

The logo for Sherbourn features the word "Sherbourn" in a classic serif font. A thick, black, curved line arches over the top of the letters, starting from the left side of the 'S' and ending on the right side of the 'n'.

Sherbourn

PA 2-50

TWO-CHANNEL FLEX AMPLIFIER

USER MANUAL

Important Safety Precautions and Explanation of Symbols



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important installation, operation, and service instructions in this manual.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltages within the enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to the user.

Please read this Installation and Operation Manual thoroughly before attempting to install, configure, or operate the Sherbourn PA 2-50. After successful installation and configuration of the PA 2-50, be sure to retain this manual in a safe place for future reference.

Safety is a key component to a long lasting and trouble free installation. Please read and follow all instructions and heed all warnings on the PA 2-50 and in this manual. The vast majority of the subsequent safety precautions are common sense. If you are not comfortable with the installation of audio/video entertainment equipment, you should seek the services of a qualified installation professional or call us for help.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THE PA 2-50 NEAR WATER OR IN WET LOCATIONS, DO NOT EXPOSE IT TO RAIN OR MOISTURE, DO NOT EXPOSE IT TO DRIPPING OR SPLASHING FROM OTHER SOURCES, AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS (SUCH AS VASES) ARE PLACED ON IT. DOING SO MAY RESULT IN DAMAGE TO THE PA 2-50 AND THE RISK OF ELECTRIC SHOCK, WHICH MAY RESULT IN BODILY INJURY OR DEATH.



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER FROM THE PA 2-50. THERE ARE NO USER-SERVICEABLE PARTS INSIDE THE PA 2-50. REFER ALL SERVICE TO QUALIFIED SERVICE PERSONNEL.

Do not install the PA 2-50 near or above any heat sources such as radiators, heating vents, or other apparatus that produces heat. Do not block any ventilation openings or heat sinks. Avoid installing the PA 2-50 directly above other heat-producing equipment unless sufficient ventilation or forced-air cooling is provided.

Do not install the PA 2-50 in locations without proper ventilation. The PA 2-50 should not be operated on a bed, sofa, rug, or similar surface that may block vents. The PA 2-50 should not be installed in an enclosed location such as a bookcase, cabinet, or closed equipment rack unless sufficient forced-air ventilation is provided.

Always install your PA 2-50 according to the manufacturer's instructions and only use attachments or accessories specified by the manufacturer.

Do not install the PA 2-50 on any stand, shelf, or other piece of furniture that is unable to support its weight. If a cart is used to move the PA 2-50, use caution to avoid injury from tip-over.

Connect the PA 2-50 only to power sources of the correct voltage (as shown in this manual and on the PA 2-50). Ensure that the Input Voltage selector switch on the rear of the PA 2-50 is set to the appropriate voltage.

Protect power supply cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the PA 2-50 unit.

Only connect the PA 2-50 to an electrical outlet or extension cord of appropriate type and rating.

DO NOT defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades - one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third grounding prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the PA 2-50 power cord, only use one of similar type and equal or greater current rating.

The power cable for the PA 2-50 should be unplugged from the outlet during severe electrical storms, or when unused for a long period of time.

Only replace the fuse in the PA 2-50 with a fuse(s) of proper value and voltage rating.

The PA 2-50 should only be cleaned as directed in the Installation and Operation Manual. Avoid spraying liquids directly onto the PA 2-50 and NEVER spray liquids into the vents. Care should be taken so that small objects do not fall into the inside of the PA 2-50.

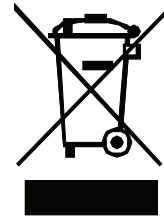


You should seek service for your PA 2-50 by qualified service personnel if any of the following occur:

1. The power-supply cord or the plug has been damaged.
2. Objects or liquid have fallen or spilled into the vents.
3. The PA 2-50 has been exposed to rain.
4. The PA 2-50 exhibits a marked change in performance.
5. The PA 2-50 has been dropped, or its enclosure or chassis is damaged.

NOTE: TO COMPLETELY DISCONNECT THE PA 2-50 FROM THE AC POWER MAINS, DISCONNECT THE AC POWER CORD FROM THE AC RECEPTACLE.

NOTE: THE PA 2-50's AC POWER CORD MUST REMAIN READILY ACCESSIBLE AT ALL TIMES.



PA 2-50

Two-Channel Flex Amplifier

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Introduction

Thank you for choosing the Sherbourn PA 2-50 Two-Channel Flex Amplifier.

The Sherbourn PA 2-50 combines two great sounding audio channels, a precision digitally controlled analog volume control, automatic input selection, flexible remote control and triggering options, and user-selectable AC supply voltage - all in one compact package.

Design features like proven class A/B technology, Sherbourn's intelligent protection system, and true commercial grade construction quality and reliability make the Sherbourn PA 2-50 an obvious choice when you need a small, flexible, great sounding two-channel amp.

