

4 *Fresco* **ACOUSTIC**

USER MANUAL

www.laney.co.uk



British Engineering from the
Black Country United Kingdom



www.laney.co.uk

WELCOME

Dear Player,

Thank you very much for purchasing your new Laney product and becoming part of the worldwide Laney family.

Each and every Laney unit is designed and built with the utmost attention to care and detail, so I trust yours will give you many years of enjoyment.

Laney products have a heritage which stretches back to 1967 when I first began building valve amplifiers in my parents' garage.

Since then we have moved on from strength to strength developing an extensive range of guitar, bass, public address, multi instrument and keyboard amplification products along with a list of Laney endorsees that includes some of the world's most famous and respected musicians.

At the same time we believe we have not lost sight of the reason Laney was founded in the first place - a dedication to building great sounding amplification for working musicians.

Warm Regards,

A handwritten signature in black ink, appearing to read 'Lyndon Laney', written in a cursive style.

Lyndon Laney
Chairman and Founder.



Welcome and thank you for choosing the A-FRESCO.

The A-FRESCO is a professional, compact and portable acoustic guitar amplifier, powered via battery or via the included PSU and dedicated to delivering a clean and clear amplified acoustic guitar tone wherever you need it.

Whether in the studio, on stage or out-doors, the A-FRESCO delivers every time.


The A-FRESCO was designed with complete portability in mind and features a compact cabinet design and ergonomic carrying handle plus a top hat for pole or tripod mounting. The A-FRESCO gives you total freedom to play where you want indoors or out.

When you are out and about using a set of high quality fully charged Lithium ION batteries the A-FRESCO can deliver up to 24hrs of non-stop operation.

The A-FRESCO is equipped with two independent channels capable of accepting either XLR or Jack inputs via the combi inputs so whatever output system your acoustic guitar has the A-FRESCO has it covered. Although designed primarily for acoustic guitar the A-FRESCO is equally at home handling a keyboard or a vocal mic, making the A-FRESCO ideally suited as a small PA system for party jams or street performances.

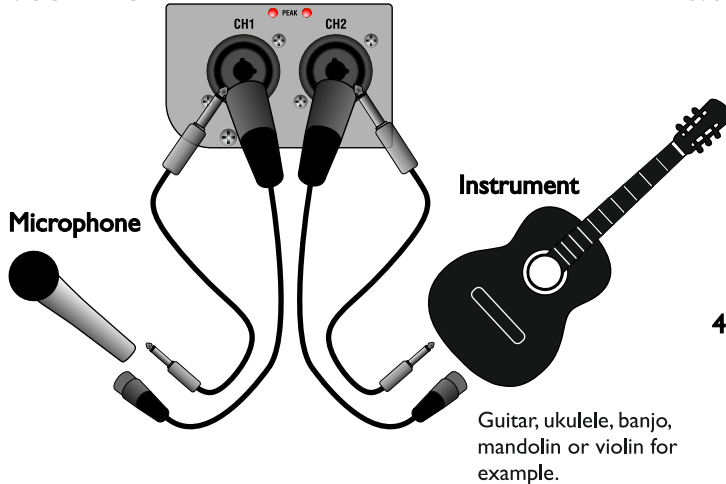
Please continue to read the rest of this manual as it is the key to getting the best out of your A-FRESCO.

