

GALAXY AUDIO

User Guide

HOT SPOT, HOT SPOT VC, CORE PA5X140



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Welcome

Welcome to the world of personal monitors. Thank you for choosing the world's first and finest personal monitor manufactured by Galaxy Audio. This user's guide contains important information on the use and care of your new **HOT SPOT** personal monitor.

Fill this out and retain for your records

Model: _____ Serial number: _____

Purchased from: _____

Purchase date: _____

To contact Galaxy Audio

call 1-800-369-7768

write to P.O. BOX 16285

Wichita, Ks 67216-0285

or visit www.galaxyaudio.com

CAUTION: THESE PRODUCTS ARE CAPABLE OF PRODUCING SOUND PRESSURE LEVELS WHICH MAY CAUSE PERMANENT HEARING DAMAGE AFTER PROLONGED EXPOSURE.

WARNING! TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. TO PREVENT THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates that a dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Before You Begin

Before using your **HOT SPOT**, **HOT SPOT VC**, or **CORE PA5X140**, be sure to read and understand all instructions in this manual pertaining to the unit(s) you have purchased.

Stand Mounting

All **HOT SPOTS** and the **CORE PA5X140** have a built in microphone stand mount. Some microphone stands may require an adaptor (contact your Galaxy Audio dealer and ask for an SA-1, microphone stand adaptor).

DO...



- Read this manual
- Use a unidirectional microphone
- Handle with care
- Complete the registration card at the back of the manual

DON'T...



- Expose the **HOT SPOT** or **PA5X140** to rain or moisture
- Plug-in or unplug the **HOT SPOT** while it is operating (doing so may damage your amplifier)
- Attempt to make any repairs (call Galaxy Audio for the nearest authorized repair center). Failure to do so may void your warranty.

The HOT SPOT & HOT SPOT VC

The impedance of the **HOT SPOT** is 16 ohms.

The impedance of the **HOT SPOT VC** is determined by the position of its volume control. Use the table below to determine the actual impedance.

POSITION	IMPEDANCE	dB REDUCTION
Full Clockwise	16 ohms	0
2nd	23 ohms	-3
3rd	33 ohms	-6
4th	46 ohms	-9
5th	64 ohms	-12
6th	90 ohms	-15
7th	130 ohms	-18

ARCHITECT and ENGINEER SPECIFICATIONS for Galaxy Audio's HOTSPOT

The loudspeaker shall be a full range system offering two ferro fluid cooled 5-inch drivers with 40-ounce magnet structures. The loudspeaker shall be capable of handling 200 watts of continuous program. Nominal impedance shall be 16 ohms. Input connections shall be ¼-inch phone jacks. The enclosure shall be constructed of rugged ABS plastic and feature a foam grille cover. The cabinet shall be available in black with a black bezel. An integrated flange shall be provided to accommodate microphone stand mounting. An optional handle shall be offered. Dimensions shall be 10.94 inches wide (278 mm), 6.75 inches high (171 mm), and 6 inches deep (152 mm). The system's weight shall be 8.25 lbs (3.37 kg). The loudspeaker system shall be the **GALAXY AUDIO HOT SPOT. MADE IN USA.**

The CORE PA5X140

CONTROLS/INDICATORS and their operation (Front Panel)

LEVEL CONTROL FOR MIC (XLR) INPUT

LEVEL CONTROL FOR 1/4" INPUT

POWER SWITCH

TONE CONTROLS

When all three controls are set to the 12 o'clock (detent) position, the output frequency response is flat.

HIGH +/- 10dB peak/dip at 16 kHz

MID +/- 10dB peak/dip at 2 kHz

LOW +/- 10dB peak/dip at 300 Hz

MIC (XLR) INPUT

Balanced input with 24 VDC phantom power for electret microphones.

