PHASX PX150 DESKTOP AUTHORING SYSTEM OPERATION MANUAL VERSION 1.1 07/29/2018

To You, our newest Partner:

Thank you for choosing the **Phasx PX150 Audio Authoring Suite**. We are very proud to have created, in our humble opinion, one of the most advanced Personal Recording Systems in the world, and prouder still that you have chosen to agree with us and give our technologies a try.

The Phasx team's mission and ambition is to create a line of Best in Class "Mastering Worthy" Professional Audio Systems that **Empower** Media Arts Professionals in ways never before possible, **Excel** in every benchmark of performance and sound quality, and **Exceed** user expectations on every front.

The PX150 has taken over ten years to develop, and called on the skills, efforts, and inputs of dozens of Acoustics, DSP, and Recording Engineering Professionals.

We hope that you will agree with us that the result was worth the wait!

Sincerely,

The Phasx Team

To receive important information and updates, as becomes available, please take a moment to register your PX15 Audio Authoring System. Go to www.phasx.com/PX150/Register

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Introduction & System Overview



Fig. 1 Complete PX150 System

The **Phasx PX150** system is a complete self-contained audio authoring system that requires only a computer running a quality DAW program and an iPhone or iPad to run Routing and Settings APPs.

The PX150 is effectively a true 3-way system because the ADIO150 Power/Bass Unit is placed directly in front of the user where it can act as a Computer Monitor Stand.

The S150 Satellite Speakers handle the midrange and high frequencies. They employ the patented Shadocastertm shape that allows astonishing position, phase, and frequency accuracy on a standard desktop as small as 48" X 24".

The S150 Satellites are both dedicated passive speakers. Crossover, Driver Compensation, Power Amplifiers, and Woofer/Subwoofer Drivers are all built in to the ADIO150 Power/Bass Unit.

The ADIO150 was designed to interface with any modern DAW and is capable of routing 4 input channels and 8 output channels of 192kHz/24bit audio to and from the DAW via the computer's USB2 system.

Every digital signal in the system, in and out, is <u>always</u> routed through an Analog Devices ASRC (asynchronous rate converter) so that input signals always arrive at the DAW perfectly timed to the rate and depth of the DAW with NO user intervention whatever.

This means that the user can mix any bit rate/bit depth audio signal on any input simultaneously with any other bit rate/depth on any other input, and never have to change any settings. The inputs are always automatically set to match the bitrate/depth selected by the user's DAW project. The only limiting factors are the DAW itself and the 96kHz 24bit limit of the S/PDIF input side hardware.

The ADIO150 is also equipped with a Bluetooth LE based APP connection system that allows the user to run an extremely sophisticated router/switcher/comparator/monitor-controller APP on any iPhone or iPad, Gen. 3 and up.

The PX150 system is extremely powerful and has far more functions than can be mastered in a single sitting or from a quick start guide. However, it is programmed to run with very little user intervention, both from the start with pre-programmed factory settings, and every day thereafter with easy APP-saved user preferences that will grow with the user's familiarity with the system.

Because the system is designed to "wake up running", it is very easy for the user get results within minutes of firing the system up!

It is critical to note that the PX150 is primarily meant to work with input from and outputs to a computer or tablet hosted multi-channel DAW. When used this way, the signal path includes **no** Digital to Analog converters until digital signal is converted directly to Speaker Cone motion. So, one of the most serious deficits of anything but the very most expensive equipment, bad DACs and ADC's, is almost completely eliminated in the PX150.

1. IMPORTANT Safety Information and Instructions

Read the following safety instructions and operations manual before setting up and using your PX150 System!

Keep this manual for future reference.

Heed all the warnings and follow the instructions.

1.1. Listening Level Warning



• The PX150 System is capable of producing very high SPL levels!

- Permanent hearing damage may occur if exposed to high SPL levels for a prolonged and or multiple periods of time.
- Extended periods of high SPL listening may allow mistakes in your mixes or reduce your critical listening ability as your hearing tends to adapt and become less sensitive over time allowing the missing of important and subtle sounds or instrument layering in the mix
- Please use safe listening levels when playing back your music material.

1.2. Important Enclosure Notice / Warning

Do not remove any cover plate screws or open any part of the PX150 System.

Hazardous Voltages exist inside the enclosure and a potential of severe or fatal electrical shock!

