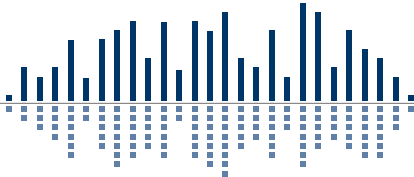


322 DSP Engine Quick Start Guide



The Vision Behind the Sound



Engineered by Symetrix

What Ships in the Box

- A 322 hardware unit.
- 322 Designer CD-ROM (Windows).
- One PS-3 (115 VAC), PS-3E (230 VAC) power supply.
- This Quick Start Guide.

What You Need to Provide

- A Windows® PC with 300MHz or higher Pentium® and:
- WIN 98SE, ME, 2000 or XP®.
- 10-15 MB free storage space.
- 1024x768 graphics capability.
- 16-bit or higher colors.
- CD-ROM drive or Internet connection.
- 64MB RAM (WIN 98SE/ME), 128MB RAM (WIN 2000/XP).
- Shielded twisted pair wire to connect the Control I/O RS-485 port to the RS-485 port of a master SymNet hardware device (Ring x, Address 1).
- A cable to connect the RS-232 serial port of your PC to the 322's RS-232 input. The 322's RS-232 input is a female DB9 connector.

Getting Help

322 Designer, the Windows application that controls the 322 hardware includes a help module which acts as a complete User's Guide for both hardware and software.

If you have questions beyond the scope of the help module, contact our Customer Support Group in the following ways:

Tel: +1.425.778.7728

8:00 am to 4:30 pm

Monday through Friday,
Pacific Time

Web: <http://www.SymetrixAudio.com>

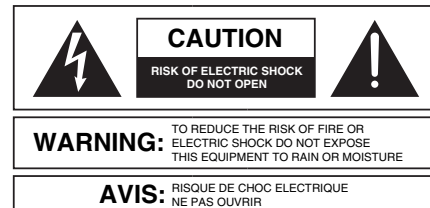
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations

Cet appareil numérique de la classe B respecte toutes les Exigences du Règlement sur le matériel brouilleur du Canada.

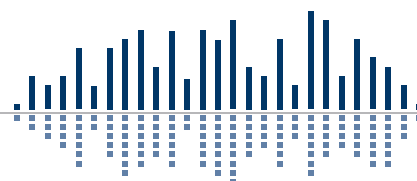
Important Safety Instructions

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install only 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 This apparatus shall be connected to a mains socket outlet with a protective earthing connection. 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 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 cord 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.



SEE OWNERS MANUAL. VOIR CAHIER D'INSTRUCTIONS.
No user serviceable parts inside. Refer servicing to qualified service personnel.
Il ne se trouve a l'interieur aucune piece pouvant etre reparaee l'usager.
S'adresser a un reparateur competent.