The PA 2-50 Two-Channel Flex Amplifier

The Sherbourn PA 2-50 is a medium-powered, audiophile quality, class A/B power amplifier with a wide variety of input and control options. The PA 2-50 offers two stereo inputs, each of which can be manually selected or configured to operate automatically, and utilizes a digitally controlled analog level control, which provides very precise control of gain, very tight channel tracking, perfect repeatability, and virtually no distortion.

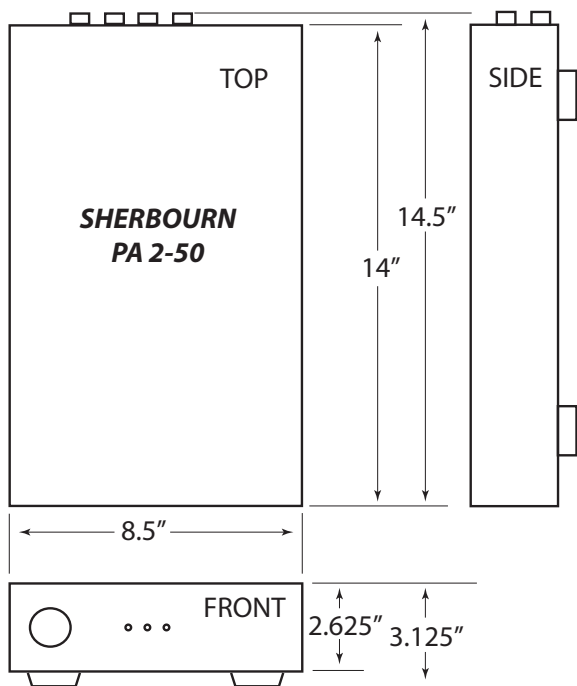
The PA 2-50 offers the usual trigger input, as well as both IR and bi-directional RS-232 serial remote control. Speaker connections (two sets) are industry standard Phoenix-type removable terminal blocks; power is via a convenient removable IEC power cord, and is user selectable between 115 VAC and 230 VAC. Direct front panel control is provided for Input selection (with LEDs to indicate the selected input), Power (an LED indicates status), and Volume control (a row of 8 blue LEDs displays the volume setting).

About This Manual

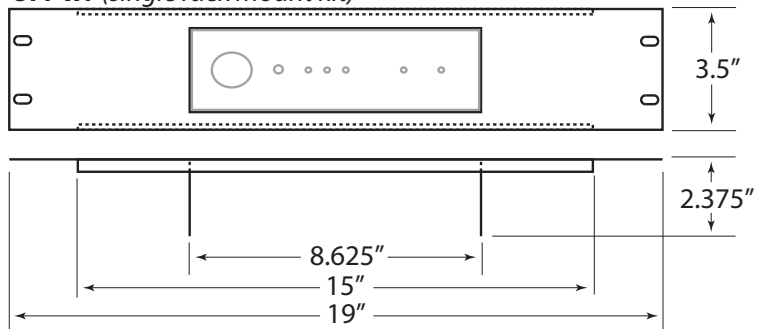
This manual will provide you with all the information you need to install and configure the Sherbourn PA 2-50 Two-Channel Flex Amplifier to achieve its optimum potential. The manual also includes a brief summary of the features offered by the PA 2-50 and a short description of how the controls work and how to perform common operations.

You may wish to record serial numbers or other purchase information on the Notes page at the back of this manual.

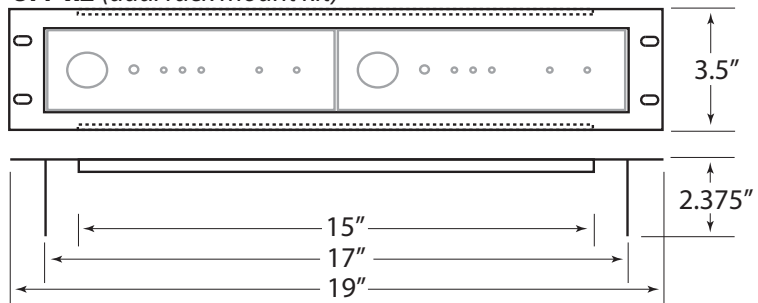
Mechanical and Environmental



UFP x1 (single rack mount kit)



UFP x2 (dual rack mount kit)



Dimensions: 8.5" wide x 3.125" high x 14.5" deep (includes feet, binding posts, no rack kit).

Weight: 11.2 lbs / 5.1 kg (unboxed); 14.4 lbs / 6.6 kg (boxed).

Rack mountable: Yes, single or paired, with optional rack mount kits.