The PX150 System has no user serviceable parts inside any of the three chassis included. Tampered Seals Void All Warrantees.

- To reduce the risk of failure, fire, or electrical shock, do not expose the any part of the PX150 System to rain, moisture, high humidity, or use near water or other liquids.
- The PX150 System must not be exposed to dripping, splashing, or spills of liquids.
 - Do not use in dusty environments as particles could enter the enclosure or collect on the speaker diaphragms.
- Refer all service to a Phasx Authorized Service Center Only
 - Servicing is required when any part of the PX150 System has been damaged in any way, does not operate normally that cannot be solved with technical support, has been dropped, or exposed to liquids that have entered any of the speakers or the ADIO150.

1.3. Mains AC Power Connection









The ADIO150 System Controller should only be operated when connected to an appropriate AC mains power source and appropriate type of 2 pin connection. This includes any extension cords or power distribution strips. Appropriate power cords are supplied with each ADIO150.

- The ADIO150 System Controller can operate on 120VAC @ 60Hz or 220/240VAC @ 50Hz.
- To completely disconnect from AC mains, disconnect the ADIO150 AC power cord from the AC mains supply receptacle or the back of the Speaker.
- The PX150 System should be installed using the shortest practical wiring and disconnection of the device should be easily accessible.

Power-Cord Protection



- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.
- Particular attention should be given to cords at plugs, power strip receptacles, and power entry connector of the ADIO150 System Controller.

Power Line Surges and Lightning



- As with all sensitive electronic equipment, it is suggested to use AC Main Power sources that have surge protection.
- For additional protection during a lightning storm, or when left unattended and unused for long periods of time, unplug the ADIO150 from the AC Mains Power source.

Mains Power Source Overloading



 Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

1.4 General Cable Connection

 Before making connections to the PX150 System, ensure that the power switch is off and connecting components are in mute or stand-by mode.



- Make sure all cables and connectors are of the highest quality, and fully checked. Defective cables can harm your speakers. They are a common source of noise, hum, crackling etc.
- Always be careful when making connections which may have hazardous voltages on them during operation.
- Always switch off your entire system before connecting or disconnecting any cables, or when cleaning any components.

1.5 Placement



- The ADIO150 will get warm to the touch on its top panel and if rack mounted must have 1 rack space above it left open and clear to the outside to allow air flow for cooling. Do not place <u>anything</u> on top of the chassis or closer than 6 inches to the rear surface to assure air flow.
- Do not place the ADIO150 near high heat generating sources such as radiant heaters, radiators, open flames, candles, or other devices that generate high heat or flames.
 - Do not place flammable material behind, above, or beneath the ADIO150
- Never operate this product or its components I n an explosive atmosphere.



- Do not place the speakers or ADIO150 Controller on an unstable cart, stand, bracket, or table. The unit may fall, causing serious injury and or serious damage.
 - When a cart or stand is used, use caution when moving both together.
- Using Isolation dampers under the speaker cabinets to help decouple the speaker cabinet from the stand that

will help dampen vibration noise and other objects which could fall.

1.6 Cleaning



Clean only with soft cotton dry cloth.

- Never use liquid cleaners, aerosol cleaners, or flammable / combustible chemicals for cleaning.
 - Avoid touching the speaker diaphragms.
- Do not use a vacuum cleaner or high pressure air source on the speaker diaphragms as damage may or will occur.

1.7 Magnetic Considerations:



- S150 Speakers have two drivers; mid-range, and high frequency, and they are NOT Magnetically Shielded
- The ADIO150 Power/Bass Unit has two Drivers for Low Frequency, and they are also <u>Magnetically</u> Unshielded.
- Please keep magnetically sensitive items at least 1.5 Feet away from any of the speaker cabinets.

CRITICALLY IMPORTANT

The ADIO150 Bass Drivers are not shielded and therefore can "fool" some laptops placed on the top of the ADIO150 into thinking that the cover has been closed.

MacBook Pro models, the best solution is to download and install a free "stay awake" utility such as InsomniaX 2.1.8

Windows 10 machines have a "Power Buttons and Lid" setting in the advanced power settings page which allows the user to cause a closing lid (or placing the unit atop the ADIO150) to have no effect.

1.8 Warning:

- 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.

