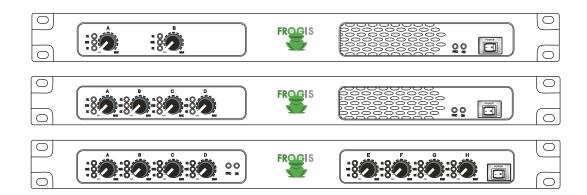

FI-AMP2/FI-AMP4/FI-AMP8





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REV. A

SYMBOLS



Frog declares that this device is in compliance with applicable CE standards and regulations. Before putting the device into operation, please observe the respective country-specific regulations!



Waste Electrical and Electronic Equipment (WEEE)

Please dispose of this product at the end of its operations.

Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling center for such equipment.



This symbol alerts the user to the presence of recommendations about the product's use and maintenance.



Warning: DANGEROUS VOLTAGE.

Terminals marked with this symbol carry a risk of electric shock, therefore external wiring connected to these terminals requires installation by a qualified professional or the use of ready-made leads or cords.



This symbol alerts the user to the presence of recommendations about product's use and maintenance.



This device complies with Restriction of Hazardous Substances Directive.

1. INTRODUCTION

The FROG-IS FI-AMP2/FI-AMP4/FI-AMP8 is the first choice for demanding musicians and DJs who work in loud environments.

A multi-purpose system (200 W), it is fully equipped to serve as a main PA, a stage monitor, a distributed audio system and also other applications. With a broad range of accessories and ultimate flexibility, it ensures a sound quality and intelligibility without compromise.

The FI-AMP2/FI-AMP8 delivers punchy, assertive sound. It's integrated; high performance delivers very high sound pressure

levels with an exceedingly dynamic, tight and clean response. Loaded with top quality speakers, it provides premium audio performance with maximum reliability and minimum power compression that is easy to install.

This is a strong-built and robust system designed to handle high loads, rendering lead vocals, guitars, electronic instruments, and playback tracks with power and authority, easily delivering sound across medium-to-longer distances. The FI-AMP2/FI-AMP4/FI-AMP8 features provide musicians and audiences with an excellent acoustic

2. UNPACKING

FROG-IS speakers are built to the highest standard and thoroughly inspected before leaving the factory. Upon arrival, carefully inspect the shipping carton, then examine and test your new product. If you find any damage, immediately notify the shipping company. Only the consignee may file a claim regarding the system's electronic equipment.

3.SAFETY



(WARNING)



Read all safety information below and operating instructions before using this device to avoid injury.

SAFETY AND HANDLING INFORMATION



Warning. Failure to follow safety instructions could result in fire, shock or other injury or damage

IT IS IMPORTANT THAT LOUDSPEAKER SYSTEMS ARE USED IN A SAFE MANNER.

Avoiding Hearing Damage. Professional loudspeakers are capable of producing extremely high sound levels and should be used carefully. Never stand close to loudspeakers driven at high volume. Set the volume to a safe level. You can adapt over time to a higher volume of sound that may sound normal but can be damaging to your hearing. Hearing loss get worse every time you're exposed to a sound level of 90 dB or over for an extended period of time. If you experience ringing in your ears or muffled speech, stop listening and have your hearing checked. The louder the volume, the less time is required before your hearing could be affected.

Choking Hazards. This device contains small parts, which may present a choking hazard to small children. Keep the device and its accessories away from small children.

Avoiding Water and Wet Locations. Do not install the system in wet or humid locations without using weather protection. Take care not to spill any food or liquid on the device. In case it gets wet, unplug all cables, turn off the device before cleaning, and allow it to dry thoroughly before turning it on again. Do not attempt to dry the device with an external heat source, such as a microwave oven or hair dryer. A device that has been damaged as a result of exposure to liquids could be not serviceable. If the device is exposed to rain or excess moisture, unplug the power cord immediately.

Keeping the Outside Clean. Handle the device with care to maintain its appearance. To clean it, unplug all cables and turn off it. Warning: unplugging the power cord is the only way to disconnect power completely. Then use a soft, dry or slightly damp cloth. Avoid getting moisture in openings. Don't use window cleaners, household cleaners, aerosol sprays, solvents, alcohol, ammonia, or abrasives to clean the device.

Carrying, Handling and Installing the device. The device contains sensitive components. Do not drop, disassemble, open, crush, bend, deform, puncture, shred, microwave, incinerate, paint, or insert foreign objects into it. If your device has been dropped or damaged, or if liquid has been spilled into the chassis, unplug the power cord immediately.

Do not operate speakers for an extended period of time with sound distortion. This is an indication of malfunction, which in turn can generate heat and result in a fire.

To reduce the risk of overheating the device, avoid exposing it to direct sunlight and take care to do not install it near heat emitting appliances, such as a room heater or stove.