IMPORTANT SAFETY INSTRUCTIONS

- 1). **Read & Retain these Instructions** carefully before installing or operating this product.
- 2). **Comply with Warnings:** All warnings and instructions for these products should be adhered to.
- 3). **Unpacking:** On unpacking your product please check carefully for any signs of damage that may have occurred whilst in transit from the Laney factory to your dealer. In the unlikely event that there has been damage, please repack your unit in its original carton and consult your dealer. We strongly advise you to keep your original transit carton, since in the unlikely event that your unit should develop a fault, you will be able to return it to you dealer for rectification securely packed.
- 4). **Amplifier Connection:** In order to avoid damage, it is advisable to establish and follow a pattern for turning on and off your system. With all system parts connected, turn on source equipment, CD/MP3 players, mixers/recorders, etc, BEFORE turning on your guitar amplifier. Many products have large transient surges at turn on and off which can cause damage to your speakers. By turning on your guitar amplifier LAST and making sure its level control is set to a minimum, any transients from other equipment should not reach your loud speakers. Wait till all system parts have stabilised, usually a couple of seconds. Similarly when turning off your system always turn down the level controls on your guitar amplifier and then turn off its power before turning off other equipment
- 5). **Servicing:** Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the DC Power Supply is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 6). **Placement:** This electrical apparatus should not be exposed to dripping or splashing and care should be taken not to place objects containing liquids, such as vases, upon the apparatus.
Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat. Do not block any of the ventilation openings.
Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 7). **When using the DC power Supply:** Only use the approved DC power supply provided by the manufacturer. Rating  12VDC 3A. Protected by a 125°C thermal fuse.
Protect the power cord on the DC power Supply from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus. (See notes on using the DC Power Supply page 5).
- 8). **Batteries:** Use alkaline batteries or Li-ion in the product. (See notes on fitting and replacing batteries page 12).
- 9). **Sound Levels:** Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.
The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures: According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Earplugs or protectors to the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.
- 10). **Maintenance:** Clean only with a dry cloth.
- 11). **Pole Stand:** Don't over-extend poles/tripods; ensure at least 4 x the diameter is still inside the outer pole.
Make sure the legs have a good splay on the tripod, but do not obstruct doorways or other access-ways. Ensure the unit is stable and cannot fall over.

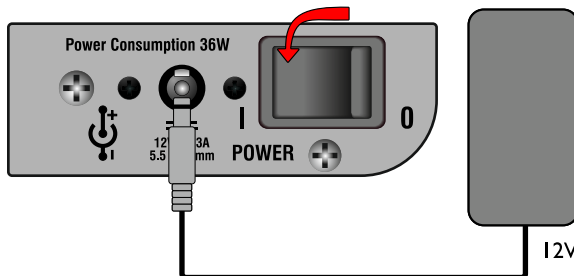
Duration Per Day in Hours	Sound Level dBA, slow response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

I. CONNECT

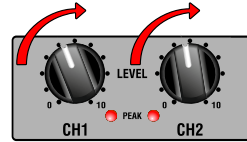


2. POWER-UP

For battery power options, please see pages 10-11 before continuing. The Power switch located on the Rear panel will bring the A-Fresco to life.



3. SET LEVELS

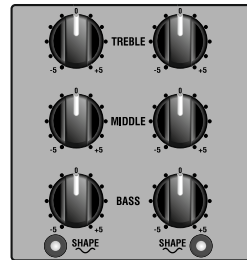


Slowly increase the Level control until the Peak led begins to flash during the loudest peaks of the music.



Increase the Volume control until the required listening level is achieved.

4. ADD EQ



Fine tune your sound with the 3-band EQ and Shape control, add to the overall tone with Cabinet EQ (17), or experiment with a mixture of the three.

5. ADD FX



If required, add independently assignable Chorus and Reverb.

FRONT PANEL CONTROLS

1. CH1/CH2 MIC/LINE INPUT: Combi sockets provide the flexibility to connect either a balanced XLR or unbalanced jack terminated cable. Set Level control (2) to minimum before connecting a device to the Mic/Line inputs. For best results, always use a good quality instrument/mic cable.

TIP—Phantom Power (15V non switchable) is available from the XLR Inputs only. This is for use with condenser microphones, but dynamic mic's won't be damaged if used.

2. LEVEL/PEAK: Use together to find the optimum level for your signal. Adjust the Level so the Peak only lights during the very highest peaks of the connected signal.

TIP—Peak illuminates constantly = possible distortion. Damage won't occur to the amplifier, but audio quality may suffer.

TIP—Peak is never illuminated = slightly reduced signal to noise ratio as amplifier is not running at optimum levels.