Note: This product 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 product 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 product 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.
- Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC/IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry

Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut

fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Section I: SYSTEM COMPONENTS OVERVIEW

1) S150 Satellite Speaker



Fig. 2 The S150 Satellite Speaker Cabinet

■ THE ShadocasterTM ACOUSTIC Cabinet Construction:

The Patented **Shadocaster™** system allows the small space over a desktop (or similar size area) to behave as if it were a part of an acoustically corrected soffit-mount speaker control room playback system, even though it is operating in a more or less standard domestic room.

The effect is to deliver astonishing sound staging and even accurate elevation effect reproduction, something that is nearly impossible in an acoustically untreated room.

You have to hear it to believe it --- and now you are about to!

Speaker Placement:

The S150 Satellites and ADIO150 Power/Bass Unit are designed to be positioned primarily on a desktop at about 28"-30" above the floor (Standard Desk Height) and at about 2 to 3 feet from the user's ears, with the ADIO150 Power/Bass directly in front of the user and the S150's placed as far apart on the desk as is practical, and then toed in toward the user. Although a very precise balance set-up control is available, it is important to place the speakers at the same distance from the user as in the diagram below.

The S150's should be positioned a minimum of 1foot from the nearest back wall, and at least 2' from the nearest side wall. Walls any nearer than this will need to have diffusion panels strategically placed to manage wall reflections.

This is particularly true in the case of rooms which have hard ceilings at a height of 10 feet or lower, or soft (suspended) ceilings at less than 8 feet above the floor.

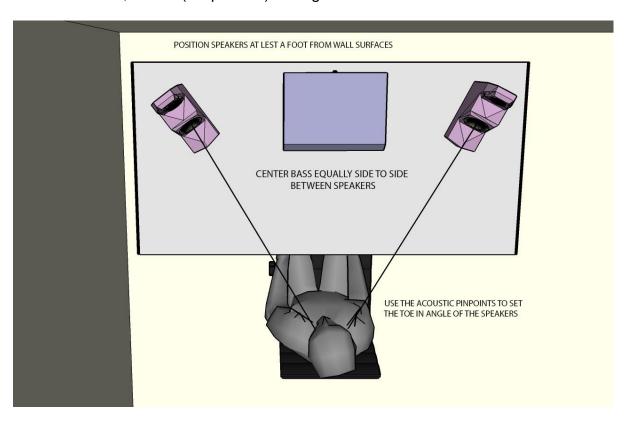


Fig. 3 Placing the S150 Satellite Speakers and ADIO150 Power/Bass Unit on the Desktop

2) THE PATENTED PHASX <u>ACOUSTIC PINPOINT</u> tm

(Possibly the simplest Speaker Positioning System ever)







Panned too far <u>Left</u>

OK!

Panned too far Right



Fig.4 Illustrating the use of the Acoustic Pinpoint System on the Desktop

The patented Phasx **Acoustic Pinpointtm** gives users the highly consistent, dead-accurate system timbre match they need to do delicate "continuity" work day-in and day-out.

The Phasx engineering team developed a distinctive, stylish "gun sight" mounted in alignment with the driver. Just by looking through the sight until the midrange driver is centered in the inner circle and the dust cap fills the inner circle, the user can position his or her ears precisely in relation to the speaker time after time.

Acoustic Pinpoint Positioning ensures sonic consistency from session to session, user to user, and day to day. The user will face the monitor in exactly the same way every time just by sighting through Acoustic Pinpoint to the midrange driver on each of the S150 Satellite Speakers.

3) THE PHASX ADIO150 POWER/BASS UNIT



Fig.5 The ADIO150 Power/Bass Unit which doubles as a Computer Monitor Stand

A fundamental principle in the Phasx engineering philosophy is that non-sinusoidal Bass frequencies CAN be located by the ear/mind.

The fact, in our opinion, is that sharp transients (in particular) are subject to IATD at even the lowest frequencies. For this reason, we decided to build our smaller systems around a centrally located bass cabinet (doubling as a computer video monitor stand) that uses two very linear 5.5" Bass Drivers in a sealed box configuration.

The fact that this cabinet is centered and very near the user means that even though low frequencies are summed to mono below around 125 Hz, the user never has to work with location mis-cues. This holds true even on seriously LF heavy effects such as car wrecks and cannon fire.

