

BRYSTON

SPV1
VIDEO SWITCHER
OWNER'S MANUAL

GENERAL INFORMATION

Thank you for choosing a Bryston product. We would welcome any comments or suggestions you may have regarding the operation of your video switcher. We consider our customer to be Bryston's most important resource and your opinion is very much appreciated. In the unlikely event you have a problem with your unit and must

return it for service please keep the original box and all packaging material.

The Bryston SPV-1 is a high quality, multi-path, video switcher intended to be used in combination with the Bryston SP1.7 surround processor or as a stand alone video switcher.

SETUP RECOMMENDATIONS

Make sure the power switch on the rear panel of the video switcher is in the off position until all connections are made. Plug the power cord into the IEC power inlet on the rear panel of the SPV-1, and plug the male end of the power cord into a wall outlet.

If using the SPV-1 with the Bryston SP1.7 connect the RS-232 cable (straight through with DB9 male connectors at one end and a 1/8" 3-conductor phone plug at the other). If

using it with other control systems (AMX, Crestron etc.) then a straight through DB9-male to DB9-female cable may be required as well.

We recommend placing the SPV-1 beneath the SP1.7 Surround Processor for ease of connection and performance optimization. The RS-232 cable should be no longer than 10 feet (3 meters) to minimize communication errors.

DESCRIPTION

The Bryston SPV-1 Video Switcher offers six *composite* video inputs, six *S-video* and two *component* video inputs. Each set constitutes an isolated switching path. This feature allows for the parallel connection of the *composite* video and *S-video* with both outputs active. This is helpful for connecting to composite video recording devices such as (older) VCRs.

Outputs include main (monitor) for *composite*, *S-video* and *component* as well as record outputs for *composite* and *S-video*. The main outputs have on-screen display (OSD) capabil-

ity when used in combination with the Bryston SP1.7 surround processor or any other RS-232 control system.

On-screen display (OSD) allows setup and start up information from the SP1.7 to be displayed on your video monitor. OSD is only available when using the RS-232 control method (see *On-Screen Display* notes in the *Front Panel Control and Indicators* section).

Infra-red (IR) control is also offered. The functions are accessed by the SP1.7 remote control or by Pronto codes available from Bryston.

FRONT PANEL CONTROL & INDICATORS

POWER BUTTON:

Pressing the front panel power button takes the unit out of stand-by mode and powers up the SPV-1. If the unit is already powered-up, then pressing the power button will power the unit down. If the power LED does not illuminate, check that the rear panel power switch (on the power inlet module) is in the "ON" ("1") position.

SOURCE BUTTONS:

Pressing one of the source buttons will switch the appropriate *composite* and S-video inputs to the Main Outputs. The LED will be green to indicate the selected video path for the main outputs. Component input selection is accomplished using the C1 and C2 selector buttons for component inputs 1 and 2 respectively.

OSD (On-Screen-Display):

Pressing the OSD button will change the OSD assignment between *composite*, S-video and *component*, sequence.

The LED will change colour as follows:

<u>LED</u>	<u>Output</u>
off	<i>inactive</i>
green	composite
red	S-video
amber	component

To save OSD settings for each type of input, press the SAVE button on the remote control.

RECORD/ZONE BUTTON:

Pressing this button will indicate the selected record source being routed to the record outputs. The record LED and Source LED will turn red. When the Record/Zone LED is red, any source (TV, DVD, VCR, etc.) can be selected for recording using the source buttons.

N.B. the record path of the SPV-1 is separate from the monitor path allowing you to record one source while monitoring a different source.

USING THE BRYSTON SPV-1 WITH THE BRYSTON SP1.7

The combination of the Bryston SP1.7 Surround Processor and the SPV-1 Video Switcher provides for totally seamless integration of all audio and video functions.

The Bryston SP1.7 (*units manufactured after October 2002*) contains all the RS-232 codes to simultaneously control the switching functions of the SPV-1. When the SP1.7 is powered up an RS-232 command will also power up the SPV-1. When an input is selected on the SP1.7 (manually or remotely) it sends a message to the SPV-1 to switch the corresponding inputs to the

main and record outputs simultaneously. The audio path on the SP1.7 does not allow a separate record path. It is not possible to listen to one source while recording another.