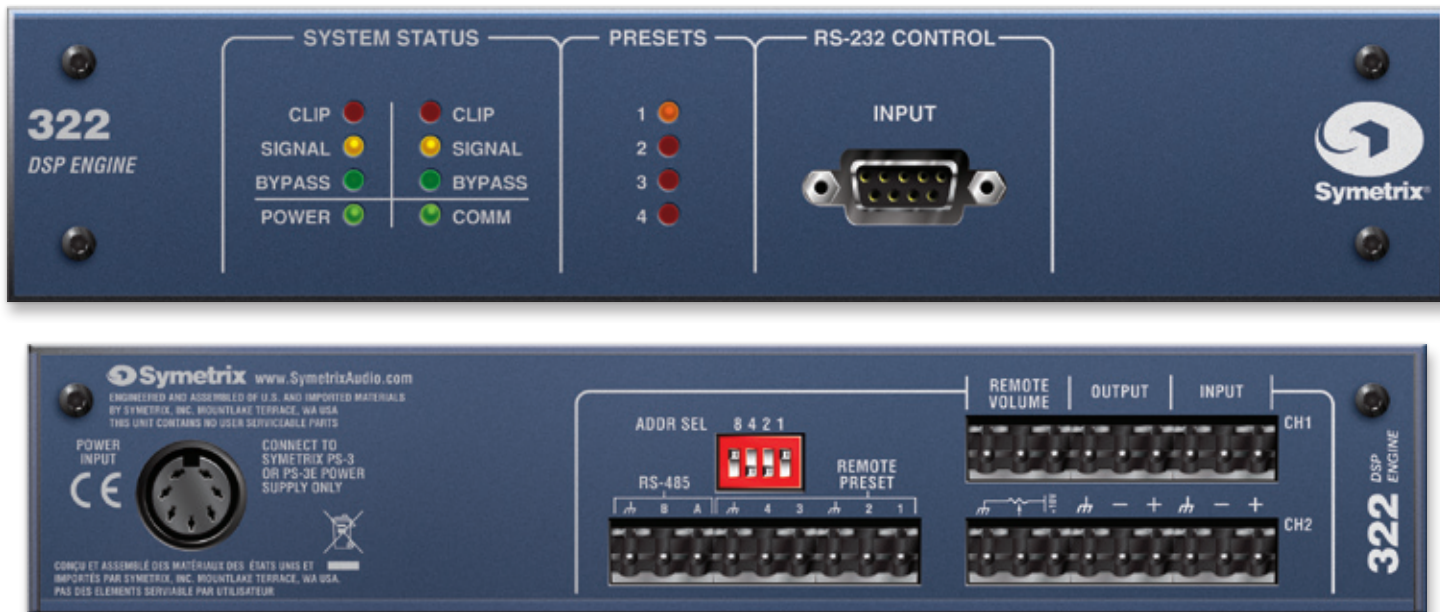
- ◆ **The lightning flash** with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product (i.e. this Quick Start Guide).
- ◆ **CAUTION:** To prevent electric shock, do not use the polarized plug supplied with the unit with any extension cord, receptacle, or other outlet unless the prongs can be fully inserted.
- ◆ **Power Source:** This Symetrix hardware uses a switching power supply that automatically adjusts to the applied voltage. Ensure that your AC mains voltage is somewhere between 100-240 VAC, 50-60 Hz. Use only the power cord and connector specified for the product and your operating locale. A protective ground connection, by way of the grounding conductor in the power cord, is essential for safe operation. The appliance inlet and coupler shall remain readily operable once the apparatus has been installed.
- ◆ **User Serviceable Parts:** There are no user serviceable parts inside this Symetrix product. In case of failure, customers inside the U.S. should refer all servicing to the Symetrix factory. Customers outside the U.S. should refer all servicing to an authorized Symetrix distributor. Distributor contact information is available online at: <http://www.SymetrixAudio.com>.



Introduction

The 322 compact DSP Engine matches a deep set of processing features with a breakthrough price. Small installations with small budgets don't have to dictate small audio thinking. Designs that previously would have required either multiple analog units, or DSP power available only from large multi I/O platforms, are all

possible with the 322 DSP Engine. This half-rack unit provides all the processing generally needed between a mixing console and a power amplifier in any basic sound system. Enhance performance and increase flexibility with the 322 DSP Engine from Symetrix, the engineering-driven company of signal processing specialists.



Hardware Connections and Switch Settings		
Connection	Connector or Control Type	What It Does
POWER INPUT	7-pin DIN female	Accepts power only from Symetrix PS-3, or PS-3E power supply.
INPUT	Detachable Euroblock	Channel 1 and Channel 2 line level incoming audio, 20k, Ohm, balanced bridging. If connecting to unbalanced sources, see HELP file section on Input and Output Connector Wiring.
OUTPUT	Detachable Euroblock	Channel 1 and Channel 2 balanced outputs. If connecting to unbalanced inputs, see HELP file section on Input and Output Connector Wiring.
REMOTE VOLUME	Detachable Euroblock	Two inputs for remote control configurable via 322 Designer software. Control from 10-50k linear potentiometers or 0-10 volt DC sources.
REMOTE PRESET	Detachable Euroblock	Momentarily grounding any 1 of these 4 connectors causes the 322 to load and execute that preset program.
RS-485	Detachable Euroblock	Serial data port connects to remote controllers such as Crestron or AMX to control up to 15 322's. See HELP file for wiring details.
ADDR SEL	4 pin DIP switch	Address selector 4 position DIP switch. Determines the device address for this 322. Each 322 in a controlled chain must have a unique address. See HELP file for switch setting details. Note: All switches down disables 232 and 485 communications!
RS-232	DB9 Female (front panel)	Receives RS-232 control and programming signals from host computer.

NOTE: Detachable Euroblock connectors are designed for use with bare wire. Do not tin stranded wires before inserting them into the connectors.