3. SHAPE: Engages an EQ circuit to give a brighter, more extended top end and scooped mid to provide more definition.

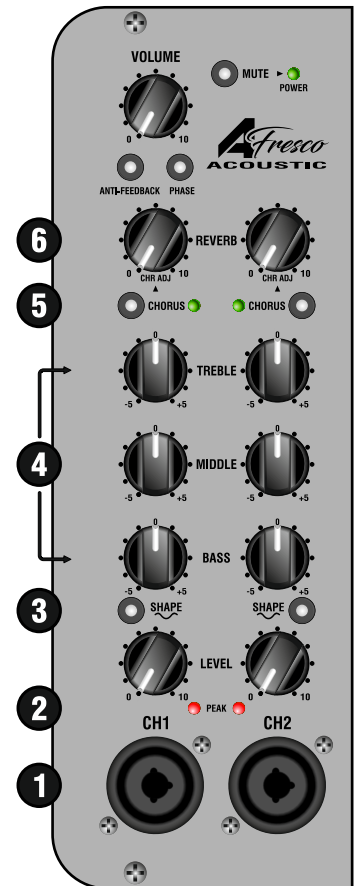
4. EQ: A traditional set of tone controls giving the player a natural set of tools to shape their ideal sound. As a starting point, set the EQ controls to the 0 position.

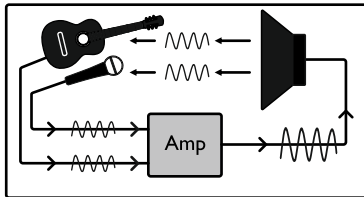
5. CHORUS: To engage the Chorus press the Chorus switch. The adjacent LED lights only when the effect is active. To adjust the chorus amount, press and hold the Chorus switch (while the chorus is active) and adjust using the Reverb control. Once you release the Chorus switch, the LED will briefly flash to indicate the setting has been stored.

TIP—The amplifier is shipped with a Chorus rate of 3.

6. REVERB LEVEL: Use these to independently control the reverb/chorus for channels 1 and 2. The Reverb Level increases progressively as you move the control from 0 to 10.

TIP—Also controls Chorus Level (when the Chorus button is pushed down).





Audio feedback is caused when a loop occurs between a microphone or guitar pickup and the loudspeaker. Commonly caused by pointing a microphone at a speaker or simply by the two being too close. The result is an unpleasant screeching or whistling sound. The A-Fresco is equipped to deal with this.

7. ANTI-FEEDBACK: When the Anti-Feedback control is enabled the A-Fresco actively and automatically searches for signs of feedback (over multiple frequencies) and greatly reduces the possibility of it before becoming a serious problem.

TIP— It is recommended that Anti-Feedback is enabled if acoustic guitars or microphones are connected.

8. PHASE: Switches the phase of the signal from the amplifier. When you play any acoustic guitar the sound it produces is a waveform, the same applies to an acoustic guitar plugged into an acoustic amplifier. It is not uncommon for these two waveforms to be out of phase with each other. To a player sat close to an amplifier this poses a small problem if the wave forms are out of phase as they are destructive to each other and cancel each other out. This would cause the guitar to sound a little thin and lack-lustre. Engaging the phase switch switches the phase of the amplified signal removing the problem of destructive interference. However sometimes the low frequencies being in phase can cause acoustic feed back problems, to avoid this try operating the phase reversal switch. Most times this will cure the problem. One thing to point out is that the audience does not hear any phase problems as by the time the sound wave reaches them any phase differences have been cancelled out naturally.

9. VOLUME: To control the overall output level from Phones, FX Send, D.I. Out and Speakers.

10. MUTE: This will mute Inputs 1 and 2, but not signals connected to AUX IN or FX RETURN.

TIP— The Power Led will flash when the Mute is enabled.

11. POWER: Illuminates with the Power Switch is set to on.



REAR PANEL CONTROLS

12. PHONES: For silent practice or late night playing just connect your favourite headphones to the 3.5mm jack socket.

TIP—When headphones are connected, the internal loudspeakers are automatically turned off.

13. AUX IN: Play along to your favourite tracks by connecting a MP3 player (or any other line level device) using a stereo 3.5mm jack. (See sleep mode disable page 11)

14. FX LOOP: Gives you the option to route the pre-amp signal through an additional FX unit. This could be in addition to or as an alternative to the onboard FX.