No naked flame sources such as lighted candles should be placed near the device.

Operate the device in a place where the temperature is between -20°C and 50°C (-4°F to 122° F). Avoid dramatic changes in temperature or humidity when using it, as condensation may form on or within the device.

During the use, it is normal for the device to get warm. The exterior of the device functions as a cooling surface that transfers heat from inside the unit to the cooler air outside.

The device should be placed so that its location does not interfere with its proper cooling. For example, the device shouldn't be placed on beds, carpets or similar surfaces that could create an obstacle for the ventilation openings.

To reduce the risk of electric shock, unplug the power cord before connecting audio cables.

Set up your device on a stable retaining horizontal surface. If combined or mechanically connected with other products, always verify the stability of the resulted system. Install the unit only in a location that can structurally support the weight of the unit, far away from people who can interfere with the stability of the system. In case of outdoor installation, assure that the wind does not interfere with the system's stability, taking extra securities like chains, weights, ropes or any other certified anchoring systems. Doing otherwise may result in the unit falling down, causing personal injury or property damage.

Protect the power cord from being walked on or pinched.

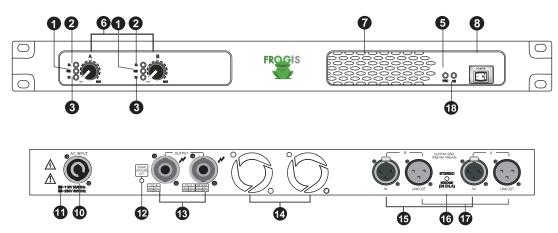
This audio system is not intended for use in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control systems, or for any other uses where the failure of the audio system could lead to death, personal injury, or sever environmental damage.

Do not make repairs yourself. Caution, risk of electric shock. Do not open the device, it contains potentially hazardous voltage. Never attempt to disassemble, repair or modify the system yourself. Disassembling the unit may cause damage that is not covered under the warranty. The device contains no user-serviceable parts. Repairs should only be performed by factory trained service personnel. Do not plug the power cord if you suspect that your device needs service or repair.

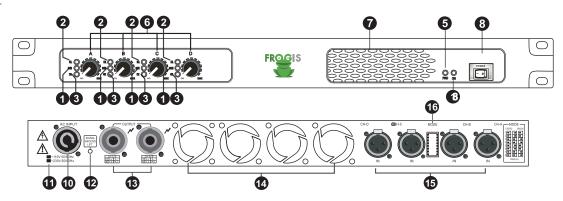
Voltage requirement. Make sure that the supplied voltage stays within the specified range. Verify that your mains connection satisfies the power ratings of the device.

4. CONTROL & CONNECTOR AND FUNCTION

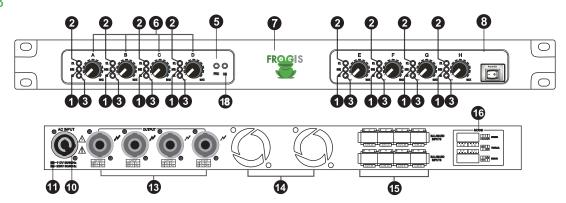
FI-AMP2



FI-AMP4



FI-AMP8

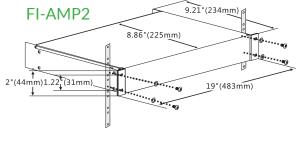


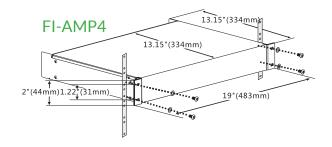
- 1) Signal Indicator Light
- 2) Clipping Indicator Light
- 3) LED Indicator Light
- 4) Temperature Protection Indicator Light
- 5) Protected Mode Indicator Light
- 6) Gain Control
- 7) Cooling Vent
- 8) Power Switch
- 9) AC Fuse

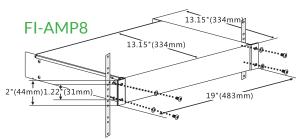
- **10)** Power Cord Connector
- 11) Operation Voltage Mark
- 12) Signal Grounding Switch
- 13) Speakon Output Connector
- **14)** Cooling Air Intake
- 15) XLR / PHOENIX Input Connector
- 16) Stereo and Bridge Connection Mode Selector Switch
- 17) XLROutput Connector
- 18) Power Indicator Light

5. RACK INSTALLATION

The amplifier is mounted to the equipment rack rail with four screws and washers. To use the amplifier outside the rack, the self-adhesive rubber washer shall be fitted at its bottom. For easy carrying purpose, the amplifier can be supported by rear rack struts.