322 Designer Installation

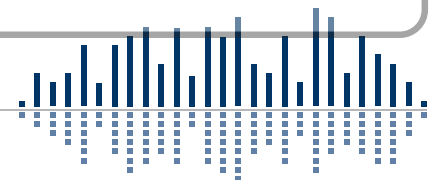
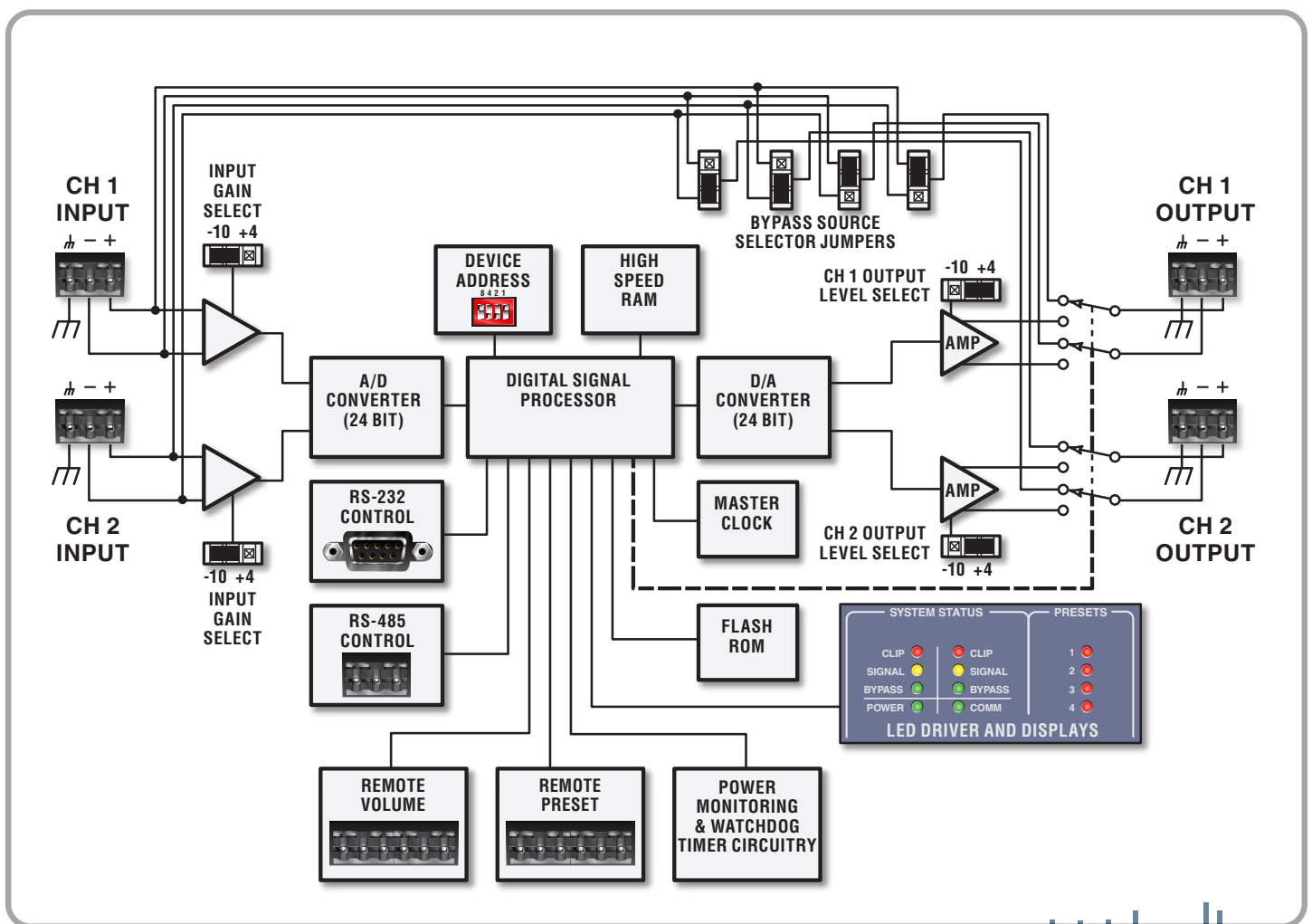
From the Internet
 (This is the recommended method.
 Our website always has the latest release
 of 322 Designer and it is free.)

1. Download 322 Designer from <http://www.symetrixaudio.com>.
2. From the Windows START button, RUN the SETUP program and follow the instructions.

From the 322 Designer CD ROM

1. The software should AUTORUN after you insert the CD-ROM.
2. If the software does not AUTORUN, then Click on the Windows START button, RUN e:\SETUP where e=your CD-ROM drive letter.

NOTE: This printed document is an abridged version of the online help module installed by the 322 Designer software installer. The online help module is easily accessed from the Help menu of the 322 software and features complete documentation of the 322 software as well as full text search capability.