15. REMOTE: Connect an FS2-Mini (2-way) foot switch and independently control Reverb and Chorus remotely.

Ring: Chorus

Tip: Reverb

16. D.I. OUT: This socket provides a balanced output for direct injection of the amplifier signal into a mixing desk mic input. Using the Source switch, choose if the signal is Pre or Post EQ, FX and Mute. Refer to the block diagram on page 13.

Finally, a ground lift switch is also provided to reduce the possibility of earth loop induced hum (when connecting to other equipment).

17. EQ: This dual function switch allows you to select one of four pre-defined EQ curves allowing you to adjust the tonal balance. To toggle from one to the next simply press the switch momentarily. An adjacent LED will clearly indicate what's selected. The EQ setting will be stored in memory, ready for use next time.

Flat: General purpose EQ setting - ideal for floor use.

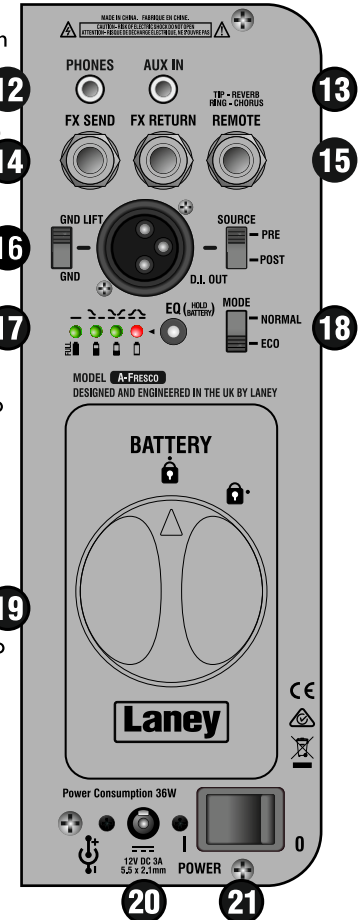
Bass: An increase in the low frequency content of your audio. Use when the A-Fresco is pole mounted to compensate for bass loss.

Loud: An increase in both low and high frequencies. Ideal for pole mounted use with added definition.

Vocal: Decreases the amount of bass and emphasises the vocal content. Also ideal for outdoors.

BATTERY MONITOR: Press and hold the Mode switch (for around a second) the EQ LEDs reconfigure to indicate the available/remaining battery life. The battery meter will display for as long as you hold the switch.

TIP—For the most reliable battery level check, there shouldn't be any sound from the speakers. This could be done by turning down input level, disconnecting/muting input signals or by turning the Master Volume (9) to minimum.



18. POWER MODE: The A-Fresco comes equipped with two power modes:

Normal: Maximum output level available and intended for use with DC supply, or Li-Ion cells.

ECO: Reduced output level aimed at prolonged battery life for use with Li-Ion or Alkaline cells.

Intelligent Power Switching: Works to provide best sound quality whilst also conserving battery life - normal mode only.

Sleep mode: In either power mode, the amplifier will enter a sleep state after a short period of inactivity to conserve battery life. As soon as signal is detected at channel 1 or 2 inputs, the amplifier will wake instantly without missing a beat.

Sleep mode over-ride: You may temporarily over-ride the sleep mode by pressing and holding the EQ button (17) for one second whilst turning the power on. The four EQ LED's will illuminate then extinguish to confirm sleep over-ride is active and will remain active until the power is turned off and on.

TIP Use this mode when signal is connected to the Aux input only, ie no signal connected to CH1 or CH2 or when you never wish the A-fresco to enter a sleep mode.

19. BATTERY COMPARTMENT: The A-Fresco comes with a quick release (no tools required) power pack supporting two battery types, allowing you to choose which best suits your needs. For more information on battery use, please see pages 10-11.

20. DC INLET: The A-Fresco comes supplied with a high quality universal 12V Power Supply unit which will work around the world with all regional mains voltages.