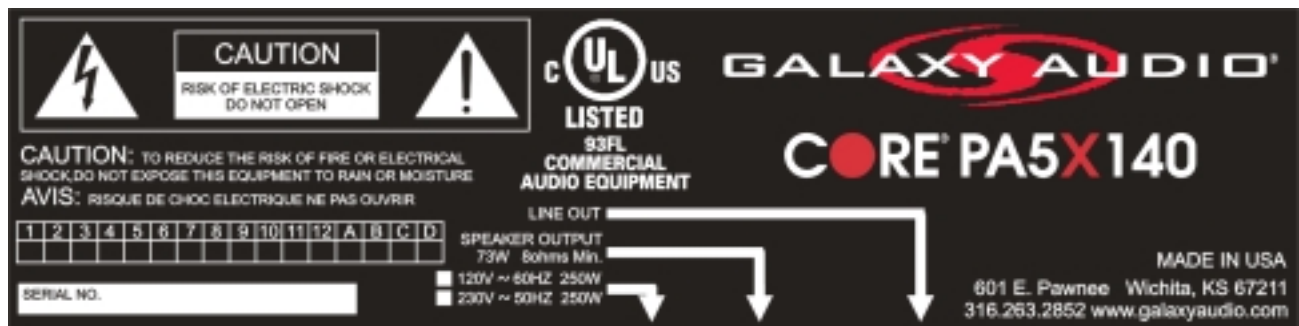
1/4" INPUT

POWER LED

LIMIT LED

Indicates when the built-in compression circuit is activated. By automatically reducing gain before clipping occurs the compression circuit prevents distortion. The LIMIT LED remains lit about half the time when the amplifier is being driven to its maximum potential. Do not allow it to remain lit more than half the time.

CONNECTORS/INDICATORS and their operation (Rear Panel)



POWER CORD

LINE OUT

RCA jack -10dB line level output can be fed to a recorder, or to other sound system components. It is post-EQ, pre-compressor and pre-amplifier.

SPEAKER OUTPUT

1/4" connector output from the internal amplifier. It can supply an external 8 ohm speaker with 73 watts of RMS power. This means two 16 ohm HOT SPOTS can be connected to the system without overloading the amplifier; great for a small PA or monitor setup.

Using the CORE PA5X140 as a...

Powered Monitor



When connected to a mixer's monitor output or auxiliary output, the **PA5X140** enables each performer to create his/her own monitor mix.



Additional monitors can be attached to the **PA5X140**'s speaker output.



A recorder can be attached to the **PA5X140**'s LINE output.



Virtually any type of signal (instrument, mic level from a mixing console, guitar, keyboard, tape player or condenser mic can be plugged into the **CORE PA5X140** inputs.

Ultra-Compact PA System



The **CORE PA5X140** by itself is a one-piece PA system. Simply plug in a mic or instrument for 100 watts of sound reinforcement power.



When two 16 ohm Galaxy Audio **HOT SPOT** personal monitors are attached to the SPEAKER OUTPUT, the **PA5X140**'s power output increases to 146 watts. Power output depends on the impedance of the speaker being powered.

Practice Amp



A balanced signal from a microphone or second instrument may be fed into one input while an instrument, CD player or tape deck is fed into the other.



Effects devices for microphones or second instrument may be fed into one input while an instrument, CD player or tape deck is fed into the other.



When driving two 16 ohm Galaxy Audio **HOT SPOT** personal monitors, the **PA5X140**'s power output increases to 146 watts. Whether using the **HOT SPOT** or another speaker, the **PA5X140**'s power output depends on the impedance of the speakers being powered. The load on the **CORE PA5X140**'s amplifier section must remain at 4 ohms or greater.

SOUND REINFORCEMENT BASICS

Avoiding feedback

Feedback (the shriek sometimes emitted by PA systems) occurs when the microphone (or pickup) and speaker are positioned too close together for a given level of volume. Once feedback occurs, it will continue until either the volume is decreased or the microphone or speaker is moved. *Gain* is the degree to which the volume may be turned up before feedback begins. In setting up a sound system, the objective is to maximize gain.

Monitor Placement



The **CORE PA5X140** should be positioned within arm's reach of the performer.



The **CORE PA5X140** should be placed to the rear of the microphone being used by the performer.