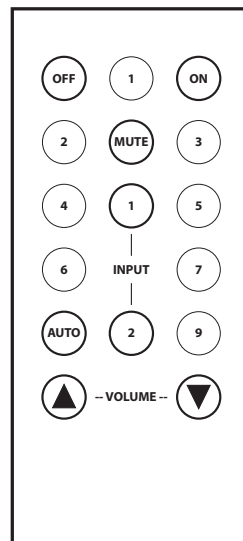
Power requirements:

115 VAC or 230 VAC +/- 10% @ 50 / 60 Hz (selectable by rear-panel switch).

Ventilation and cooling:

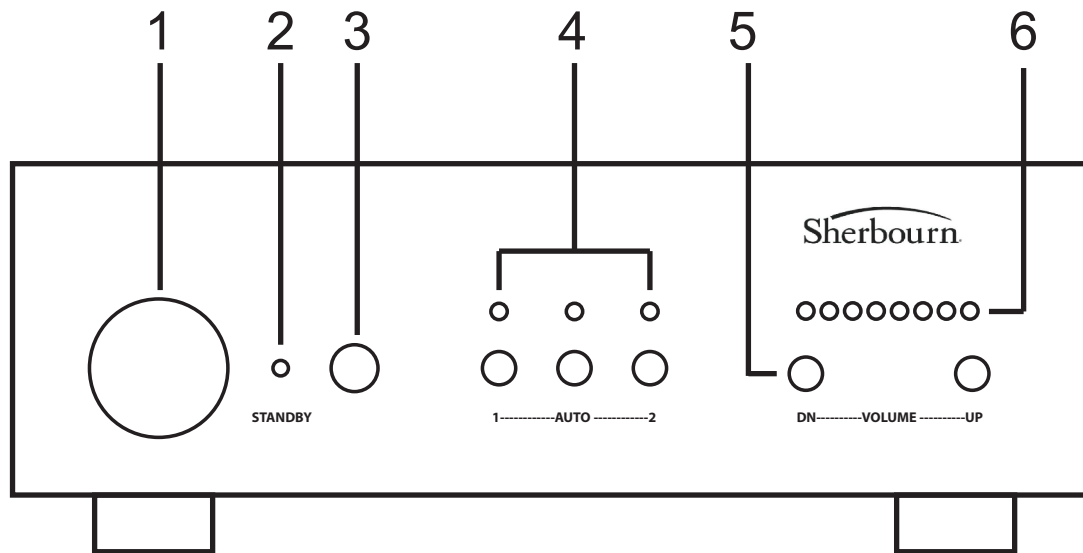
To avoid overheating, be sure to provide adequate clearance and ventilation.

Remote Control



Note: Only certain buttons on the remote control are used.
(On, Off, Mute, Input 1, Input 2, Input Auto, Volume Up, and Volume Down.)

Front Panel



1. Standby Button

Switches (toggles) the unit between Standby and On.

2. Standby LED

Illuminates red for Standby; blue for On, flashing red for a Fault condition.

3. Infrared Detector Window

Used by the infrared remote control.

4. Input Selector Pushbuttons and Input LEDs

Pressing 1 or 2 manually selects that input; pressing Auto instructs the PA 2-50 to use whichever input has active audio signal on it. (If both inputs are active, Input 1 has priority.) When each input / mode is selected, the corresponding LED will illuminate.

5. Volume Up and Volume Down Pushbuttons

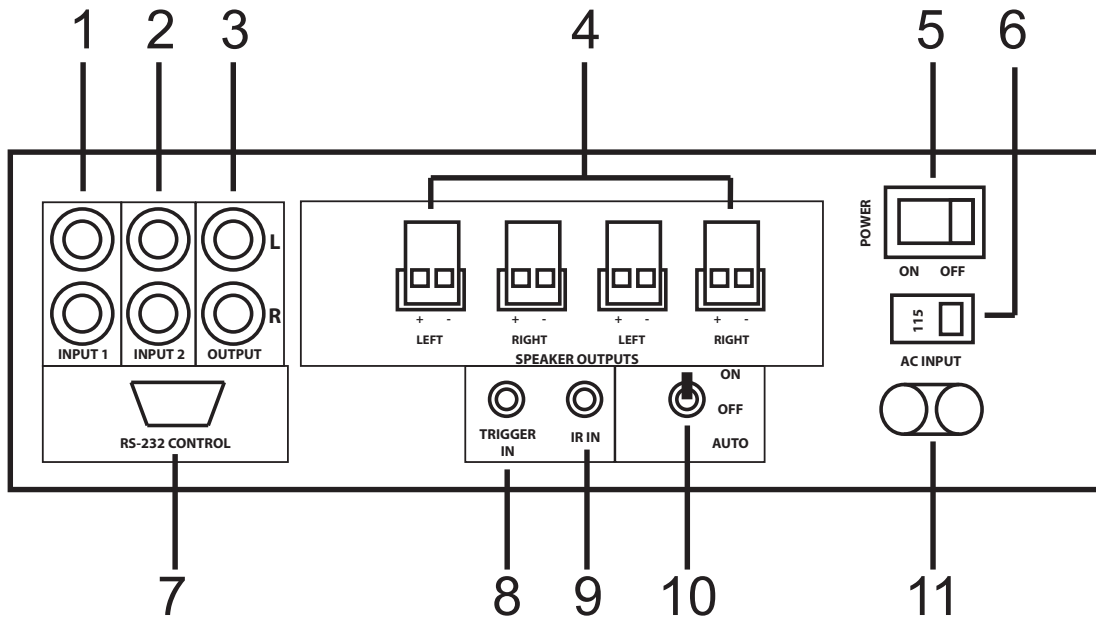
Press and hold either button to increase or decrease volume gradually.