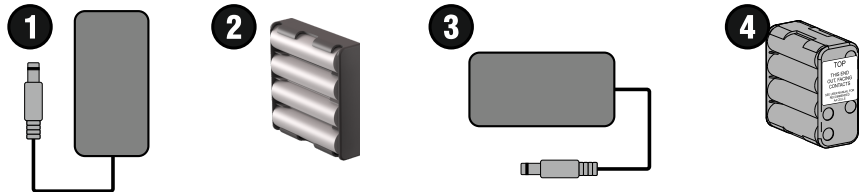
TIP If the DC adaptor is used any batteries are isolated and not charged. **To avoid possible damage, please use supplied PSU only!**

21. POWER: The main power switch for the unit.

POWER OPTIONS:

The A-Fresco can be powered using four possible methods. We recommend using the included mains adaptor if at all possible for best performance. Other options in order of best performance are:

- 1. - Mains power using DC adaptor
- 2. - 4* 18650 Li-Ion batteries
- 3. - 12V D.C. power bank (12V/3A Min)
- 4.- 8*AA batteries



BATTERY TYPES

1. 4* Lithium-ion 18650 cells offer the best performance and are recommended. Constant high discharge rate recommended at 6A or above, with a 3AH or greater capacity for best life. We recommend quality, Self-resetting batteries with a high trip current. Please note, Lithium batteries must be the protected, button top type; unprotected cells must never be used in this product and could pose a severe fire risk.

Lithium batteries are not all created equally, many are sub-standard with very low or inconsistent protection levels. Sub-standard batteries could affect the performance of the A-Fresco or reduce the run time, or both! In some circumstances, these sub-standard batteries may also trigger the batteries own protection circuit too early, making the A-Fresco appear to shutdown. Always use the best high quality batteries!

Battery Pack Optional Accessory: **BP-18650 : (4*18650 batteries and charger)**

2. 8*AA alkaline (LR6) or 8*NiMH (CR6) cells can be used, but are not recommended for best performance. Most AA cells cannot provide the necessary power levels for constant full power use in Normal mode and are best used in ECO mode or at modest listening levels, or for vocals.

About the batteries:

The table to the right is intended to give you an idea of the usage time for your battery choice. This is a guide only as battery life is determined by many factors.

BATTERY SAFETY:

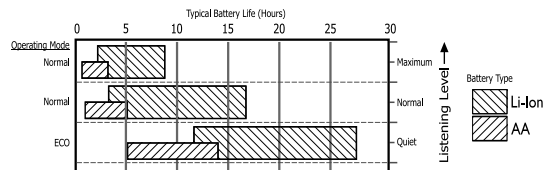
If used incorrectly batteries may leak or explode and cause damage or injury, please take the following precautions.

- 1: Avoid mixing new batteries with old or part used batteries.
- 2: Avoid mixing different types of batteries.
- 3: Do not try to recharge or take apart alkaline batteries.
- 4: Remove the batteries from the unit if it is not going to be used for a long time.
- 5: If batteries have leaked in the battery tray, remove the batteries and all traces of the discharge from the tray. Use caution so that none of the discharge gets near the skin or the eyes. Any affected areas should be immediately rinsed with cold running water, seek medical advice.
- 6: Do not dispose of used batteries in fire or water systems. Batteries must not be exposed to excessive heat such as sunlight, fire or the like.
- 7: Used batteries should always be disposed of in compliance with the current regulations applicable to the country/region where you live.