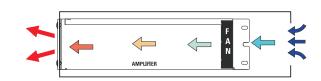




When mounting the equipment to the rack, please place in each set evenly. Otherwise, danger may occur due to the weight unbalance.

5.1 COOLING

Air flows through the rack to the back of the amplifier, and out at the front. This keeps the rack cool. Do not block the front or rear air vent! Ventilation inside the amplifier: cold air goes into the rear cover of amplifier through cooling fan. Hot air flows out from the front cover of the amplifier.







The correct AC voltage is indicated on the voltage mark at the rear panel, connection with wrong voltage may damage the amplifier or increase the risk of electric shock.

5.2 AC POWER

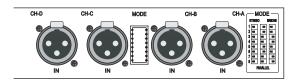
Put the AC power on the power slot at the back of the amplifier. Notice: Before connecting the AC power, make sure that the AC power switch is OFF.

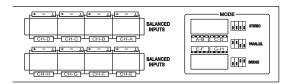
6. INPUT AND OUTPUT

1. There are balanced 3-core XLR input end for each sound track. The input ends are all standard connections that can be changed quickly.



2. Each channel has a balanced input end.





The input impedance is 20k Ohms (balanced) or 10k Ohms (unbalanced).

It is recommended to reduce AC noise and interference by balanced connection, especially when using long cables.

Unbalanced connection applies to short cables.

Signal source impedance shall be less than 600 ohms.

During inserting, the unbalanced PHOENIX connector (2-core) will automatically connect the cathode (-) with the grounding end.

Mode Switch

The amplifier has a mode switch for switching the stereo or bridge connection mode. In addition, there is independent clipping limit for each sound track.

Select stereo or bridge connection mode.

The amplifier can be set as the normal stereo operation mode or bridge connection mono mode.

Stereo mode-each sound track keeps independent. The amplifier is available for two different signals.

Bridge type -the setting uses double output power to merge two sound tracks into one. Set the gain control for the input ends of the first and second sound tracks to the maximum. For higher output power, the rated load must be set and connected as indicated on the output part.



When operating in the bridge connection mode, do not connect the different types of input ends with any side of the sound track line pair.

Stereo and bridge connection mode? the mode configuration switch must be set. Bridge connection mode? the sound track pair of bridge connection mode shall be configured to drive a single voice-frequency circuit. For bridge connection mode, you must select the selector switch.



When using bridge connection mode, the minimum impedance is 8 ohms; do not use the load less than 8 ohms in bridge connection mode! Please pay attention to the connection polarity in bridge connection mode.

7. SFI FCT STERFO & PARALLEL OR BRIDGE CONNECTION MODE

The amplifier can be set to a normal stereo, parallel input mode or bridge connection mono mode.

Stereo mode - each sound track remains independent, and the amplifier can be used for two different signals.

Parallel Mode - This set connects two input signals together. A signal inputs into two sound tracks, and the gain control of each sound track and speaker connections remain independent.

Bridge type - the setting uses double output power to merge two sound tracks into one. Only use the input end and the gain control of the first sound track, and set the gain control of the second sound track to the minimum. For higher output power, the rated load must be set and connected as indicated on the output part.



When operating in parallel mode or bridge connection mode, do not connect different input ends to any side of the sound track line pair.



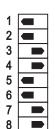
Stereo Mode:

1, 2, 3, 4, 5, 6, 7 and 8 are set on the left side, and CHA,CHB,CHC and CHD are connected to signal.



Parallel Mode:

1, 2, 5 and 6 are set on the right side, 3, 4, 7 and 8 on the left side, while CHA and CHC are connected to signal.



Bridge Connection Mode:

3, 4, 7 and 8 are set on the right side, 1, 2, 5 and 6 on the left side, while CHA and CHC are connected to signal.

8. OUTPUT

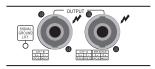
SPEAKON Output

Each sound track is available to general 2 - wire cable. In addition, sound track 1 is available to 4 - wire cable for single-line stereo or bi-amplifier bi-amp connection.

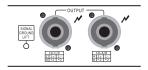


Safety warning of output end! Do not touch the output end while the amplifier power is ON. Turn off the power of amplifier before all connections. Potential danger of electric shock!

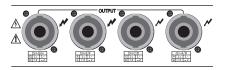
FI-AMP2



FI-AMP4



FI-AMP8





When using bridge connection mode, the minimum impedance is 8 ohms; do not use the load less than 8 ohms in bridge mode! Please pay attention to the connection polarity in bridge connection mode.

9. GAIN CONTROL

Turn the gain control clockwise, and the gain increases; turn the gain control counter clockwise, and the gain decreases. LED indicator light is used to monitor system operation and identify the general problems. Indicator Light and Gain Control.