If On-Screen Display (OSD) is desired, this can be toggled on or off by pressing the OSD button on the SP1.7 remote control. The OSD messages will be sent from the SP1.7 to the SPV-1 and displayed on the video monitor. OSD messages are displayed when changing inputs, changing mode, changing volume, or while using the setup menus.

IMPORTANT NOTES:

1. The Component 1 input on the SPV1 will be active when TV/SAT, CD, or VCR is selected on the Bryston SP1.7 Preamp/Processor *
2. The Component 2 input on the SPV1 will be active when DVD, AUX, or TAPE is selected on the Bryston SP1.7 Preamp/Processor *
3. When using Progressive Scan, De-Interlaced, or HDTV signals turn off the OSD feature. The Hi-Definition signal will still be passed to the Component Output but On Screen display (OSD) will not be available. If OSD is active Hi-Definition signals will not be passed to the Component output.
4. When OSD is active the SP1.7's front panel LCD menu will operate slower than normal and appear on screen. Turn off OSD if normal front panel menu operation is required.
5. When not using the OSD it is recommended that it be turned off to ensure optimum picture quality.
6. The On-Screen Display (OSD) settings can be saved for each input by selecting which OSD mode you wish (Composite, Component, S-video or Off) and hitting SAVE on the SP1.7 remote control. *

** If the SP1.7 Preamp/Processor is used in combination with SPV1 Video Switcher*

SPECIFICATIONS:

Composite & S-Video Bandwidth - 60 MHz

Component Video Bandwidth - 150 MHz

Inputs: 6 Composite, 6 S-Video, 2- Component, 1 serial data

Input Impedance: 75 ohms

Output Impedance: 75 ohms

S/N ratio: >80dB

Monitor Outputs: 1 Composite, 1- S-Video and 1 Component

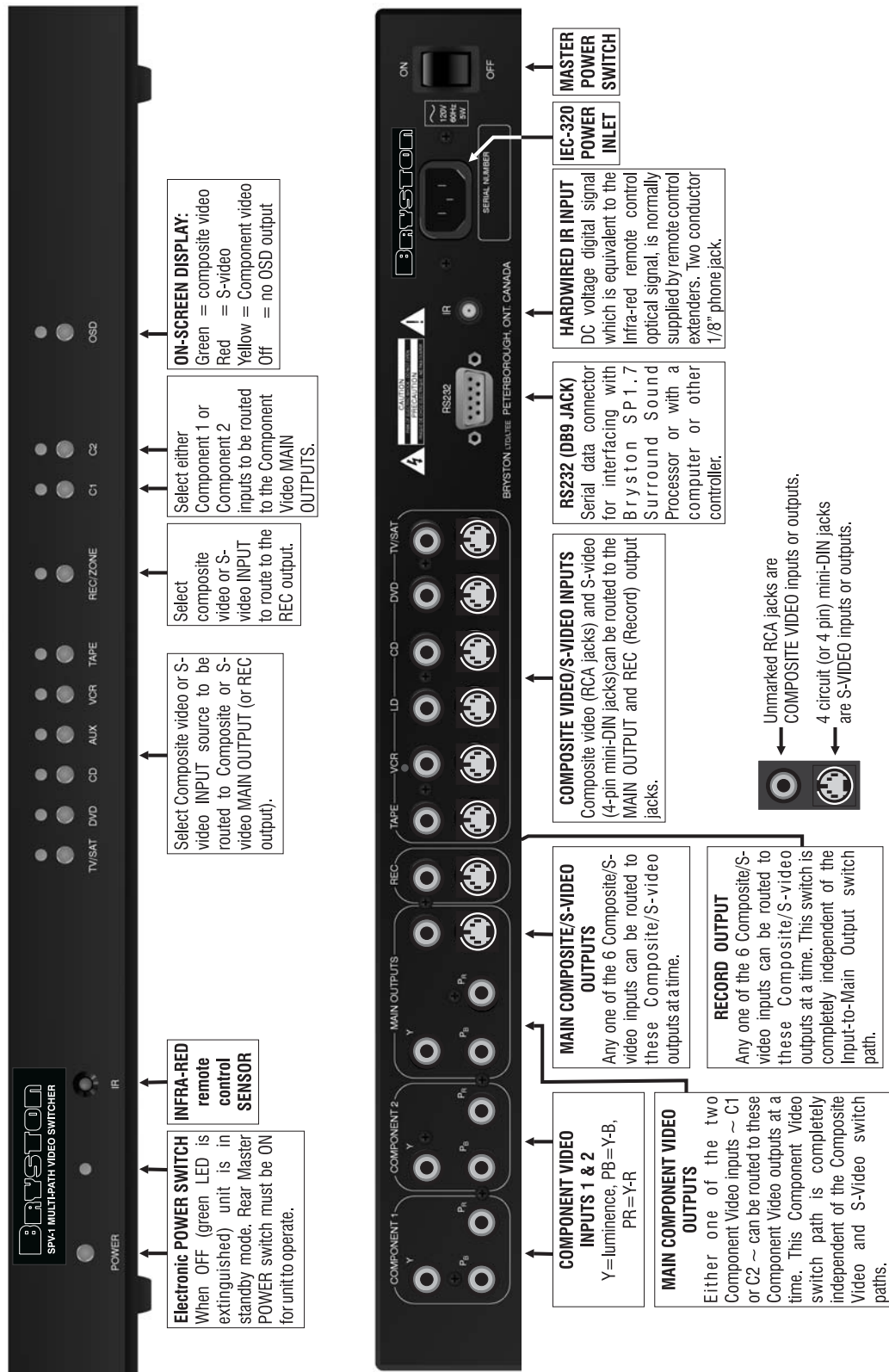
Record Outputs : (no OSD) 1 Composite, 1- S-Video

