

## What Ships in the Box

- A 6100 hardware device.
- A detachable power cord.
- This Quick Start Guide.

## Getting Help

If you have questions beyond the scope of this Quick Start Guide, please download the complete User's Guide from the Symetrix website or 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.symetrix.co>  
**Email:** [support@symetrix.co](mailto:support@symetrix.co)

## 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.



Note: This equipment has been tested and found to comply with the limits for a Class B 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 to correct the interference by one or more of the following measures:

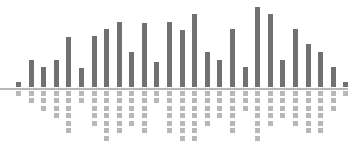
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.  
 Cet appareil numérique de la classe B respecte toutes les Exigences du Règlement sur le matériel brouilleur du Canada.

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>WARNING:</b> TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE		
<b>AVIS:</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR		

SEE OWNERS MANUAL. VOIR CAHIER D'INSTRUCTIONS.  
 No user serviceable parts inside. Refer servicing to qualified service personnel.  
 Il ne se trouve à l'intérieur aucune pièce pouvant être réparée l'utilisateur.  
 S'adresser à un réparateur compétent.

- ◆ **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 device with any extension cord, receptacle, or other outlet unless the prongs can be fully inserted.
- ◆ **Power Source:** This Symetrix hardware uses a universal input 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.
- ◆ **Lithium Battery Caution:** Observe the correct polarity when changing the lithium battery. There is a danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. Dispose of used batteries according to local disposal requirements.
- ◆ **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.symetrix.co>.



MENU	OPTION	DESCRIPTION
SIGNAL INPUT SOURCE	ANALOG or AES/EBU	—
NOMINAL INPUT LEVEL	-10 dBu +0 dBu +4 dBu +8 dBu	—
NOMINAL OUTPUT LEVEL	-10 dBu +0 dBu +4 dBu +8 dBu	—
DIGITAL INPUT SYNC	INTERNAL 48KHZ WORD CLOCK AES/EBU	—
DELAY TIME	0.0 to 40.0 SECONDS (in 0.1 second increments)	—
DUMP LENGTH	FIFTH QUARTER THIRD HALF WHOLE	—
ALGORITHM	GAP DETECT	Waits for gaps or pauses in speech and then splices audio. Minimal delay artifacts. Very fast delay build or exit times with speech only program when known maximum build and exit times are not required.
	GAP DETECT & CATCH UP	If gaps do not naturally occur then splicing is forced. Some audible splice artifacts. Use for building and exiting delay with music + speech when known maximum build and exit times are required.
	CONTINUOUS	Continuously forces splicing regardless of program content. Some audible splice artifacts. Use for building and exiting delay with music only when known maximum build and exit times are required.
	PITCH SHIFT	Uses gradual, subtle pitch shifting instead of splicing to increase or decrease delay. Use with music or music + speech when minimal artifacts are required. Build and exit times are predictable.
DELAY RATIO	10:1 to 40:1	Ratio controls the balance of delay build/exit speed vs. overall audio quality. (10:1 = fastest, 40:1 = best quality)
BARGRAPH MODE	PRE DELAY POST DELAY	
AUTOMATION MODE	SWITCH CONTACTS DLYD RS232 DELAYED	Sets the automation delay mode for the unit. Either the contact closures on the AUTOMATION rear panel D-sub connector or the RS-232 connector may be delayed, not both. In RS-232 delay mode, any commands entering the unit on the RS-232 port will be delayed by the amount of current delay and then sent back out the RS-232 port. The RS-232 delay memory is limited to 500 characters at any one time. Data input beyond this limit will be silently discarded. If the device sending RS-232 automation data is different than the device receiving RS-232 automation data, a custom cable may be required. Refer to the Wiring and Pinout section for details.
AUTOMATION TRIM	EARLY: 300 mS EARLY: 270 mS EARLY: 240 mS EARLY: 210 mS EARLY: 180 mS EARLY: 150 mS EARLY: 120 mS EARLY: 90 mS EARLY: 60 mS EARLY: 30 mS CURRENT DELAY LATE: 30 mS LATE: 60 mS LATE: 90 mS LATE: 120 mS LATE: 150 mS LATE: 180 mS LATE: 210 mS LATE: 240 mS LATE: 270 mS LATE: 300 mS	Adjusts the automation events to exit the delay early, on time, or late in relation to the audio. This trim is applied to RS-232 data or contact closures depending upon AUTOMATION MODE as set above.
TC89 OUTPUT DELAY	0.0 to 60.0 SECONDS (in 0.5 second increments)	Applies an additional fixed delay to the TC89 output so that certain constant system delays can be accounted for such as encoders or satellite transmission.
REAR SERIAL PORT	RS-232 (DB9) RS-485 (3 PIN EURO)	Select which communications interface to use.
SERIAL PORT BAUD	1200 2400 4800 9600 19200 38400	Sets the baud rate for the selected serial port.
UNIT NUMBER	ID: (1-255)	Sets the RS-485 bus address.

Remote Panel Switch Pinouts	
Function	Pin #
START	1
EXIT	4
DUMP	7
COUGH	10
BYPASS (Hardware)	14
Switch Common	13

Automation connector pinout		
Relay	Function	Pin #
Relay 1	Common	1
	Normally Closed	2
	Normally Open	3
Relay 2	Common	4
	Normally Closed	5
	Normally Open	6
Relay 3	Common	7
	Normally Closed	8
	Normally Open	9
Relay 4	Common	10
	Normally Closed	11
	Normally Open	12
	LED 1 (A1)	13
	LED 2 (A2)	14
Automation	LED 3 (A3)	15
	LED 4 (A4)	16
	LED Return	17
	Auto In 1	18
Button	Auto In 2	19
Closures	Auto In 3	20
	Auto In 4	21
	Auto In Ground	22

**Declaration of Conformity**

We, **Symetrix Incorporated**, 6408 216th St. SW, Mountlake Terrace, Washington, USA, declare under our sole responsibility that the product:

**6100 Broadcast Audio Delay**

to which this declaration relates, is in conformity with the following standards:

**IEC 60065,  
EN 55103-1, EN 55103-2, FCC Part 15, RoHS**

The technical construction file is maintained at:

**Symetrix, Inc.**

6408 216th St. SW

Mountlake Terrace, WA, 98043 USA

The authorized representative located within the European Community is:

**World Marketing Associates**

P.O. Box 100

St. Austell, Cornwall, PL26 6YU, U.K.

Date of issue: May 31, 2009

Place of issue: Mountlake Terrace, Washington, USA

Authorized signature:



**Dane Butcher, President, Symetrix Incorporated.**

## The Symetrix Limited Warranty

Symetrix, Inc. expressly warrants that the product will be free from defects in material and workmanship for three (3) 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 three (3) 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 commercial carrier 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 or apps 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.symetrix.co>.

## 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 device 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 device 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 device 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 device 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. Payment for all charges must be pre-arranged (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 device to Symetrix.