

Elite Acoustics Engineering A2-5 Live-Performance Studio Monitor with 4 Channels, Mixer, Effects, and Bluetooth® *User's Manual*



Superb functionality and cordless portability provides unparalleled versatility. A2's light weight yet fully featured Mix, Digital Effects, and Monitor sections seamlessly combine to elevate your performance. A2 offers extensive input EQ and an adjustable Notch Filter to tame Feedback or add that final degree of clarity when needed. An all-wood cabinet combined with a 5-1/4" high-sensitivity woofer and 1" silk-dome tweeter deliver full frequency clarity with impressive bass response.

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NOTE: Due to continuous development and improvements of our products, features and specifications are subject to change without notice. All weights and measures are approximate.

WHAT IS IN THE BOX

Your A2-5 package contains the following:

- | | |
|---------------------------------------|-------------------------|
| (1) Speaker | (1) Quick Start Guide |
| (1) 12V AC Power Supply Adapter | (1) Registration Card |
| (1) 12V DC Car Battery Supply Adapter | (1) Speaker Handle Grip |

Refer to Page 2 and 4, for the following Controls

QUICK START

1. Check that the Battery Switch [49] is set to the "Connect" position. (Battery Switch is a built in circuit breaker to preserve battery life.)
2. Make sure the SPEAKER VOLUME [3] control is turned all the way down.
3. Connect microphones and/or instruments. You can use Channel 1 or Channel 2, or both. If using Channel 1, be sure the Instr-Mic/Line push-switch [22] is not pushed in when using a mic or line level signal. Microphones are connected to the XLR MIC IN [29], for 1/4" Line Levels signals use [28], and use [27] for unbuffered instrument applications (note this is a high gain setting and should not be used for active outputs such as battery powered guitar preamps).
4. Turn on the POWER switch [50]
5. If desired, connect a Bluetooth® [13] device; see Bluetooth® Function on page 3.
6. Turn on your source signal(s) and adjust level for normal operation. Turn up GAIN [14] until there is a solid green LED showing "signal" at the desired playing level. The red "peak" LED, indicating too much signal, should only light for very brief periods, less than one second, or not at all. Note if you are using an iPhone or iPad via Bluetooth®, set the volume on your device about halfway. Maximum volume will distort.
7. Adjust the SPEAKER VOLUME [3] to a comfortable level.

TOP PANEL CONTROLS

LED's:

- [1] Power: Blue indicates unit is ON
- [2] +48V LED: Orange indicates Phantom Power is on

Monitor Output Controls

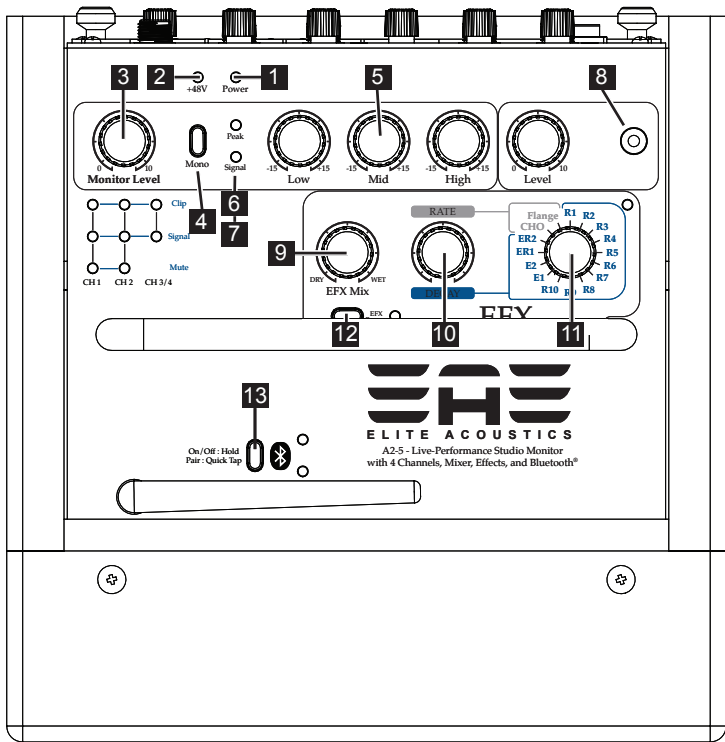
- [3] Speaker Volume: Control speakers' volume level
- [4] Mono: Changes speaker output from Left Only to Mono
- [5] Equalizer: Adjust High, Mid, and Low Frequency response
- [6] Peak LED: RED indicate Signal Clip
- [7] Signal LED: GREEN indicate Signal Present
- [8] Aux Input/Level: Connect audio source with 1/8" jack from MP3/CD player, etc.