For the acoustics aficionado, "Zero Stored Energy" is a critical mandate for Phasx. Accordingly, we never use Bass Reflex alignments of any sort in any of our systems. For that reason, all of our systems, even the lowest cost, are either true or quasi 3-way.

7) THE APPS

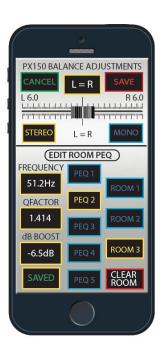


Fig.6 One of the Specialty Screens from Control and Setup APP for the ADIO150

The system ships with a link to a free suite of APPs that add a higher degree of flexibility than has ever been built into an Audio Monitoring System before. From input signal level monitoring to true 100% capable signal routing, to comprehensive setup and instant recall of every important parameter, the ADIO150 APP suite is unmatched in the industry.

SECTION II: GETTING STARTED:

A) Getting to Know the ADIO150 Front Panel

Section I: Input Selection Section II: Level Meter and Gain Setting

Standby/On Switch

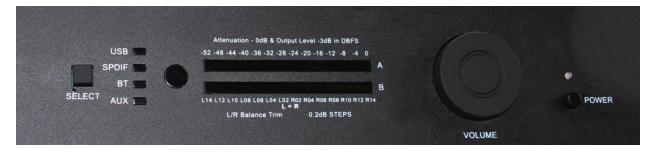


Fig.7 ADIO150 Front Panel

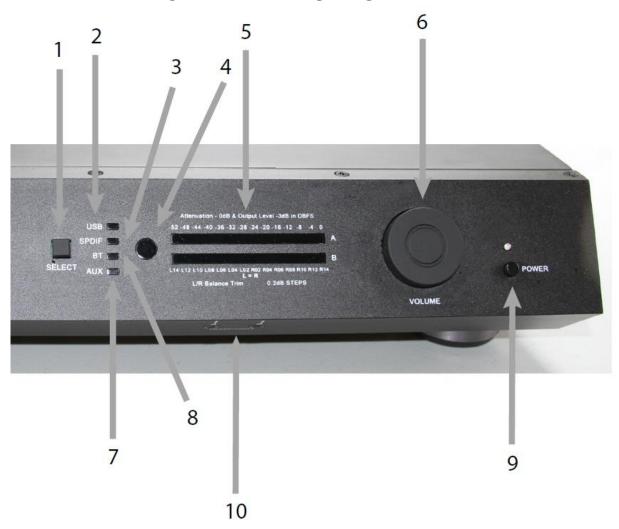
The ADIO150 combines a desktop Bass Cabinet with a studio grade USB2 interface, top grade Bluetooth receiver, state of the art ADI DSP, six power amplifiers, and a 32 bit microprocessor to tie it all together.

Well go over manual operation here, but it is important to note that the **PX150 doesn't reach anything like its full capability unless it is controlled by our custom Apps**, which are provided free to any registered Phasx user. Just go to http://www.phasx.com/PX150/Userportal to learn more.

- Input Selection -- selects the input that is currently routed to the Main Speakers and Headphone Output 1. This does not affect routing to or from the DAW. A short press of the Select Button sequences through the inputs. The Input Section Switch can be overridden by the APP input settings if they are invoked. Selection will revert to "normal" when the power is cycled. A long press on the
- IR Control Window: The unmarked Round Plastic Window is the window for the IR Remote Control included with your PX150 system.
- Level Metering The Volume level metering system is a multifunctional system designed to minimize gain staging errors. In normal operation, the meter indicates the output level in dBFS. The level shown is always 3dB above the actual level. For example: if the output level is reading 0dBFS, the actual level is -3dBFS and the corresponding SPL at the users' ears is about 97dBspl. More information can be found in the training videos located in the PX150 user portal.
- Volume Control The Rotary Encoder marked "Volume" is used to set the current Output Attenuation Level. Although it is always the fastest way to set output volume, the use of the APP for output level setting is always recommended.

• **Standby/On Switch** – When the rear power switch is set to on, LED glows Red when the ADIO150 is in Standby Mode and Blue when it is On. The Power button toggles between the two states.