The Symetrix Limited Warranty

Symetrix, Inc. expressly warrants that the product will be free from defects in material and workmanship for two (2) years from the date the product is shipped from the factory. Symetrix's obligations under this warranty will be limited to repairing or replacing, at Symetrix's option, the part or parts of the product which prove defective in material or workmanship within two (2) years from the date the product is shipped from the factory, provided that the Buyer gives Symetrix prompt notice of any defect or failure and satisfactory proof thereof. Products may be returned by Buyer only after a Return Authorization number (RA) has been obtained from Symetrix. Buyer will prepay all freight charges to return the product to the Symetrix factory. Symetrix reserves the right to inspect any products which may be the subject of any warranty claim before repair or replacement is carried out. Symetrix may, at its option, require proof of the original date of purchase (dated copy of original retail dealer's invoice). Final determination of warranty coverage lies solely with Symetrix. Products repaired under warranty will be returned freight prepaid via United Parcel Service by Symetrix, to any location within the Continental United States. Outside the Continental United States, products will be returned freight collect.

The foregoing warranties are in lieu of all other warranties, whether oral, written, express, implied or statutory. Symetrix, Inc. expressly disclaims any IMPLIED warranties, including fitness for a particular purpose or merchantability. Symetrix's warranty obligation and buyer's remedies hereunder are SOLELY and exclusively as stated herein.

This Symetrix product is designed and manufactured for use in professional and studio audio systems and is not intended for other usage. With respect to products purchased by consumers for personal, family, or household use, **Symetrix expressly disclaims all implied warranties, including but not limited to warranties of merchantability and fitness for a particular purpose.**

This limited warranty, with all terms, conditions and disclaimers set forth herein, shall extend to the original purchaser and anyone who purchases the product within the specified warranty period.

Symetrix does not authorize any third party, including any dealer or sales representative, to assume any liability or make any additional warranties or representation regarding this product information on behalf of Symetrix.

This limited warranty gives the buyer certain rights. You may have additional rights provided by applicable law.

Note: Some Symetrix products contain embedded software and may also be accompanied by control software intended to be run on a personal computer. Said software is specifically excluded from this warranty.

Limitation of Liability

The total liability of Symetrix on any claim, whether in contract, tort (including negligence) or otherwise arising out of, connected with, or resulting from the manufacture, sale, delivery, resale, repair, replacement or use of any product will not exceed the price allocatable to the product or any part thereof which gives rise to the claim. In no event will Symetrix be liable for any incidental or consequential damages including but not limited to damage for loss of revenue, cost of capital, claims of customers for service interruptions or failure to supply, and costs and expenses incurred in connection with labor, overhead, transportation, installation or removal of products, substitute facilities or supply houses.

Servicing Your Symetrix Product

If you have determined that your Symetrix product requires repair services and you live outside of the United States please contact your local Symetrix dealer or distributor for instructions on how to obtain service. If you reside in the U.S. then proceed as follows:

Return Authorization

At the Symetrix factory, Symetrix will perform in-warranty or out-of-warranty service on any product it has manufactured for a period of three (3) years from date of discontinued manufacture.

Before sending anything to Symetrix, please contact our Customer Service Department for a Return Authorization (RA) number. The telephone number is +1.425.778.7728. Additionally, support is available via the web site: <http://support.SymetrixAudio.com>.

In-warranty Repairs

To get your Symetrix product repaired under the terms of the warranty:

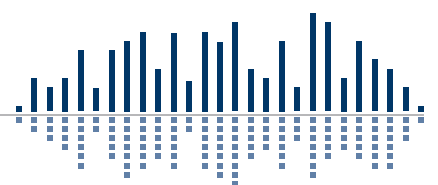
1. Call us for an RA number (have the serial number, shipping and contact information and description of the problem ready).
2. Pack the unit in its original packaging materials.
3. Include your name, address, daytime telephone number, and a brief statement of the problem.
4. Write the RA number on the **outside** of the box.
5. Ship the unit to Symetrix, freight prepaid. We do not accept freight collect shipments.

Just do these five things, and repairs made in-warranty will cost you only one way freight charges. We'll pay the return freight.

If you don't have the factory packaging materials, we recommend using an oversize box. Wrap the unit in a plastic bag, surround it with bubble-wrap, and place it in the box surrounded by Styrofoam peanuts. Be sure there is enough clearance in the box to protect the rack ears. We won't return the unit in anything but Symetrix packaging for which we will have to charge you. If the problem is due to operator misuse or error, you will have to pay for both parts and labor. In any event, if there are charges for the repair, you will pay for the return freight. All charges will be COD unless you have made other arrangements (prepaid, Visa or Mastercard).

Out-of-warranty Repairs

If the warranty period has passed, you'll be billed for all necessary parts, labor, packaging materials, and freight charges. Please remember, you must call for an RA number before sending the unit to Symetrix.





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Item No. 53-0004

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