Effects Controls

- [9] Effects Mix: Amount of effect being added to output
- [10] Rate/Decay: Controls the duration of the effect
- [11] Effects Knob Selector: Select effect of choice
- [12] EFX Bypass: Turn effects on or off (When LED is on, the effects are turned off)

[13] Bluetooth: Activate Bluetooth function

TOP PANEL



BLUETOOTH® FUNCTION

1. **Turn Bluetooth® function ON/OFF;**
Press the MODE button and hold for approximately 5 seconds
Both LEDs will flash at the same time
2. **Pair device to the speaker system**
While both LED's are flashing, quickly tap the MODE button once
Both Flashing LED: indicate Bluetooth® is ready to be paired
Flashing Blue LED only: indicate Bluetooth® is connected

REAR PANEL CONTROLS

Channel 1

- [14] **Gain:** Apply gain for level control
- [15] **Mute:** Mute Channel
- [16] **EFX/AUX Send Level:** Adjust the level to “send” out
- [17] **EFX/AUX select:** select whether you are sending to internal EFX or external AUX bus
- [18] **PAD:** fixed attenuation for “hot” signals
- [19] **Notch Filter:** set amount of cut or boost for Notch Filter
- [20] **Frequency:** set the frequency of the Notch Filter
- [21] **Phase:** Reverse the phase of input waveform
- [22] **Instr-Mic/Line:** Select input source; Instrument or Mic/ Line input
- [23] **High:** set amount of High Frequency cut or boost
- [24] **Mid:** set amount of Mid Frequency cut or boost
- [25] **Mid Frequency:** set the frequency of the Mid cut or boost
- [26] **Low:** set amount of Low Frequency cut or boost
- [27] **Instrument:** 1/4" TS input
- [28] **Line:** 1/4" TS input
- [29] **Mic:** XLR for Microphone Input

Channel 2

- [30] **Gain:** Apply gain for level control
- [31] **Mute:** Mute Channel
- [32] **EFX/AUX Send Level:** Adjust the level to “send” out
- [33] **EFX/AUX select:** select internal EFX or external AUX bus
- [34] **PAD:** fixed attenuation for “hot” signals
- [35] **Line:** 1/4" TS input
- [36] **Mic In:** XLR for Microphone Input

Channel 3/4

- [37] **Level:** Set the gain for both channels 3 & 4
- [38] **EFX Send Level:** Adjust the level to “send” out
- [39] **Left (Mono):** 1/4" balance TRS TRS input
- [40] **Right:** 1/4" balance TRS input

[41] **Monitor Right Output:** Connect to another speaker using 1/4" TS

[42] **Foot Switch:** TR footswitch to control Effects Bypass remotely

[43] **AUX Send:** 1/4" balance TRS output

[44] **AUX Return:** 1/4" balance TRS input

[45] **Main Outputs / Chan 1/2 Direct Output:** Select source of XLRs as Main mix or Direct Outputs for Chan 1 & 2

