence of the Master device in the Lecnet2 system.



Choose Device Setup->Expansion Mode from the Menu Bar. A submenu of choices will open, with a check mark next to the current value. Use the mouse to select the desired expansion mode. The change will not take effect until power is cycled on the DMPA12.

RS-232 Baud Rate Adjustment

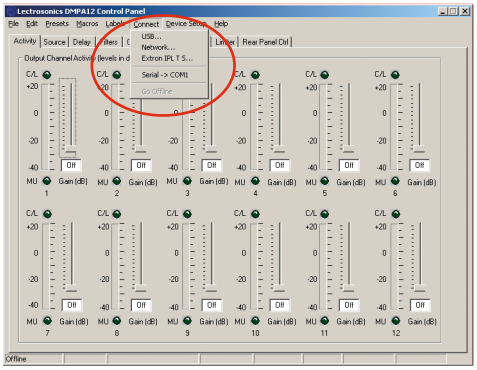
The RS232 serial port on the DMPA12 is intended for use with third party control systems. Since the serial port capabilities of these systems varies, a means of changing the baud rate of the RS232 port to match the control system requirement is provided. This adjustment affects only the RS232 port.



Choose Device Setup->RS232 Port Baud Rate from the Menu Bar. A submenu of baud rate choices will open, with a check mark next to the current value. Use the mouse to select the desired baud rate. The change will take effect immediately.

Connect Options

The DMPA12 can be connected to a computer via the following methods:



USB - A standard interface that launches automatically when the unit is connected and turned on. Front and rear USB ports are provided.

RS-232 - For direct computer connecton with this standard serial interface, or for use with a Crestron® or AMX® control system.

Network - One or more amplifiers may be made connected via a network using a gateway server acting as a middleman, receiving DMPA12 commands and forwarding them to the connected amplifiers via the USB ports.

Extron IPL T S interface - Extron Electronics offers network software/hardware interfaces to connect DMPA12 amplifiers to a computer via a network and RS-232 ports. The IPL interface functions as a gateway server over a LAN by means of an Ethernet connecton. These interfaces are available only from Extron Electronics.

Serial->COM1 - An RS-232 port for RS-232 communications between the DMPA12 and the computer sytsem, or for connecting the DMPA12 to an external Crestron® or AMX® control system.

NOTE: The menu will list all serial ports detected on the PC. However, many newer PCs have no RS232 serial ports at all, so no serial connection options will be listed.

Go Offline - No connection is made. This mode can be used for off line configuration and is the default mode.

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(416) 596-6648 Fax

E-mail:
Sales: colinb@lectrosonics.com
Service: joeb@lectrosonics.com

LIMITED ONE YEAR WARRANTY

The equipment is warranted for one year from date of purchase against defects in materials or workmanship provided it was purchased from an authorized dealer. This warranty does not cover equipment which has been abused or damaged by careless handling or shipping. This warranty does not apply to used or demonstrator equipment.

Should any defect develop, Lectrosonics, Inc. will, at our option, repair or replace any defective parts without charge for either parts or labor. If Lectrosonics, Inc. cannot correct the defect in your equipment, it will be replaced at no charge with a similar new item. Lectrosonics, Inc. will pay for the cost of returning your equipment to you.

This warranty applies only to items returned to Lectrosonics, Inc. or an authorized dealer, shipping costs prepaid, within one year from the date of purchase.

This Limited Warranty is governed by the laws of the State of New Mexico. It states the entire liablility of Lectrosonics Inc. and the entire remedy of the purchaser for any breach of warranty as outlined above. NEITHER LECTROSONICS, INC. NOR ANYONE INVOLVED IN THE PRODUCTION OR DELIVERY OF THE EQUIPMENT SHALL BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS EQUIPMENT EVEN IF LECTROSONICS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF LECTROSONICS, INC. EXCEED THE PURCHASE PRICE OF ANY DEFECTIVE EQUIPMENT.

This warranty gives you specific legal rights. You may have additional legal rights which vary from state to state.

LECTROSONICS®

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24 August 2016