

# **DMP 128 • Setup Guide**



IMPORTANT: Refer to www.extron.com for the complete user guide and installation instructions before connecting the instructions before conver source. product to the power source.

This guide provides basic instructions for an experienced technician to install the DMP 128 ProDSP<sup>™</sup> Digital Matrix Processor. For additional information and specifications, see the DMP 128 product page at **www.extron.com**.

## **Disconnect Power and Mount the DMP 128**

Disconnect power to the DMP 128 and turn off all devices that will be connected to it. The DMP 128 is housed in a full rack width, 8.5 inch deep, 1U high metal enclosure that can sit on a table with the provided rubber feet or can be rack mounted. Select a suitable mounting location, then choose an appropriate mounting option.

Make all external device connections before applying power.

#### DMP 128 C P AT



## Connections

- AC Power IEC power connector 100 240 VAC, 50 60 Hz.
- Phantom power indicators Green LEDs light when +48 V phantom power is placed on the corresponding input. Phantom power voltage is not adjustable and is available only on inputs 1 8.
- (3) Mic/Line 1-8 input connectors Connect up to eight balanced or unbalanced microphone or mono line level devices using 3-pole 3.5 mm captive screw connectors. Phantom power is available to any of these inputs. Wire as shown at right.



5-pole CSR

(4) Mic/Line 9-12 input connectors — Connect up to four balanced or unbalanced mono microphone or line level, or two stereo devices to these 6-pole 3.5 mm captive screw connectors (see Audio Input Wiring at right).

#### NOTES:

- Balanced or unbalanced stereo devices can be connected to the 6-pole connectors.
- When using the 5-pole CSR adapter, connect it so that the far left plug inserts into the far left jack of the 6-pole input connector (see example at right).



(5) Mono output connectors — Connect up to eight balanced or unbalanced mono line level or four stereo outputs to these 6-pole 3.5 mm captive screw connectors. Wire as shown at right. In addition 5- and 6-pole connectors can be used (see Audio Output Wiring, right).



**ATTENTION:** For unbalanced audio outputs, connect the sleeves to the ground contact.

**DO NOT** connect the sleeves to the negative (-) contacts.

DO NOT Connect Here

# DMP 128 • Setup Guide (Continued)

(6) Digital I/O connectors — Connect up to four 6-pole 3.5 mm captive screw connectors. Each connector provides five configurable digital input or output ports allowing connection of up to twenty devices such as motion detectors, alarms, lights, LEDs, buttons, photo (light) sensors, and temperature sensors.

Digital I/O ports can monitor or drive TTL level digital signals. The inputs are configured to operate in one of two modes: digital input or digital output. In output mode, the device sources up to 250 mA at +5 V. In input mode, voltages greater than 1 V indicate a logic 'high' signal while voltages less than 1 V indicate a logic 'low'.

Digital I/O ports are tied to a common ground (one common ground for each 6-pole connector).

Connect a control system – There are three options to connect a control system to the DMP 128: LAN, RS-232, and USB (front panel only). Extron recommends using the LAN port for configuration and remote control of the DMP 128.

**RS-232** — Connect the host RS-232 cable to the rear panel of the switcher (<sup>(a)</sup>) using the provided 3-pole captive screw connector for bi-directional RS-232 ( $\pm$ 5 V) serial control. The default baud rate is 38400. Use the wiring diagram at right.

LAN — Using a standard Ethernet cable, connect to a network via the LAN port (<sup>®</sup>). The table at right shows the default network settings. The control system and DMP 128 must be connected on the same network.

**NOTE:** To connect the DMP 128 directly to a computer Ethernet port, use a crossover Ethernet cable.



OFF

DHCP:

**RS-232** 

USB-Connect the host USB port to the front panel configuration port, (not shown), using a

USB A to mini-B cable. The USB connection is used only for configuration. Use the RS-232 or LAN port for remote control of the DMP 128.

- (8) EXP port connector One RJ-45 jack for digital audio connection to an additional DMP 128 using the Extron proprietary protocol. Use the included one foot long shielded CAT 6 cable to connect two DMP 128 units to form a larger matrix system. The expansion bus supports 16 bi-directional channels of audio; eight assignable channels that are mixed from any of the input and virtual paths, and eight channels directly connected to the virtual return path outputs. See the DMP 128 User Guide for operation details.
- 9 Reset button and LED indicator The reset button returns the DMP 128 to different tiers of default states and places the unit into an event recording mode for troubleshooting. The LED flashes to signify the different tiers (see "DMP 128 Hardware Reset Modes" in the DMP 128 User Guide).
- (1) AT ports (AT models only) Four RJ-45 jacks form a 4-port Gigabit switch that interfaces with the AT bus. The AT expansion bus uses the Dante<sup>™</sup> protocol for digital media networking allowing connection of multiple DMP 128 AT models to form a larger matrix. See the DMP 128 User Guide for operation details.

**NOTE:** The Dante Controller software is required for configuration of the AT expansion bus (see **Dante Controller Software Installation (AT models only)** on the next page).

(1) Telephone ports (P models only) — Two RJ-11 jacks for incoming line (LINE) and telephone (PHONE) connection. The telephone interface follows all applicable US standards and international standards for select countries. A phone dialer is available in the DSP Configurator control software to assist with setup and testing.

When all connections have been made, power up the input and output devices, then apply power to the DMP 128.



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## **DSP Configurator Software Installation**

There are no hardware controls for the DMP 128. All configuration and control is done using DSP Configurator. Install DSP Configurator on a PC running Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 or later. For full details about computer requirements, see the DSP 128 User Guide at www.extron.com.