Avoiding Distortion

Distortion in a monitor system usually occurs when the amplifier is being *overdriven*-nearing the limits of its power output capability. *Overdriving* the amplifier may be corrected by reducing the bass frequencies in the monitor mix (low notes use a lot of power). Distortion may also originate with a bad signal source. The 5 inch driver will not reproduce tones lower than 200 Hz. If the speaker begins to distort, reduce the low frequencies by adjusting the LOW tone control. As a monitor the **CORE PA5X140** does a great job in conjunction with the house stack where the low frequencies are reproduced.

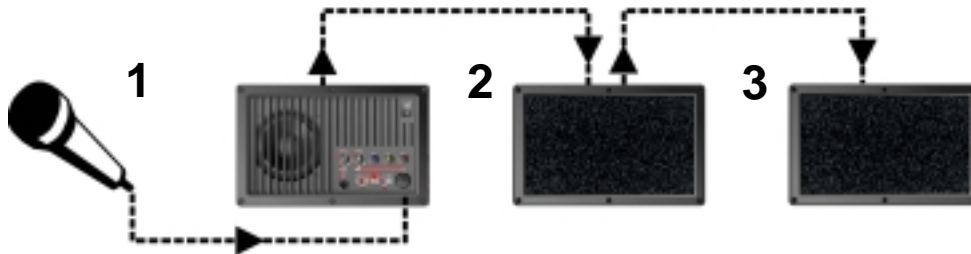
USING THE HOT SPOT WITH THE CORE PA5X140 POWERED MONITOR

The **CORE PA5X140**'s *SPEAKER OUTPUT* jack is designed to allow two **HOT SPOTS** to be "daisy-chained." Its amplifier is rated at 4 ohms. Therefore, the total impedance of the speaker system must be greater than, or equal to, 4 ohms. Anything less will overload the amplifier.

The **CORE PA5X140** produces 146 watts when powering two **HOT SPOTS** (see figure below)

Route cables:

- 1) From the microphone to Galaxy Audio's **CORE PA5X140**.
- 2) From the output of the **CORE PA5X140** to the first **HOT SPOT**.
- 3) From the first **HOT SPOT** to the second **HOT SPOT**.



ARCHITECT and ENGINEER SPECIFICATIONS for Galaxy Audio's CORE PA5X140

The PA system shall be a portable integrated unit featuring a 146 watt power amplifier @ 4 ohms, two-channel mono mixer with phantom power, equalization, compressor and a single loudspeaker. The amplifier shall be capable of producing 146 continuous watts of power to a 4 ohm load, 100 watts of continuous power to the internal 8 ohm speaker. The mixer section shall include one balanced (differential) input using a ¼-inch phone plug connector and one +24 VDC phantom powered balanced (differential) input using an XLR connector. The mixer section shall include two separate sensitivity controls capable of automatically adjusting the gain to handle line, instrument or mic level inputs and a RCA connector capable of line level output. Equalization shall be accomplished via a three band equalizer: ± 10dB peak/dip at 300 Hz, ± 10dB peak/dip at 2 kHz, ± 10dB peak/dip at 16 kHz. The PA system shall have a ¼-inch speaker level output jack capable of driving an 8 ohm load. The loudspeaker shall be a ferro fluid cooled 5-inch full range driver with a 40 ounce magnet structure. Sensitivity measured at 1 watt at 1 meter (1 kHz, octave band) shall be 98 dB. The enclosure shall be constructed of fire retardant styrene with fade-resistant colors. The cabinet finish shall be black with a black cast aluminum bezel. Dimensions shall be 6 inches (152 mm) high, 10.94 inches (278 mm) wide and 6.75 inches (171 mm) deep. The system weight shall be 12.5 lbs (5.7 kg). The PA system shall display UL, CSA and CE agency markings. The PA system shall be the **GALAXY AUDIO CORE PA5X140. Made in the USA.** Specifications subject to change without notice.