[46] **Output Level: Set output level for XLRs**

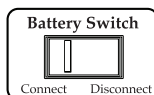
[47] **Left:** XLR Left Output

[48] **Right:** XLR Right Output

[49] **Battery Slide Switch:** Preserve battery life for storage or transport

Connect: Enable battery power when using unit

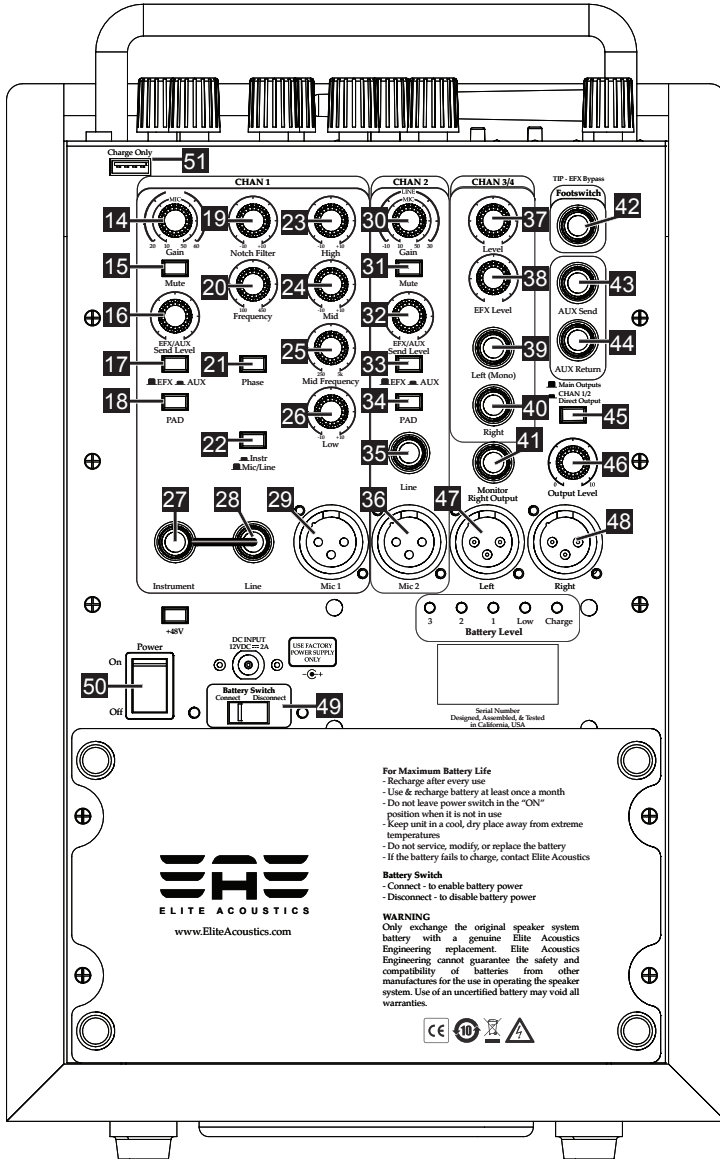
Disconnect: Disable battery power when storing unit to preserve battery life



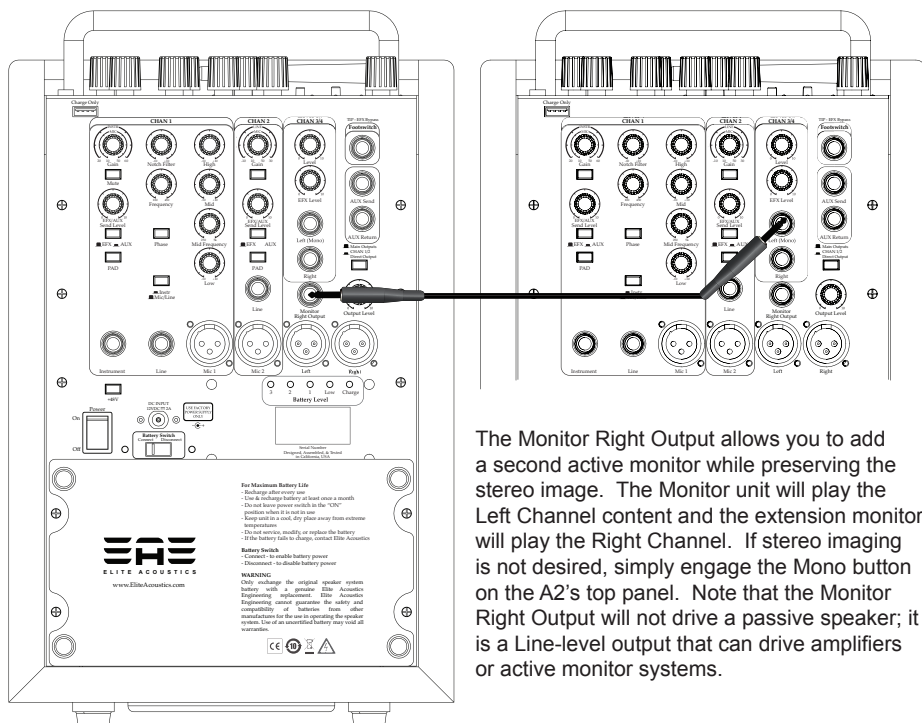
[50] **Power Switch:** Turn you speaker on or off