Control Options: IR , RS232 and Front Panel.

Dimensions: (HWD) - 1.75 inches x 17 inches x 12 inches.

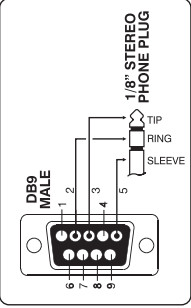
Weight: 10 Lbs

SPV-1 DIAGRAMS: Front and Rear Panel Legends



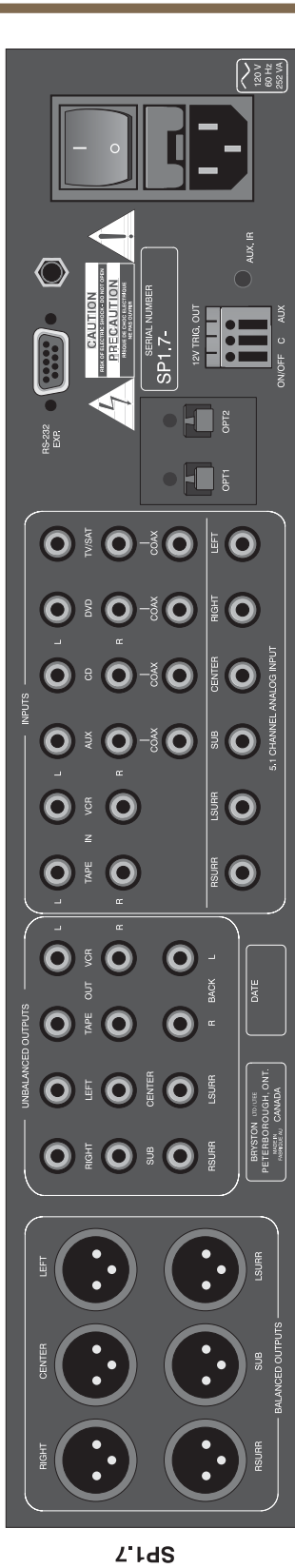
SPV-1 DIAGRAMS: Typical SPV-1 & SP1.7 Hookup