DETAILED FRONT PANEL LISTING:



- 1) Select Button: Sequences through the various Inputs
- 2) USB/DAW Digital Multi-Channel Input from Computer, Tablet, or Phone
- 3) S/PDIF Stereo Input from rear-panel selectable Toslink or Coax Inputs.
- 4) Optical Window for Included IR "Credit Card" Remote Control
- 5) Multi-Functional Gain Setting and Level Indication Meters
- **6)** Rotary Encoder for Volume, Mute, and Precision Balance Functions.
- 7) Stereo Analog Rear Panel RCA Inputs with -10dBV sensitivity
- 8) High Quality Blue Tooth Stereo Audio Input
- **9)** Standby/On Switch and Indicator (Red=Standby, Blue = On, Purple = Bass Compression Warning!
- 10)Two Semi Independent Headphone Output Jacks

Getting to Know the ADIO150 Rear Panel

Analog and Digital Inputs and Outputs

Speaker Outputs

Mains In/Switch



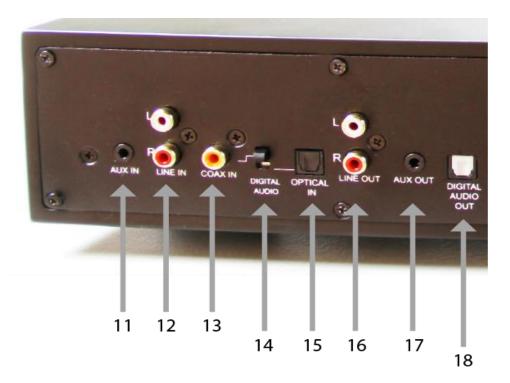


Fig.8 ADIO150 Rear Panel Audio I/O Connectors

INPUTS:

- 11) A 3.5mm TRS Stereo Analog input for Portable Media Players and the like.
- 12) Stereo Line Input on RCA: -10dBV will produce the internal equivalent of -18dBFS
- 13) S/PDIF COAX Input. Standard input with resolution to 96kHz/24bit
- 14) Slide Switch used to select either COAX or Optical S/PDIF Input
- 15) Optical S/PDIF (TOSLINK) Input with resolution to 96kHz/24bit

Outputs:

- 16) RCA Stereo Analog Line Output: -10dBV = -18dBFS, Max out is about +9dBV
- 17) Aux Output: TRS Stereo Analog Output similar to #16 and separately routable
- 18) S/PDIF Output with resolution up to 192kHz 24bit and separately routable

SECTION III: Computer Connection and Setup

A) Connecting your MAC computer using the USB-B connector on the ADIO150 Back Panel

Next, we will hook up your computer so that you will be able to begin hearing the system playing back tracks. There are very few things that can go wrong here, particularly if you are using a USB2 Compatible Mac computer which will require no drivers or additional software (outside of your DAW, Music Playback, or Video Editing Application).

Start by connecting the two S150 Satellite Speakers to the rear panel via the supplied 2 Meter Cables. Run the cables from the S150 rear connectors to the ADIO Connectors #22 and #23 shown below. Be sure that the connectors are fully tightened on both ends.



- 19) USB connector for Program Updates
- 20) USB2 DAW Interconnect
- 21) IR Out (future use)
- 22) Right S150 Connect
- 23) Left S150 Connect

Fig.9 The ADIO150's Rear Panel USB/DAW and Speaker Connectors

1) With the ADIO150 powered Off, connect a USV A-B Cable between any open USB port on your computer and **#20**, the ADIO's USB/DAW connector, which is located on the ADIO150's Back Panel.

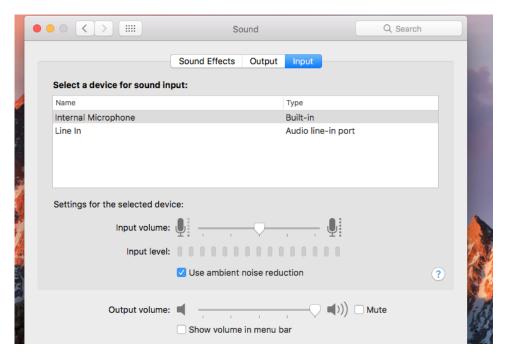


Fig. 10 ADIO 150 Rear Panel AC MAINS Connector

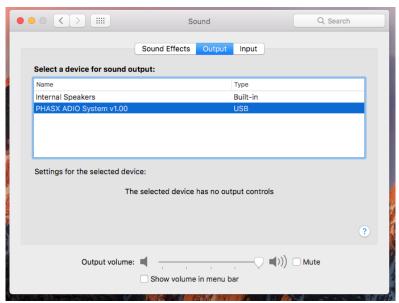
- 2) Connect the included AC Mains cable to #25, the <u>AC Mains Input Connector</u> located on the ADIO150's Back Panel on the right-hand side.
- 3) On your MAC, go to System Preferences, and select the <u>Sound</u> icon