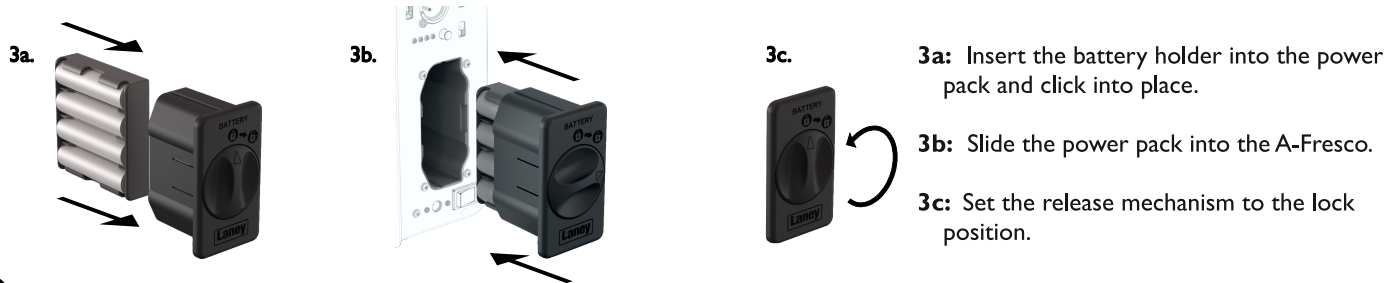
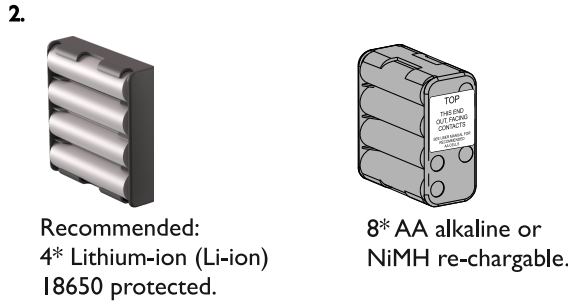
The following Lithium batteries have been tested and found to work acceptably in this product

* Batteries not included.

Brand	Type
Samsung	NCR18650
XTAR	3400mAh(Black)
Keppower	NCR18650B
EVVA	NCR18650 (Black)
Enerpower	NCR18650B (Blue)