[51] **USB Charging Dock:** Conveniently recharge your portable devices

REAR PANEL



CONNECTING TO ANOTHER SPEAKER



The Monitor Right Output allows you to add a second active monitor while preserving the stereo image. The Monitor unit will play the Left Channel content and the extension monitor will play the Right Channel. If stereo imaging is not desired, simply engage the Mono button on the A2's top panel. Note that the Monitor Right Output will not drive a passive speaker; it is a Line-level output that can drive amplifiers or active monitor systems.

ABOUT EQ AND PHASE SETTINGS

High – used to add sibilance and crispness to your sound, with the knob at 12:00, there is no boost or cut to the high frequency content.

Mid – Helps control the clarity of your overall mix and should be adjusted to suit lower or higher volume performance levels. Boosting the mids helps speech clarity and intelligibility at lower volumes while cutting the mids produces a more natural sound at higher volumes. The Mid frequency selection knob allows for a range extending from high LF to low HF. When set to 12:00 the Mid frequency peak is around 1.2k Hz, with +/- 12dB of boost or cut depending on the setting of the Mid knob. Here again, with Mid set to 12:00 the mid control is effectively out of the circuit.

Low – In general, lower volumes can benefit from LF boost to help bring out the bass at these lower settings, but it is usually left flat or even slightly cut for high playback levels.

Notch – When it comes to the mechanics, Notch filtering is very much like the adjustable mid frequency described above. However, the frequency range is much lower, and the filter itself is much tighter, hence the term "notch." When used in "cut" mode, this is very effective in managing feedback, which is explained in some detail in our Feedback section. However, the notch can be set to cut or boost to allow for the full range of possibilities. Many times feedback is not an issue, and the artist can take advantage of a particular notch setting to effectively tweak a final mix to accommodate specific room or instrumentation considerations.

Phase – Use the phase setting that best supports your overall sound and system integration considerations. For example, Phase can be set to facilitate the best bass response at low volumes, and it can also be effective as a feedback deterrent, which will be reviewed in our Feedback section.

HOW TO DEAL WITH ACOUSTIC FEEDBACK

Simply put, the annoying shrilling howl of growing and untamed feedback is the result of “in-phase” frequencies getting together and being reinforced by the sound system and environment.

Phase Switch – since the purpose of the Phase Switch is to reverse the polarity, the first line of defense is to change the phase, which can sometimes be a cure all by itself. This has the effect of changing the phase relationship between the amplified signal and live sound, which can break up some “in-phase” reinforcing components. On the other hand, it's preferred if we can leave the phase set to provide the most natural and balanced sound.

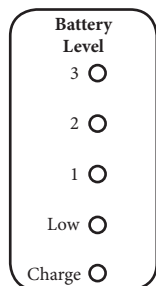
Notch Filter – Another way to prevent “in-phase” reinforcement is to simply find and “notch” out the offending frequency. The approach is straight forward; with the Notch set to full “cut” (counter clockwise), slowly rotate the Notch Frequency to align with and cancel the offensive tone.

Phase and Notch – probably the most widely used approach is to start without the notch filter engaged, and to bring up the gain and or volume to encourage feedback. Changing the Phase will change the frequency of the feedback. Leave the Phase set to whichever setting produces the higher pitched note.