#### To Download the DSP Configurator Software from the Extron website:

- 1. On the Extron home page, click the **Download** tab. The Download page opens.
- 2. Under Software in the left column, select DSP Configurator Software. The DSP Configurator Software page opens.
- 3. Click the **Download Now** button and follow the on-screen instructions.

**NOTE:** On the first installation of DSP Configurator, the USB driver loads automatically. Follow the on-screen instructions. Once the USB driver has loaded, DSP Configurator continues to load.

By default, the program installs in C:\Program Files\Extron\DSP Configurator and an icon is placed on the desktop.

## **DMP 128 Configuration**

When power is connected to the DSP 128, an audio source, a power amplifier, and speakers, it produces an audio output that can easily be tailored to the listening environment. When a different configuration is required, change it using the DSP Configurator setup and control software.

### To Configure the DMP 128:

- Ensure the control computer is connected to the Ethernet port (recommended), RS-232 port, or front panel USB Config port of the DSP 128 (see "⑦" on page 2).
- Start the DMP Configurator software. Select the DMP 128 model corresponding to your model (DMP 128 C P shown at right). The main DMP 128 screen opens.
- 3. The program starts in emulate mode.
  - a. To create a configuration offline and upload (push) those changes to the DMP 128 at a later time, remain in emulate mode.
  - b. To push a configuration to the device, pull a configuration from the device, or to make immediate changes to the configuration or operation, select Live mode.

**NOTE:** When live mode is selected, a connection dialog box appears. Select the desired connection and follow the on-screen prompts.

The connection can be changed from the main menu by selecting **Tools** > **Connect to Device**, or by pressing <F6>.



For more information about live and emulate modes, see the DMP 128 User Guide.

The main screen provides access to all the features of the DMP 128. Full details about using the DSP 128 software can be found in the *DMP 128 User Guide* on the Extron website at **www.extron.com** or in the help file for the program.

## Dante Controller Software Installation (AT models only)

The DMP 128 AT uses Dante Controller for Windows to select and route inputs and outputs for all connected DMP 128 AT models.

Download and install the latest version of Dante Controller for Windows from the included software DVD or from the Dante Controller product page at **www.extron.com**.

## **Dante Network Audio Setup**

The following is the recommended procedure for configuring DMP 128 AT models on a Dante network.

**NOTE:** A connection to both the Dante (AT) Ethernet switch and the DMP 128 LAN port is required to follow this setup procedure. If the control computer has only one Ethernet port, connect it to a rear panel AT port (item (a) on page 2). Then connect a short CAT 5 cable from the LAN port (item (a) on page 2) to an unused AT port (item (a) on page 2). Alternately use an Ethernet switch to connect the control computer to both the LAN and AT ports.

- 1. Connect the control computer to an AT (Dante) port on the DMP 128. Also connect the control computer to the DMP 128 LAN port (see Note above).
- 2. Start DSP Configurator in Live mode (see steps 1, 2, and 3b of DMP 128 Configuration on the previous page).
- 3. From the DSP Configurator toolbar, select **Tools>Device Settings**.
- 4. In the **Unit Name:** field, enter a descriptive name for the DMP 128 (typically the device name and location) that enables it to be easily identified on the network.
- 5. Click **App1y**, then close the dialog box.
- 6. From the DSP Configurator toolbar, select **Network Audio Control**. If Dante Controller does not launch, see the **Dante Controller Software Installation (AT models only)** section on the previous page.
- 7. From Dante Controller toolbar, select Device>Device View.
- 8. Choose the Dante device. The DMP 128 appears as DMP128, plus the last six digits of the Dante MAC address.

**NOTE:** Connect DMP 128 units to the Dante network one at a time to easily identify the units. To confirm the proper device is configured, compare the Dante MAC address printed on the rear of the unit with the MAC address in the **Device View**.

- 9. Select the **Device Config** tab in Dante Controller.
- 10. Rename the device to match the DSP 128 name given in DSP Configurator (see step 4 above), then press <Enter>.
- 11. Select Yes to confirm the new name.
- 12. To connect additional DMP 128 units, repeat this procedure with the next device.

See the Dante Controller section in the DMP 128 User Guide for operation of the controller software.

## Telephone Ports (DMP 128 C P and DMP 128 C P AT only)

The DMP 128 provides a telephone interface with separate input and output signal processing paths (labeled "Telephone Rx" and "Telephone Tx" on the DSP Configurator main screen on the previous page). The country code must be entered before attaching the DMP 128 to a phone system.

To set or change the country code of a phone model:

 Follow Steps 1 and 2 from To Configure the DMP 128 on the previous page, then select Live in the Mode box.

**NOTE:** The device settings dialog can be accessed only in Live mode.

- 2. From the main DSP Configurator menu , select Tools>Device Settings.
- From the Device Settings dialog, select the Phone Settings tab (see diagram at right).
- If the correct country code is not listed under Selected Country:, click Change Phone's Country Code, then select the correct country code for your region from the dropdown list.
- 5. Click **App1y**, then close the dialog box.

See the DMP 128 User Guide for operating details of the phone modem.

Date/Time	Phone Settings	Dante Board		
Selecte	d Country: Un	ited States		
Version	: 1.0	0		
Ch	eck for	Import Country		
United St	ates	•		
United St Version: 1	ates	*		
United SI	ates 1.00	•		
United St Version: 1	ates	¥		

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