INTERCONNECTING SERIAL DATA CABLE BETWEEN THE SP1.7 PROCESSOR/PREAMP & SPV-1 VIDEO SWITCHER

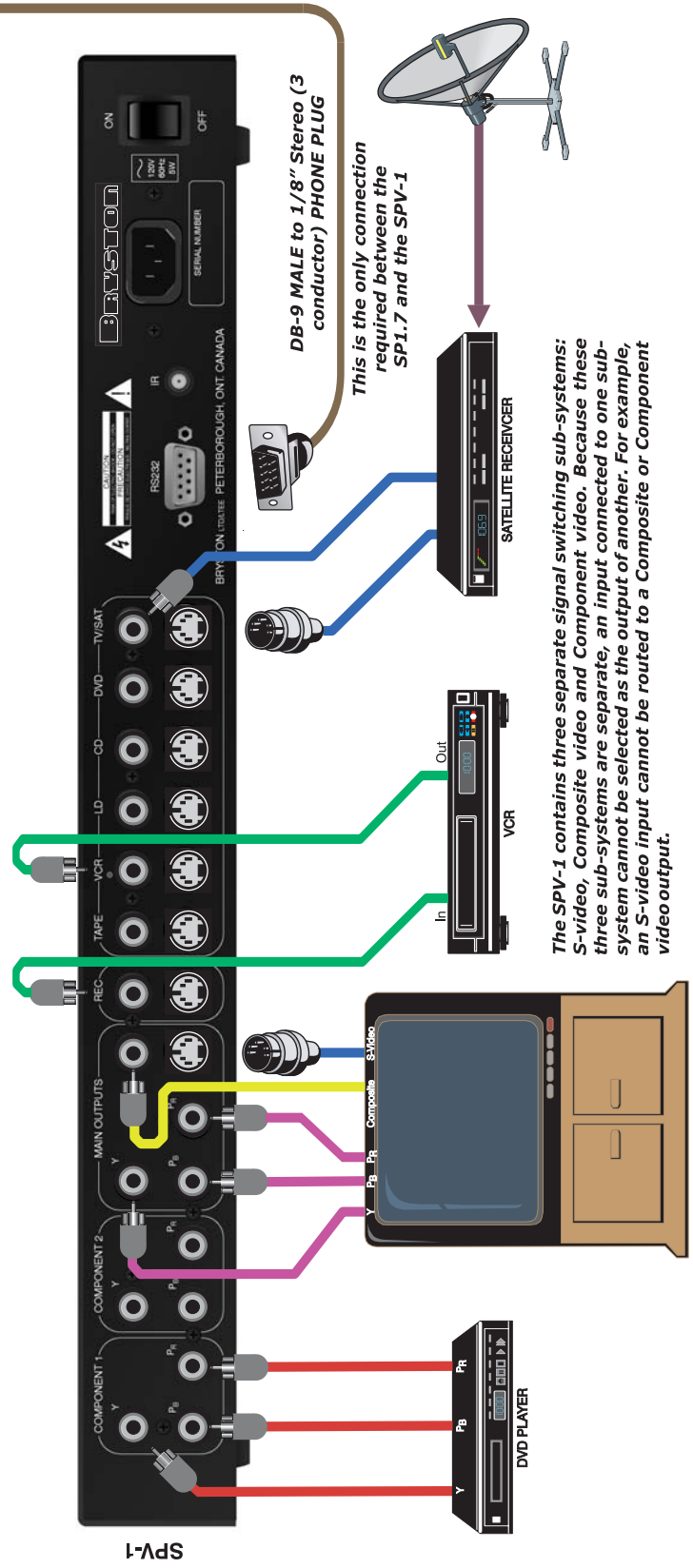


NOTE:

When interconnecting the SPV-1 with SP1.7 processor/preamps with serial numbers lower than 000398 a DB9 male to male (straight through) cable must be used as earlier SP1.7's lack the 1/8" 3 conductor phone jack illustrated below.