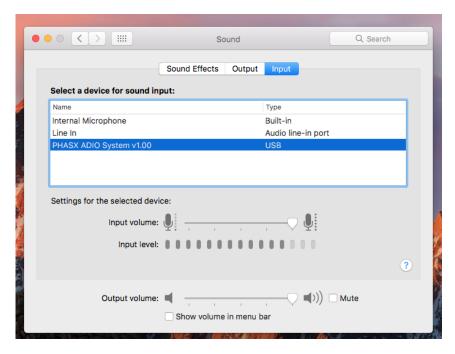
4) After selecting the "Sound" icon, you will see a screen similar to this:



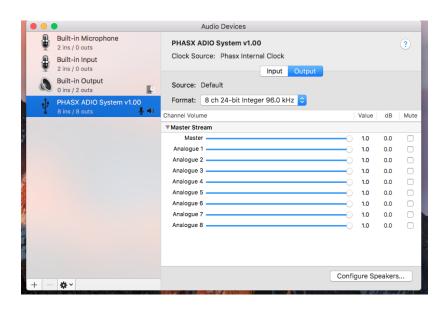
5) Now Power Up your ADIO150, using first the rear panel "hard" switch (#24 in Figure 12), and then the front panel Standby/On Switch. The front panel power LED should be Blue. Then the Sound Preferences Screen will change to something like this:



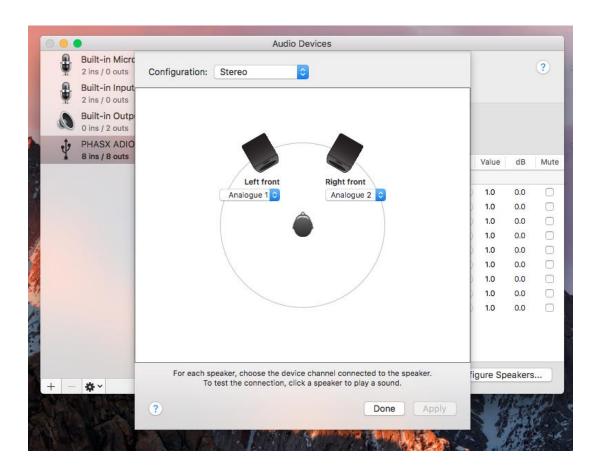
- 6) Select the Phasx ADIO System V1.00 (or later) device
- 7) Be sure to change the Sound Preference for BOTH the Input and Output:



- 8) Next, in <u>Utilities</u>, locate and open <u>Audio MIDI Setup</u>
- 9) Under Window click Show Audio Devices



10) Here you can set the default device to Phasx ADIO, and you can also set the default bit-rate and volume levels for each of the available channels on both input and output sides. We recommend setting a 96kHz/24bit default for maximum compatibility with third party Applications, but anything up to 192/24 is fine. Again, be sure to check both input and output



11) Navigate to the Configure Speakers section of Audio MIDI Setup, and make sure that your default setting is for a Stereo Speaker pair on Analog1 and Analog2 so that System sounds and sounds from other 2-channel Apps will be routed correctly. Click "done", and then exit the Audio Devices Menu.

About the Muti-Function Rotary Encoder Volume Control:

In order to simplify manual (with no APP Running) operation without compromising the allimportant Project Gain Staging, we have designed in a unique approach to Level Indication and Gain Adjustment. First, a short press on the Volume Spinner (it's a pushbutton as well as a spinner) puts the system in MUTE mode. Speakers and Headphones are Muted, and the Input Indicator (USB in this case) will BLINK to indicate that Mute is active.

Here is what happens when you start to **move** the Volume Spinner:



Fig. 13 ADIO 150 Multi-Functional Gain and Balance Setting System

As you move the spinner clockwise or counterclockwise, the normally displayed Level Meter shuts off and the "A" meter shows the current Gain Setting. Since the display is calibrated in dBFS, the gain will be set to something less that 0dB. Standard "Calibrated" Playback is predicated on a Gain setting of -10dBFS (our reasoning is laid out in Videos accessible on the PX150 User Portal).