6. Volume LEDs (8)

These LEDs indicate the approximate volume setting.

Note: The Volume on the PA 2-50 can be set in very small increments; the LEDs only show an approximation of the current setting.

Rear Panel



1, 2. Inputs (one stereo pair for each input; unbalanced)

Connect your line level inputs to these.

3. Outputs (one stereo pair; unbalanced)

Stereo passthrough output carries the selected input signal for chaining other devices.

4. Speaker Outputs (two each for left and right channel)

Phoenix-type connectors for connecting up to two pairs of speakers.

5. Power Switch

Switches the AC mains power to the PA 2-50 On and Off. When this switch is Off, the PA 2-50 will not respond to trigger signals or manual controls.

6. Input Voltage Selector Switch

Always ensure that this switch is set for the proper line voltage for your area and installation.

7. RS-232 Serial Remote Control Interface

Accepts RS-232 control codes from a wired serial remote control.

Refer to the Remote Control Codes and Signal Specifications section for details.

8. Trigger Input

The Trigger Input is used to allow other trigger-enabled equipment to switch the PA 2-50 between On and Standby.

9. IR Input.

Connect an external IR sensor to this input if the PA 2-50 is mounted such that IR remote control signals cannot reach the front panel directly.

10. Power Mode Switch.

Selects between regular, triggered, and auto-on power modes.
Refer to the Installation Tips and Configuration sections for details.

11. Standard IEC Power Inlet.

The PA 2-50 requires a standard IEC C7/C8 (2.5A two wire) power cable.

Inputs and Outputs

Analog inputs:

2 inputs; each one stereo pair of unbalanced (RCA) inputs.

Analog (line level) outputs:

1 output; one stereo pair of unbalanced (RCA) outputs .

Input sensitivity (for full output into 8 ohms):

600 mV

Speaker outputs:

2 pairs of two-terminal Phoenix-type connectors
(2 each; Left Speaker and Right Speaker).

Minimum recommended load impedance:

4 ohms (one 4 ohm load or two paralleled 8 ohm loads per channel)
(2 speaker outputs for each channel are paralleled; minimum *total* load impedance per channel is 4 ohms).

Trigger and control:

Trigger Input (mono 1/8").

IR input (optical); window on front panel next to Standby switch.

IR Input (electrical; mono 1/8"); on rear panel next to Trigger Input.

RS-232 serial input/output; on rear panel (9 pin d-connector; female).

Front panel controls and indicators:

Standby; (large push button); toggles Standby mode.

Standby LED (1); red indicates Standby mode; blue indicates normal operation; flashing red indicates a fault.

Input; pushbuttons; (1, 2, auto); select input / mode.

Input; LEDs (3); indicate active input / mode.

Volume Up, Volume Dn; pushbuttons.

Volume LEDs (8); indicate approximate volume setting.

Rear panel controls and indicators:

Power (rocker switch); switches mains power.

Input Voltage (protected slide switch); selects 115 or 230 VAC line voltage.

Power Mode toggle switch (On / Off / Triggered).

Remote control:

The Sherbourn PA 2-50 includes a compact infrared (IR) remote control.

May also be controlled by standard (user-supplied) multi-remote.

Remote control via RS-232 serial connected controller (bi-directional).

AC power input:

IEC C7/C8 (2.5A two wire) type inlet and power cord.

Installation Tips

Input Switching

The Sherbourn PA 2-50 has two separate stereo inputs. Explicitly choosing either Input 1 or Input 2 (by either the front panel buttons, the IR remote, or the RS-232 remote) selects that input as the signal source; choosing Auto as the signal source instructs the PA 2-50 to use whichever input signal is active; if Auto is selected, Input 1 has priority over Input 2 if both inputs are receiving signal. If only a single input is to be used, Input 1 should always be chosen to assure optimum performance.

Auto Power Mode

When the rear panel Power switch is set to On, and Power Mode is set to Auto, the PA 2-50 will switch On when signal is detected at either input (regardless of which input is selected as the signal source).

Volume and Input Setting Persistence

When the PA 2-50 is powered On from a full shutdown, or returned to operating mode from Standby, the Volume level and Input selection will return to the settings in effect when the PA 2-50 was shut down.

Volume Lockout

The Sherbourn PA 2-50 has a special user Volume control lockout feature. This feature is engaged by pressing the front panel Input 1 button and holding it for approximately 3 seconds. THIS LOCKOUT MODE WILL REMAIN IN EFFECT EVEN IF THE PA 2-50 IS SET INTO STANDBY MODE OR POWERED OFF AND ON AGAIN. The lockout mode is disengaged by again pressing the front panel Input 1 button and holding it for approximately 3 seconds.