SP1.7



SPV-1

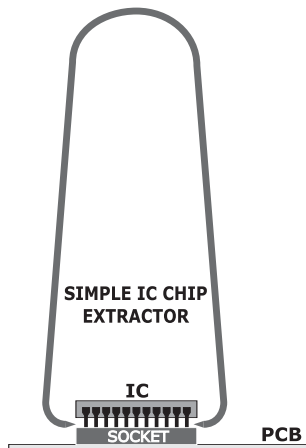
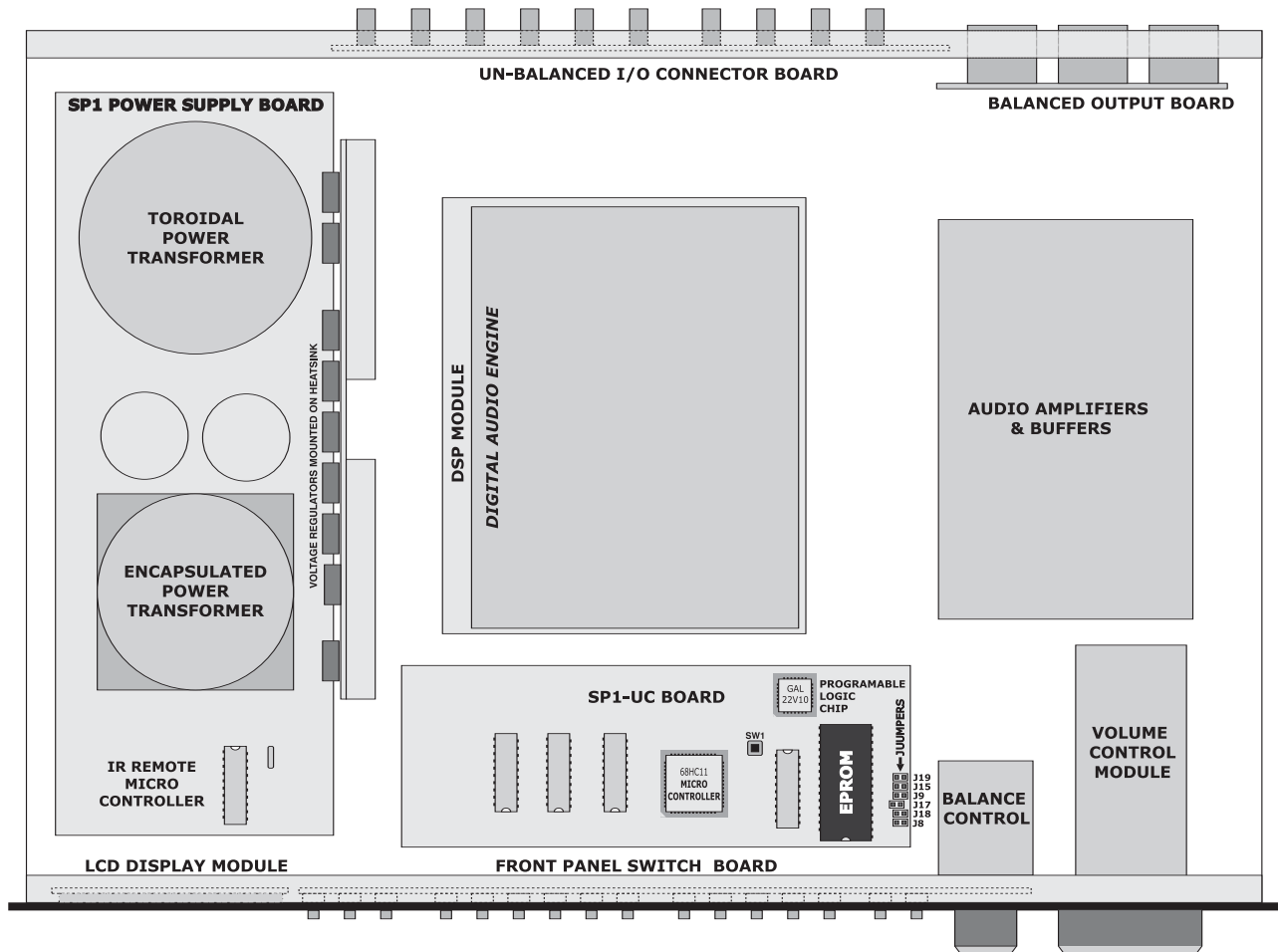
DB-9 MALE to 1/8" Stereo (3 conductor) PHONE PLUG

This is the only connection required between the SP1.7 and the SPV-1

The SPV-1 contains three separate signal switching sub-systems: S-video, Composite video and Component video. Because these three sub-systems are separate, an input connected to one sub-system cannot be selected as the output of another. For example, an S-video input cannot be routed to a Composite or Component video output.