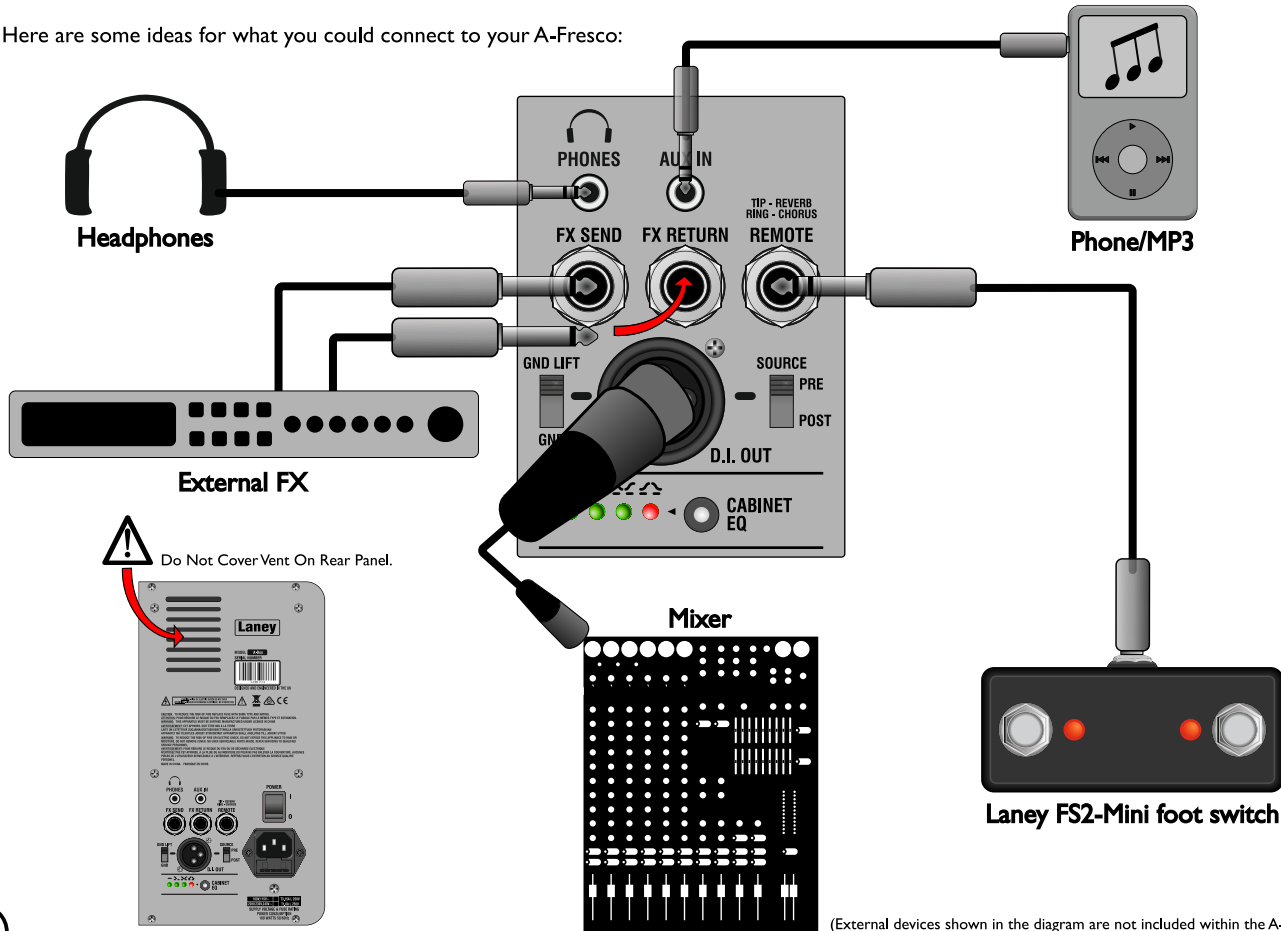


BATTERIES - FITTING AND REPLACING



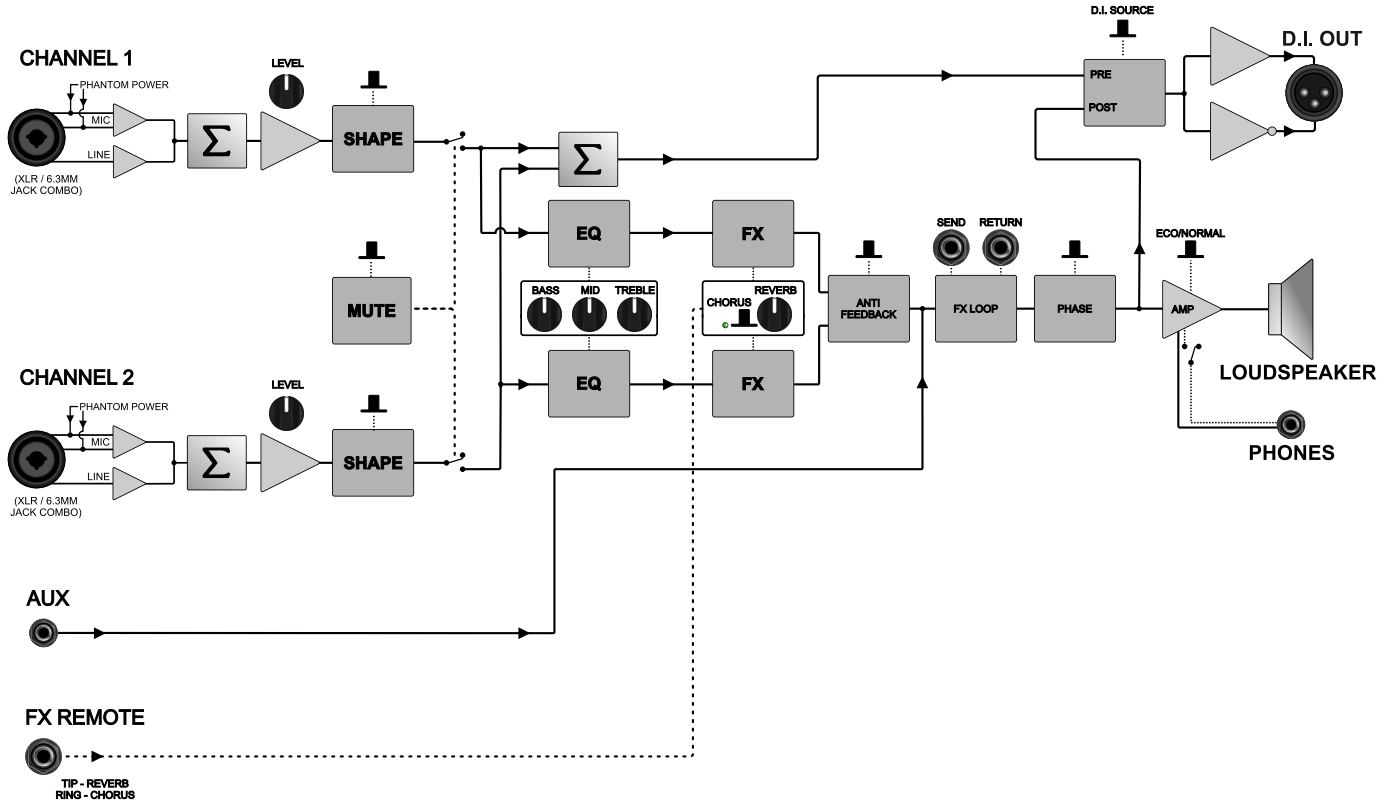
SAMPLE SETUP

Here are some ideas for what you could connect to your A-Fresco:



(External devices shown in the diagram are not included within the A-Fresco package.)

BLOCK DIAGRAM



FCC COMPLIANCY STATEMENT



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
- 2) This device must accept any interference received, that may cause undesired operation.

Warning: Changes or modification to the equipment not approved by Laney can void the user's authority to use the equipment.

Note: This equipment has been tested and found to comply with the limits for 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 equipment 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 equipment 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 and 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.



This product conforms to the requirements of the following European Regulations, Directives & Rules:
CE Mark (93/68/EEC), Low Voltage (2014/35/EU), EMC (2014/30/EU),
RoHS (EU2011/65/EU), ErP (2009/125/EU).



In order to reduce environmental damage, at the end of its useful life, this product must not be disposed of along with normal household waste to landfill sites. It must be taken to an approved recycling centre according to the recommendations of the WEEE (Waste Electrical and Electronic Equipment) directive applicable in your country.

SPECIFICATIONS



Output Power Rating:	30W RMS	
Loudspeakers:	1 x 8" Custom Designed full range Dual Cone Driver	