When the lockout mode is engaged, the front panel Volume controls *and* the IR Volume control are disabled; the RS-232 Volume control functions will still operate normally. (This is *not* a Mute function; the Volume remains set as it was when the lockout was initiated.) When the Input 1 button is pressed to engage the lockout mode, the Input selection will also switch to Input 1. Since the Input selection controls are *not* locked out, Input 2 or Auto may be re-selected afterwards.

Ventilation and cooling

Even though the PA 2-50 is quite efficient, it still produces some heat; to avoid overheating, be sure to provide adequate clearance and ventilation, and do not block the vents. Overheating adversely affects performance and shortens component life. We suggest locating components that produce the most heat towards the top of your rack if practical, and leaving at least 1U (1.75") of rack space between components. Space between components can be left open for ventilation, filled with a spacer, or used to house a forced-air cooling solution.

Sherbourn's C-12 Flex Rack™ Cooling System uses whisper quiet high capacity variable speed fans to provide over 100 CFM of forced air cooling for rack installations. The C-12 offers a variety of air-flow options (including external ducting), includes professional features like triggered operation and thermostatic control, and takes up only 2U of rack space.

IR Remote Control Input

If the PA 2-50 is installed in a location where the front panel IR remote window is blocked, an external IR receiver may be connected to the IR In connector on the rear panel.

Rack Mounting Options

The Sherbourn PA 2-50 may be rack mounted using the Sherbourn UFPx1 rack mount kit. Two PA 2-50 units may be mounted side by side in a 19" rack using the Sherbourn UFPx2 rack mount kit.

Configuration

Operating Voltage - Verify that the Sherbourn PA 2-50 is configured for the correct operating voltage for your area. (Voltage is set via the AC Input switch on the rear panel of the PA 2-50).

Power Mode - The way in which the PA 2-50 responds to the Trigger Input, audio signals, and the front panel Standby switch is determined by the setting of the Power Mode switch (the small bat switch on the rear panel below the speaker outputs, to the right of the Trigger and IR Inputs). When the rear panel Power rocker switch is set to Off, the PA 2-50 is *powered completely off* and will not respond to any other control, switch setting, or input. In order for the PA 2-50 to operate as described below, the rear panel Power rocker switch must be set to On.

- When the Power Mode switch is set to On, the PA 2-50 is controlled by the front panel Standby switch, which toggles between Standby and operating (On) modes each time it is pressed.
- When the Power Mode switch is set to Auto, the PA 2-50 is controlled by audio input; the PA 2-50 switches On when there is audio signal present at any of the inputs (this will occur even when audio arrives at an input which is not assigned as a source); the PA 2-50 will return to Standby mode about fifteen minutes after audio input signal is no longer present.
- When the Power Mode is set to Off, the PA 2-50 will switch On when a trigger signal is received, and will return to Standby mode when the trigger signal is no longer present.

Remote Control - The PA 2-50 responds to certain remote control commands (including the Power On command) when in Standby mode. The rear panel Power rocker switch is a manual, mechanical switch; when it is set to Off, the PA 2-50 is *powered completely off* and will not respond to any remote control commands. The remote control Power Off commands (and the Standby button) return the PA 2-50 to Standby, but do not remove all AC mains power (the remote control receivers remain powered on).

Remote Control Codes and Signal Specifications

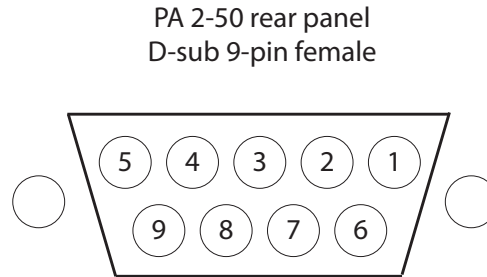
RS-232-Serial Codes

The Sherbourn PA 2-50 responds to serial codes in standard text format.

The following list of codes must be sent *precisely* as shown;

everything after the equals sign (=) is part of the code, INCLUDING THE SINGLE QUOTES; the single quotes (apostrophes) MUST be included or the code will not be accepted

- Power On = '@112'
- Power Off = '@113'
- Input 1 = '@15A'
- Input 2 = '@15B'
- Input Auto = '@15Z'
- Mute On = '@11Q'
- Mute Off = '@11R'
- Mute Toggle = '@11U'
- Volume Up = '@11S'
- Volume Dn = '@11T'
- Volume Direct = '@11P'xxx
(xxx represent three decimal digits from 000 to 080 -
000 is full volume; 080 is minimum volume)



Recommended serial port settings are 9600,N,8,1, NO handshake

Required cable is a "standard one-to-one male-to-female 9-pin D-sub serial cable"; the PA 2-50 requires pin 2 to pin 2, pin 3 to pin 3, and pin 5 to pin 5 (you may use a fully wired one-to-one cable; do NOT use a "null modem" cable)