The bottom line is this:

- 1) If the Gain is set to -10dB (a more accurate setting may be had using the free APP)
- AND the input is Correlated Pink Noise (or <u>very</u> heavily compressed MONO Music[©]) set to -18dBFS at one of the Digital Inputs.
- 3) **OR** -10dBV at one of the Analog Inputs.
- THEN the level at the user's ears will be 80dB_{SPL}.

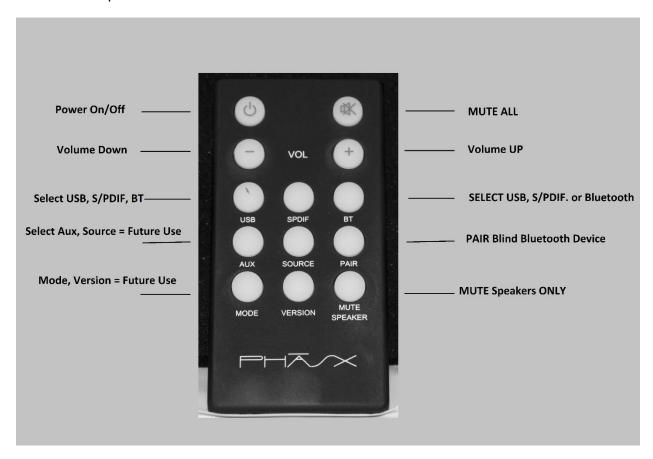
The "B" Meter shows two dots at the middle of the display. These indicate that the Precision Balance Control is set to the middle, and Left Gain exactly equals Right Gain.

If you perform a **long** press on the Volume Spinner button, the unit will enter Balance Mode, and display ONLY the two dots in the middle of the "B" Meter. Now, you can rotate the spinner left or right to change the balance approximately 0.4dB (total) per click. When you are happy with the new balance setting, a short press on the spinner will set that balance until the next power cycle. If you don't do the short press, the unit will revert to the previously stored balance, usually 0dB.

NOTE: The changed balance is ONLY saved until the PX150 is power cycled. This prevents the current user from inheriting the last user's balance setting.

About the Included "Credit Card" IR Remote Control

The IR Remote control Duplicates Front panel controls and adds a few functions. The important ones are Mute Speakers ONLY (Not Headphones) and Blind BT Pair which is handy for hi Fi Bluetooth Adapters which have no screen.



.... That's it!

Open a music playback application such as iTunes, set the volume control on the ADIO150 to somewhere around -25 or so and start playing music!

Of course, there is a <u>lot</u> more to creating a sound track than just Stereo Playback! You will find that the PX150 system includes many, many APP accessible features that allows for almost any imaginable need or setting, including:

- Complete Routing and Fader capability to allow for very complex surround projects including elevation speaker routing.
- Monitor Management features such as target playback system modelling and a complete multi-monitor Equal-Level A/B/C Comparator
- Room EQ to eliminate "One Note Bass" in bedroom sized spaces.
- Compression Onset Warning System so you can be confident that the System never went near protection during <u>your</u> project. (This is a problem that <u>every</u> powered speaker has but no maker <u>ever</u> talks about...)
- Built in Test Signal Generation including Pink Noise and Calibrated Log Sine Sweep.

You will also find a great deal on information, instruction, and examples in both print and video on the PX150 User's Portal at

http://phasx.com/PX150/UserPortal

SECTION IV: Technical Data Specifications

- Patented Shadocaster Self Diffusing Cabinet Technology
- Quasi 3-Way Operation with Separately Amplified Woofer, 2-Midrange, and 2-Tweeter
- 31Hz to 23kHz +/- 1.5dB in Free Air Without a Subwoofer
- 98 dBspl Continuous & 108 dBspl Peaks at Listening Position
- S/PDIF /TOSLINK inputs with Asynchronous Rate Conversion for any rate to 96Khz, depth to 24bit
- Elite Class "Hot-Rodded" TI CLASS D amps Throughout:
- 30Watt Woofers x2 (60 Watts RMS total), 15Watt Stereo Midrange (30W Total), 10Watt Stereo Tweeter (20W Total)
- Patented Acoustic PinpointTM system minimizes Multi-User and Continuity issues.
- Proprietary Zero-Attack Time Peak detectors protect drivers and warn the user of Compression
- Three-Band, Three Level in-App indicator system provides confidence and impending compression warning
- Flexible Room Correction Filter set provides three Banks (presets) each of 5 Bands of Parametric EQ to remove "1 Note Bass" Room Boom
- Precision (per Session) Balance Adjustment System
- User Playback Device Simulation System and Library