SPV-1 DIAGRAMS: Upgrading SP1.7 Surround Processors

Older SP1.7 Surround Processors made before November 2002 may require a firmware upgrade to enable the serial data control link between the SP1.7 and the SPV-1 Video Switcher. If you experience any difficulties in getting your SPV-1 working properly with your SP1.7, please contact either your dealer or the factory. SP1.7 firmware revision 41A (or greater) is required.



If you need to install upgraded firmware (Revision 41a or greater) in your SP1.7 Surround Processor, the SP1.7's EPROM (Erasable-Programmable Read Only Memory) chip will have to be replaced. This chip is located on the SP1.7's MicroController board (named "SP1-uC"). The EPROM chip is shown in black in the diagram above. Detailed installation instructions will be included with your firmware upgrade kit. When ordering, please ask for a free Chip Extractor tool if you don't already have one. This simple tool (see illustration to the left) will make the task of replacing the EPROM simpler and safer.

IMPORTANT SAFETY INSTRUCTIONS



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated “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 to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

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 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 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 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.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE.

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

BRYSTON LIMITED WARRANTY

Bryston analog audio circuits are warranted to be free from manufacturing defects for twenty (20) years from the original date of manufacture. The warranty includes parts and labour.

Bryston Digital circuits and cables are warranted for five years from the original date of manufacture. The warranty includes parts and labour.

Bryston products having motorized moving parts, excluding motorized volume controls, are warranted for three years from the original date of manufacture. The warranty includes parts and labour.

Bryston will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance. Bryston will pay shipping costs one way (usually the return portion) during the first three years of warranty coverage.

In the event of a defect or malfunction, contact Bryston’s repair centers for return authorization. Products must be returned using original packaging material only. Packing material may be purchased from Bryston if necessary. This warranty is considered void if the defect, malfunction or failure of the product or any component part was caused by damage (not resulting from a defect or malfunction) or abuse while in the possession of the customer. Tampering by persons other than factory authorized service personnel or failure to fully comply with Bryston operating instructions voids the warranty. This warranty gives you specific legal rights and you may also have other rights which may vary from province to province and country to country.

As of 2006-02-22 Bryston will only warranty Bryston products purchased through authorized Bryston dealers. Bryston products with a date code of 0608 or higher (date code format is “yyww”, where “yy” is the two least significant digits of the year and “ww” is the week of the year) must be accompanied by a copy of the bill-of-sale from a Bryston authorized dealer to qualify for warranty service. The warranty is transferable from the original owner to a subsequent owner as long as a copy of the bill-of-sale from the original authorized Bryston dealer accompanies the re-sale. The copy of the bill of sale to any subsequent owner need ONLY include the Name of the Bryston Authorized Dealer and the Model and Serial number of the Bryston product. The warranty will only be honored in the country of the original purchase unless otherwise pre-authorized by Bryston.

BRYSTON SERVICE in CANADA:

Postal address: **PO. BOX 2170, Stn. Main
PETERBOROUGH, ONTARIO
CANADA K9J 7Y4**

Courier address: **677 NEAL DRIVE
PETERBOROUGH, ONTARIO
CANADA K9J 6X7**

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FAX: 705-742-0882
E-mail: cdnser@bryston.ca

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E-mail: usaser@bryston.ca

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contact your local distributor or

CHECK OUR WEB SITE: www.bryston.ca
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FAX BRYSTON DIRECTLY: 01-705-742-0882
PHONE BRYSTON DIRECTLY: 01-705-742-5325