IR Remote Control Codes

The Sherbourn PA 2-50 responds to "16-bit custom NEC style IR codes"

- Power On = 01F601
- Power Off = 01F604
- Input 1 = 01F606
- Input 2 = 01F60A
- Input Auto = 01F609
- Mute Toggle = 01F605
- Volume Up = 01F60C
- Volume Dn = 01F60E

To generate the "full NEC IR codes", enter these codes into IR Code Doctor or a similar code converter, choose to Create an NEC Code; the left 4 hex digits are converted into decimal (01F6 hex = 502 decimal) and entered into the System field; the right two hex digits are converted into decimal and entered into the Command field. This will yield what some vendors refer to as the "full NEC IR code"; converting to RAW will yield the "Pronto" style code.

These codes are provided for you on the next page (and may be cut and pasted from the PDF version of this manual). Simply cut and paste ONLY the block of numbers after the equals sign into your code editor.

Performance Specifications

Analog inputs:

2 inputs; each one stereo pair of unbalanced (RCA) inputs.

Analog (line level) outputs:

1 output; one stereo pair of unbalanced (RCA) outputs.

Input sensitivity (for full output):

600 mV

Auto switch response time:

(On from Standby or switch to priority input on sense); < 10 seconds.

Speaker outputs:

2 pairs of two-terminal Phoenix-type connectors
(2 each; Left Speaker and Right Speaker).

Minimum recommended load impedance:

4 ohms (one 4 ohm load or two paralleled 8 ohm loads per channel)
(2 speaker outputs for each channel are paralleled; minimum *total* load impedance per channel is 4 ohms).

Power output:

60 watts RMS per channel (x2); into 8 ohms.
80 watts RMS per channel (x2); into 4 ohms .

S/N ratio:

> 95 dB (A-weighted).

Frequency response:

20 Hz to 20 kHz + / - 1.0 dB at 1 watt (- 1.5 dB at 80 kHz).

Trigger and control:

Trigger Input: 5 - 20 VAC or VDC.
Serial: Standard RS-232 drive levels.

Protection:

The Sherbourn PA 2-50 is protected against excessive operating temperature, shorted speaker connections, ground faults, and other common fault conditions. If a fault occurs, the PA 2-50 will automatically power down and the front panel Standby LED will flash red. To reset the protection, turn the PA 2-50 Off and then On again using the REAR PANEL POWER SWITCH after the fault has been removed.

Features

The Sherbourn PA 2-50 Two-Channel Flex Amplifier combines the latest cutting edge technology with solid engineering and high quality components to deliver superior sound quality, performance, and features. Some of the more important features of the PA 2-50 include:

- 2 channels of fully discrete, audiophile quality amplification
- Each channel delivers:
 - 60 watts into 8 ohms
 - 80 watts into 4 ohms
- Two stereo inputs with manual or automatic input selection
- Precision, microprocessor controlled analog volume control
- Always-on, auto-sense, and triggered power modes
- Infrared (IR) and RS-232 serial remote control
- Compact form factor
- Convenient front panel controls for Input selection, Power, and Volume
- Bright, easy to read, front panel status indicators
- Speaker connections via industry standard Phoenix-type connectors
- Massive toroidal power supply
- Connections for two sets of 8 ohm speakers (or one set of 4 ohm speakers)
- Intelligent protection from electrical faults, thermal faults, and overheating
- Operates from 115 VAC or 230 VAC (user selectable)
- Rack mountable (individual or two units side by side in a single 19" rack mount)
- 10 year Sherbourn Technologies Limited Warranty

You can find more information about the PA 2-50 Two-Channel Flex Amplifier on our Web site at www.sherbourn.com

Operation

Turning on the AC power

The AC mains power on the Sherbourn PA 2-50 is controlled by the Power rocker switch located on the rear panel above the power cable. When the AC mains power is Off, the PA 2-50 will not respond to any command (but it will remember Volume and Input settings.) Once the AC power is turned on, the PA 2-50 will remain in Standby mode until:

- the Standby push button on the front panel is pressed.
- the Trigger Input is asserted (if the Power Mode switch is in Trigger mode).
- audio signal is sensed at an input (if the Power Mode switch is in Auto mode).
- the On button on the IR remote is pressed (or the code is received from a compatible control).
- the Power On command is received from an RS-232 serial device.

The PA 2-50 will then remain On until:

- the Standby push button on the front panel is pressed again.
- the Trigger Input is dropped (if the Power Mode switch is in Trigger mode).
- audio signal is no longer sensed at an input - after a short delay (if the Power Mode switch is in Auto mode).
- the Off button on the IR remote is pressed (or the code is received from a compatible control)
- the Power Off command is received from an RS-232 serial device.

The Power Mode switch is the small bat switch on the rear panel below the speaker terminals, labelled "On/Auto/Trigger".