SECTION V: Troubleshooting

No Sound

- 1. Check an audio player with ear buds, set the volume to mid-range and then unplug the ear buds.
- 2. Use a 3.5mm to 3.5mm Stereo Cable to connect the player to Audio Unbalanced input on the ADIO150 rear Panel
- 3. Power Cycle your ADIO150, and wait for Boot to Complete.
- 4. Select the Analog Input, and set the Player to Play a track. Be Sure that the PHASX SPEAKER outputs are Connected and that the connectors are fully tightened. Make sure that MUTE is off and that the Volume setting indicator is above -24dBFS when you slightly spin the volume control. You can also user the Monitor Phones Main output with a pair_of known good Headphones or Ear Buds if that is easier. You should hear sound, but in the event that none of this helps and no other explanation is possible, contact Phasx Service.

5.

No Computer Sound

Problems in Computer Sound are almost always caused by an incorrect setting in the computer's sound system user interface. Review Section III, Computer Connection and Set-Up, and consult user manuals for both your computer and for your Audio/Video Players and/or DAW Application. Sections. If all else fails, contactl Phasx Service.

<u>Distorted signal</u>

The ADIO150 is made to accept an unbalanced Analog signal up to a maximum level of approximately +9dBv. Anything more will certainly cause distortion but is not indicative of any failure.

It is important to note that the ADIO150 is meant to decode ONLY standard S/PDIF digital signals (commonly called PCM audio) on both the COAX and OPTICAL inputs. NO other sort of

Digital Audio Signal can be decoded by the ADIO150. Be sure you are wiring a known good S/PDIF signal to the ADIO150. The bit rate and depth (up to 96kHz/24bits) should not matter, but Life Happens.

While not very likely, incorrect signals could even cause driver damage by creating crackling noise and the like.

If you do not know for sure that the signal you are using is standard PCM, double check it by connecting it to another independent decoder, also known good.

If the independent decoder sounds OK, please take note of the Bit Rate and Bit Depth and contact Phasx Service.

Register Your Product

• To register your product, go to phasx.com/PX150/register

Limited Warranty

PHASX LIMITED WARRANTY

PHASX. warrants that this product is free from defective material and workmanship. PHASX further warrants that if product fails to operate properly within the specified warranty period and the failure is due to improper workmanship or defective material, PHASX will repair or replace the product at its option. All warranty repairs must be performed by a PHASX authorized service center. The name and address of the location nearest you can be obtained by calling toll free: 1-800 823 2383 or on line at WWW.Phasx.com/support.

Transportation to and from the service center is the customer's responsibility but Phasx will pay one way for warranty repair. The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase. It must be presented to the authorized service center.

WHAT IS NOT COVERED

This warranty does not cover damage due to accident, fire, flood and/or other acts of God; misuse, incorrect line

voltage, improper installation, improper or unauthorized repairs, commercial use, or damage that occurs in shipping.

Exterior and interior finish, LEDs, and cables are not covered under this warranty.

Customer adjustments, which are explained in the instruction manual, are not covered under the terms of this warranty.

This warranty will automatically be voided for any unit found with a missing or altered serial number. Some States do

not allow the exclusions or limitations of incidental or consequential damages, or allow limitations on how long an

implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal

rights, and you may also have other rights, which vary from State to State.

CONTACTING PHASX

To obtain warranty service for your product, please choose one of the following:

Contact PHASX Service via text message to: +1-321-830-4729

OR fill out our convenient, online service request form at

www.Phasx.com/PX150/Userportal

Power consumption and Auto Power Standby:

-The System contains a Auto Power safe mode for Standby.

In case of any Analog Input source the Auto Power feature will turn the System into Standby after

20min. no Signal appearing on the Inputs.

In Case of any Digital Input source the Auto Power feature will turn the System immediately into

Standby once the Source device is disconnected or power off.

Power consumption Standby ***W

Power consumption Network Standby ***W

Power consumption Idle: ***W

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