SPECIFICATIONS

	HOT SPOT	HOT SPOT VC	CORE PA5X140
Speaker Compliment	2- 5" drivers (S5C160-8)	2- 5" drivers (S5C160-8)	1- 5" driver (S5C160-8)
Magnet Structure	80 oz. (2.2 kg) total	80 oz. (2.2 kg) total	40 oz. (1.1 kg)
Power Handling	200 watts cont.	200 watts cont.	100 watts cont.
Sensitivity (1 watt @ 1 meter)	98 dB (1 kHz octave band)	98 dB (1 kHz octave band)	98 dB (1 kHz octave band)
Frequency Response	150 Hz- 15 kHz	150 Hz- 15 kHz	150 Hz- 15 kHz
Nominal Impedance	16 ohms	16 ohms	8 ohm
Input Connections	1/4" jacks	1/4" jacks	see amplifier section
SPL0WT	15.37	15.37	9.12
Enclosure	ABS Plastic	ABS Plastic	Fire Retardant Styrene
Dimensions	6.75"x 10.94"x 6" (171mm x 278mm x 152mm)	6.75"x 10.94"x 6" (171mm x 278mm x 152mm)	6.75"x 10.94"x 6" (171mm x 278mm x 152mm)
Net Weight	8.19 lbs. (3.72kg)	8.19 lbs. (3.72kg)	12.5 lbs. (5.7kg)
Additional Feature		volume control; range 18 dB	see amplifier section
AMPLIFIER (PA5X140 only)			
Power Output			100 watts @ 8 ohms 146 watts @ 4 ohms
Distortion			8 ohm < 0.05%
Minimum Load			4 ohm < 0.1%
Frequency Response			4 ohms
Equalization			200 Hz- 20 kHz three band center detent LOW: +/-10 dB @ 300 Hz MID: +/-10 dB @ 2 kHz HIGH: +/-10 dB @ 16 kHz
Input Connections			one 1/4-inch balanced one XLR
Output Connections			one 1/4-inch for 8 ohm load one RCA line out

The Galaxy Audio S5C160-8 is ferro fluid cooled



THREE YEAR LIMITED WARRANTY

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

This warranty is extended to the purchaser and to any purchaser from him for value.

GALAXY AUDIO warrants the materials and workmanship of its products for a period of three full years from the date of the original purchase.

The following are not covered by the warranty:

1. Damage to or deterioration of the exterior cabinet which occurs after delivery.
 2. Damage after initial delivery resulting from accident, misuse or neglect.
 3. Damage resulting from failure to follow instructions contained in the owner's manual.
 4. Damage resulting from the performance of repairs by someone other than **GALAXY AUDIO** or an authorized **GALAXY AUDIO** service center.
 5. Damage occurring during the shipment or delivery of any **GALAXY AUDIO** product to **GALAXY AUDIO** or an authorized service center after initial delivery of the product to you.
 6. Damage to any **GALAXY AUDIO** product which has been altered, or on which the serial number has been effaced or removed. If your unit requires service, it must be returned, shipping charges prepaid to an authorized **GALAXY AUDIO** service center in the United States. (This warranty is not enforceable outside the U.S.) If you are not able to locate an authorized service center in your area, please call or write **GALAXY AUDIO**, 601 E.Pawnee, Wichita, Kansas 67211, (316) 263-2852. We will then refer you to an authorized service center to which the unit may be returned, or we may advise you to return your unit to the factory for service. Under no circumstances should you return your unit to the factory without written instruction to do so. If service is required, you must present the original or a copy of the bill of sale as a proof of date of purchase of your unit. Upon receipt of your unit for service, **GALAXY AUDIO** or the authorized service center will repair or replace your unit as soon as possible, but in no event later than 30 days after the receipt of the unit. We will return the unit to you, shipping charges prepaid, provided the necessary repairs are covered by this warranty.
- IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY, UNLESS OTHERWISE PROVIDED FOR BY STATE LAW. GALAXY AUDIO'S LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT, AND SHALL IN NO EVENT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. GALAXY AUDIO** does not authorize any third party, including any dealer or Authorized Service Center, to assume any liability on behalf of **GALAXY AUDIO** or to make any warranty for **GALAXY AUDIO**.