Status Indicators

When the PA 2-50 is in Standby mode, the single LED next to the front panel Standby switch will be lit red; when the PA 2-50 is On, the LED will be lit blue; if a fault occurs, the LED will flash red (and all other LEDs will be off).

Selecting an Input

To select an input using the front panel controls, press one of the Input Selector buttons (1, 2, or Auto). Pressing 1 or 2 directly selects that input; pressing Auto configures the PA 2-50 to use whichever input is active. If both inputs have audio signal on them, Input 1 takes priority and will be selected. If only a single input is to be used, it should be Input 1. The same input commands may be received via the included IR remote control, a programmable IR remote configured with the correct codes, or a remote control device connected to the RS-232 serial port on the rear panel of the PA 2-50.

Volume Control

To control the volume of the PA 2-50 from the front panel or the IR remote control, press or press and hold the Volume Up or Volume Dn button. The level will increase or decrease by a very small increment each time the button is pressed, and move smoothly up or down if the appropriate button is held down. When under the control of an RS-232 serial controller, the level may be either moved up or down, or set to an explicit level (explicit levels are expressed as a negative value, with 0 being full volume and 80 being minimum volume).

Mute Control

The PA 2-50 has a Mute function that can be accessed via IR or serial RS-232 remote control. When accessed from the IR remote, pressing the Mute button toggles the Mute function. When accessed via the RS-232 serial control, the Mute may be toggled or explicitly turned On or Off.

Resetting a fault

If the PA 2-50 experiences a short or other fault, the PA 2-50 will return to Standby mode and the Standby LED will flash red. To reset the protection, turn the PA 2-50 Off and then On again using the REAR PANEL POWER SWITCH after the fault has been removed. If the fault indication remains, please refer to the Troubleshooting section for more options.

Volume Lockout

The Sherbourn PA 2-50 has a special user Volume control lockout feature. This feature is engaged by pressing the front panel Input 1 button and holding it for approximately 3 seconds. THIS LOCKOUT MODE WILL REMAIN IN EFFECT EVEN IF THE PA 2-50 IS SET INTO STANDBY MODE OR POWERED OFF AND ON AGAIN. The lockout mode is disengaged by again pressing the front panel Input 1 button and holding it for approximately 3 seconds.

When the lockout mode is engaged, the front panel Volume controls *and* the IR Volume control are disabled; the RS-232 Volume control functions will still operate normally. (This is *not* a Mute function; the Volume remains set as it was when the lockout was initiated.) When the Input 1 button is pressed to engage the lockout mode, the Input selection will also switch to Input 1. Since the Input selection controls are *not* locked out, Input 2 or Auto may be re-selected afterwards.

Periodic Maintenance

The Sherbourn PA 2-50 requires no periodic maintenance.

Cleaning the Sherbourn PA 2-50

- If necessary, the Sherbourn PA 2-50 should be cleaned gently with a soft rag.
- If something sticky gets on the front panel or case of the PA 2-50, it should be cleaned with a mild cleaning solution applied to a soft rag, followed by wiping with a clean rag dampened with plain water and drying with a soft dry rag or cloth.

Note: DO NOT spray water or cleaning solution directly onto the Sherbourn PA 2-50 or into the vents.

Troubleshooting

If problems occur, the first step should be to verify that the Sherbourn 2-50 is set to the proper line voltage for your AC power source, and that your power source is operating correctly.

Problem: No sound is heard from either channel (the Standby LED is not lit).

Reason: You have no AC power.

- Verify that the circuit is live and the rear panel Power switch is On.
- Verify that the line cord on the PA 2-50 is fully inserted and is tight.

Problem: No sound is heard from either channel (the Standby LED is lit red).

Reason: The PA 2-50 is in Standby mode.

- If the PA 2-50 is in “On” power mode, press the Standby button.
- If the PA 2-50 is in “Trigger” power mode, verify that a trigger signal is present.
- If the PA 2-50 is in “Auto” power mode, verify that audio signal is present at an input.
- Send a Power On command via IR or RS-232 remote control.

Problem: No sound or distorted sound is heard from one or both channels (the Status LED is lit blue).

Reason: The PA 2-50 is On and is not indicating a fault.

- Verify that the correct input is selected.
- Verify that the Volume is not all the way down.
- Check your source and your input cabling.
- Check your speakers and speaker connections.

Problem: No sound is heard (the Standby LED is flashing red).

Reason: The PA 2-50 is indicating a fault on one or both channels.

- Verify that the speaker cable(s) and speaker terminals are not shorted.
- Verify that the speaker itself is not shorted or damaged (try the speaker on another channel and see if the fault “moves”).
- Verify that the source is not faulty (try that input cable on another input and see if the fault “moves”).
- Disconnect all inputs and outputs and reset the PA 2-50 (turn the rear panel Power rocker switch Off and back On).