Inputs:	CH1 - Combi (Mic/Line)	Balanced XLR Supports 15V Phantom Power Unbalanced 6.3mm jack Impedance - 10M Ohm/47pF
	CH2 - Combi (Mic/Line)	Balanced XLR Supports 15V Phantom Power Unbalanced 6.3mm jack Impedance - 10M Ohm/47pF
EQ:	Bass:	±12dB at 100Hz, Lo Shelving
	Middle:	±12dB at 600Hz, Peaking
	Treble:	±12dB at 10KHz, Hi Shelving
	Shape: 3 Band Preshape EQ	
FX Channel1:	Reverb:	Adjustable amount
	Chorus:	Adjustable amount
FX Channel2:	Reverb:	Adjustable amount
	Chorus:	Adjustable amount
Other:	Anti-Feedback control	12 Position notch filter
	Phase	
D.I. Out:	Balanced XLR with source switch and GND lift	
Aux In:	3.5mm Stereo jack	
Headphones:	3.5mm Stereo jack	
	(Speaker mutes when headphones are connected)	
Power:	2.5mm DC inlet for 12V/3A supply	
	Battery holder for either 4*18650 lithium ion cells or 8*AA	
Pole cup:	For use with a standard 35mm pole stand (not included)	
Size (mm):	347*265*242 (H*W*D)	
Packed Weight (Kg):	8.7	
Unit Weight (Kg):	7.2	
Optional Extras:	4*18650 batteries and high quality charger - Laney part number: BP-18650	

Male XLR



Mic

6.35mm Mono Jack



Line In, FX Send/Return

6.35mm Stereo Jack



TIP RING SLEEVE
REVERB REMOTE
CHORUS REMOTE
GROUND

Remote

3.5mm Stereo Jack



TIP RING SLEEVE
LEFT RIGHT GROUND

Aux In, Phones

Female XLR



D.I. Out

In the interest of continued development, Laney reserves the right to amend product specification without prior notification.



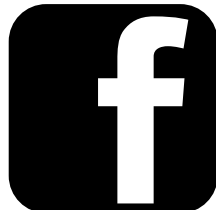
Model number:

Serial number:

Place of purchase:

Date of purchase:

Please complete for future reference.



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Revision A.00