Next, use the aforementioned Notch technique to hone in on and prevent the feedback. Keep in mind, fighting feedback in this manner may or may not appeal to your taste in overall tone. It's certainly fair to experiment and try it the other way around, i.e., Phase switch to stop HF tone and Notch to cutout the LF tone. After all, Live Sound is an Art and when it's all said and done tone is King.

EAE BATTERY & RECHARGING INFORMATION

1. To fully charge a unit –
 - a. Set Battery Switch to “CONNECT”
 - b. Turn Power Switch OFF
 - c. Connect “AC” adaptor to Power Jack.
 - d. Blue “Charge” LED should be lit, Charge time can vary from 24 – 36 hours depending on model.
2. When unit is powered with “AC” adaptor, Battery Switch should be in “CONNECT” position.
3. Battery Switch should be on “DISCONNECT” when unit is packed for transit or unit is in storage. Make sure battery is fully charged before UNIT is put into storage. We recommend fully charging the battery at least once each month.
4. SLA battery lifetime is typically 1 – 2 years depending on usage.



FOR MAXIMUM BATTERY LIFE

- Recharge after every use
- Use & recharge battery at least once a month
- DO NOT leave power switch in the “ON” position when it is not in use. Doing so after a long period of time will damage the battery
- Keep unit in a cool, dry place away from extreme temperatures
- Do not service, modify, or replace the battery
- If the battery fails to charge, contact Elite Acoustics Designs

SYSTEM SPECIFICATIONS

Speakers:

Woofer = 5 1/4"

Tweeter = 1" Silk-Dome

Optimized front ports for extended low-frequency response

Frequency response 70Hz - 20k Hz

103 dB SPL

Amplifier:

Ultra High-Efficiency Class D 30W Bi-AMP

EQ Controls:

Low +/- 12dB @ 50Hz (shelving)

Mid +/- 12dB @ 200Hz – 4k Hz (resonant)

High +/- 12dB @ 10k Hz (shelving)

Notch +/- 12dB @ 80Hz – 400 Hz (high-Q resonant)

Battery:

Built-in SLA type, rechargeable [12V, 9Ah/20hr]

Typical recharge time ~ 20 hours

Play time ~ 6 to 8 hours

Power Supply:

DC 12V, 3000 mA

Physical:

Dimensions: 9.0"L x 9.0"W x 14.5"H

Weight: 24 lbs

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 UNDESIRE OPERATION.

WARRANTY

Elite Acoustics Engineering Inc. warrants this product to be free of defects in material and workmanship (excluding battery) for a period of 1 year from the date of original retail purchase. Elite Acoustics Engineering Inc. warrants the Speaker's Battery for 90 days from the date of original retail purchase. This warranty is enforceable only by the original retail purchaser. To be protected by this warranty, the purchaser must complete and return the enclosed warranty card within 14 days of purchase. During the warranty period EAE shall, as its sole and absolute option, either repair or replace, free of charge, any product that proves to be defective on inspection by EAE or its authorized service representative. To obtain warranty service, contact Elite Acoustics Engineering Technical Support via email: RMA@eliteacoustics.com. PRE-AUTHORIZATION MUST BE OBTAINED BEFORE SENDING ANY PRODUCT TO AN ELITE ACOUSTIC ENGINEERING SERVICE CENTER. All inquiries must be accompanied by a description of the problem. All authorized returns must be sent to the EAE repair facility postage prepaid, insured and properly packaged. EAE reserves the right to update any unit returned for repair. EAE reserves the right to change or improve the design of the product at any time without prior notice. This warranty does not cover claims for damage due to abuse, neglect, alteration, or attempted repair by unauthorized personnel and is limited to failures arising during normal use that are due to defects in material or workmanship in the product. Any implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, therefore above limitation may not apply to you. In no event will EAE be liable for incidental, consequential, or other damages resulting from the breach of any express or implied warranty, including among other things, damage to property, damage based on inconvenience or on loss of use of the product, and, to the extent permitted by law, damages for personal injury. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion 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. This warranty only applies to products sold and used in the United States of America. For warranty information in all other countries please refer to your local distributor.

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