If the fault condition persists after all inputs and outputs have been disconnected and the fault has been reset, AND the Voltage Select switch is in the proper position, please contact Sherbourn Technical Support.

Problem: The Volume control doesn't respond to the front panel buttons or the IR remote, but everything else is working correctly.

Reason: The PA 2-50's Volume Lockout feature is engaged.

- Press and hold the front panel Input 1 button for about three seconds to disengage the Volume Lockout feature.

Sherbourn Technologies, LLC Ten-Year Limited Warranty

What does this warranty cover? Sherbourn Technologies, LLC (“Sherbourn”) warrants its products against defects in materials and workmanship. This warranty is subject to revision at any time.

How long does this coverage last? This warranty commences on the date of retail purchase by the original retail purchaser and runs for a period of ten (10) years thereafter, with the following exceptions: (1) receivers (including the SR-8100, SR-8200, and SR-120), preamp/processors (including the PT-7030, PT-720C4, and PT-7020), preamplifiers (including the PRE-1), and the CD-1 CD Player (with the exception of the slot load CD engine) are covered by this warranty for five (5) years from the date of retail purchase by the original purchaser; and (2) electromechanical components, including the slot load CD engine on the CD-1 CD Player, and all fans (including the C-12 Cooling Unit), are covered by this warranty for three (3) years from the date of retail purchase by the original retail purchaser. This warranty is transferrable, upon written notification to Sherbourn, to any person that owns the warranted product, however, if ownership is transferred, the Term shall be no longer than five (5) years from the date of purchase by the original purchaser. Sherbourn warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in the previous 3 sentences is hereinafter referred to as the “Term”. TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES RELATED TO THE ORIGINAL PRODUCT AND ANY REPLACEMENT PRODUCT OR PARTS (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY LIMITED TO THE TERM OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. A claim under this warranty must be made by you within the Term. A claim shall not be valid (and Sherbourn has no obligation related to the claim) if it is not made within the Term and if it is not made in strict compliance with the requirements of the “How do you get service?” section.

What will Sherbourn do? Sherbourn will, at its option, either: (i) repair the product, or (ii) replace the product with a new consumer product which is identical or reasonably equivalent to the product. Sherbourn may provide you with a refund of the actual purchase price of the product in the event (i) Sherbourn is unable to provide replacement and repair is not commercially practicable or cannot be timely made, or (ii) you agree to accept a refund in lieu of other remedies hereunder. When a product or part is repaired or replaced, any replacement item becomes your property and the replaced item becomes Sherbourn’s property. When a refund is given, the product for which the refund is provided must be returned to Sherbourn and becomes Sherbourn’s property.

What is not covered by this warranty? This warranty does not apply: (i) to damage caused by use with non-Sherbourn products, where the non-Sherbourn product is the cause of the damage; (ii) to damage caused by service or maintenance performed by anyone who is not a representative of Sherbourn; (iii) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (iv) to a product or part that has been modified after its retail purchase, where the modification caused or contributed to the damage; (v) to consumable parts, such as batteries; (vi) normal wear tear; or (vii) if any Sherbourn serial number has been removed or defaced and Sherbourn cannot otherwise confirm that you are the original retail purchaser or authorized transferee. SHERBOURN SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR RELATED TO ANY DEFECTS IN OR DAMAGES TO ITS

PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY.

How do you get service? In order to make a claim under the warranty, you must:

1. Call a customer service representative (“CSR”) of Sherbourn at (1-877-366-8324). Provide the CSR with a description of your problem and the serial number of the product for which the warranty claim is being made.
2. The CSR will provide you with a returned material authorization number (“RMA”).
3. Ship the product to Sherbourn at the following address, with the RMA written in large, bold letters on the outside of the box, and with the letters “RMA” written before the number. Parcels arriving without a RMA number on the outside of the box will be refused.

Sherbourn Technologies, LLC
Attn: Repair Department
131 Southeast Parkway Court
Franklin, TN 37064

How does state law apply? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. CERTAIN STATES HAVE ENACTED LAWS WHICH PRECLUDE THE WAIVER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES AND/OR PRECLUDE THE WAIVER/LIMITATION OF IMPLIED WARRANTIES. TO THE EXTENT YOUR STATE HAS ENACTED A LAW WHICH PROHIBITS SUCH A WAIVER/LIMITATION, ALL SUCH WAIVERS/LIMITATIONS CONTAINED IN THIS WARRANTY ARE INAPPLICABLE TO YOU. CERTAIN STATES HAVE ENACTED LAWS WHICH REQUIRE THE DURATION OF A WARRANTY TO BE EXTENDED (INCLUDING BUT NOT LIMITED TO DURING PERIODS OF REPAIR). TO THE EXTENT YOUR STATE HAS ENACTED A LAW OF THIS NATURE, THEN THE DURATION OF THIS WARRANTY WILL BE EXTENDED AS REQUIRED BY APPLICABLE LAW.

Notes

All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products without prior notice.

Sherbourn

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