The thermal protection circuit can be activated in case of continuous operation at high power, allowing the amplifier to stop operating, and the protection indicator lights are lit up. When the amplifier is cooled enough, the operation will restart.



Gain Control and Indicator Light

Signal: green is on the left side of each gain control.

- Normal display: blink when the input signal exceeds -35 dB. When the signal is close to full power, the indicator light will blink continuously.
- If there is no display: check the input end connection and audio source of the signal. If the clipping indicator light only blinks few times or no signal blinks, please check if the output wiring is in short circuit.

• Abnormal display: If the signal indicator lights up without signal input, it may be caused by the system vibration or other faults. Disconnect the load and reduce the gain control completely. If the signal indicator light is lit up, the amplifier may need to repair.

Clipping: red is on the left side of each of the gain control.

- Normal display: when the amplifier goes beyond the full power drive, it will blink at any time. LED brightness indicates the degree of distortion. We can hardly feel the distortion caused by the short flash.
- Abnormal display: if bright red blink occurs when the amplifier is working, it indicates that it is the hot mute or short-circuits output.
- -Short circuit or overload output circuit will cause excessive clipping flash and possible overheating.
- -If you cn feel the distortion without clipping display, the problem may exist at the front or rear of the amplifier. Check whether there is any damaged speaker or overload signal source. Amplifier gain control shall be in the upper half of this range to prevent put overload.

Power: normal display: AC power switch is turned on: OK indicator light will be lit up.

- If there is no display: check the AC power wiring and AC power socket. Check the rear panelbreaker. emperature: red is on the left side of the gain conrol group.
- Normal display: the indicator light does not work under normal conditions.
- Abnormal display: if the amplifier overheats, the protected indicator light will be lit up when the temperature exceeds 100. Keep the power on to allow the fan cool te amplifier.

Protection: Red is on the left side of the gain control group.

• Normal display: the light goes up when the amplifier switches to protection mute status.

The indicator light does not work under normal conditions.

• Abnormal display: If the protection LED is lit up, check whether the amplifier is in the protection mute status. Keep the power on to allow the fan cool the amplifier.

10. SERVICE

To obtain service:

- 1) Contact the official Frog distributor in your country. Your local distributor will direct you to the appropriate service center.
- 2) If you are calling for service, please have the serial number(s) of the unit(s) available for reference. Ask for Customer Service, and be prepared to describe the problem clearly and completely.
- 3) If the problem cannot be resolved over the phone, you may be required to send the unit in for service. In this instance, you will be provided with an RA (Return Authorization) number which should be included on all shipping documents and correspondence regarding the repair. Shipping charges are the responsibility of the purchaser.

Any attempt to modify or replace components of the device will invalidate your warranty. Service must be performed by an authorized Frog service center.



Cleaning:

Use only a soft, dry cloth to clean the product. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

11. SPECIFICATIONS

	FI-AMP2	FI-AMP4	FI-AMP8
Output Power @8Ω	2x 160 W	4x 160 W	8 x 160 W
Output Power @4Ω	2 x 240 W	4 x 240 W	8 x 240 W
Output Power Bridge@8Ω	1×480W	2×480W	4 x 480 W

Class

 $\begin{array}{ll} \textbf{Frequency response} & 20~\text{Hz to } 20~\text{KHz (+/-3dB)} \\ \textbf{THD+N} & <-0.05\% \ @ \ 8~\Omega/1~\text{KHz} \\ \end{array}$

Slew Rate40V/usS/N Ratio>90 dBDamping factor $>600 @ 8 \Omega$ Channel separation $>100 dB @ 8 \Omega/1 KHz$ Input impedance $20 K\Omega (Bal.)/10 K\Omega (Unbal.)$

Input sensitivity 1.0 Volt

Protection DC, Short circuit, Overheat, Soft start

Front: 2 x Volume Ctl. 4 x Volume Ctl. 8 x Volume Ctl.

Rear: Ground lift, Input link mode, Bridge mode (pair)

Input connectors $2 \times XLR$ (Bal.) $4 \times XLR$ (Bal.) $8 \times Phoenix$ (Bal.)Ouput connectors $2 \times Speakon$ $2 \times Speakon$ $4 \times Speakon$

2 contacts (1+/1-2+/2-) 2 contacts (1+/1-2+/2-) 4 contacts (1+/1-2+/2-)

Dimention 1U - 19"

Dimensions WxHxD 483 mm * 44.45 mm * 355 mm

Weight 4 Kg - 8.8 Lbs 4.8 Kg - 10.6 Lbs 5,5 Kg - 12.1 Lbs

^{*0} dB=0.775 Vrms

^{*}The specifications and appearance of this equipment may be changed without priornotice due to improvement.



FROG-IS

WWW.FROG-IS.COM

FROG-IS is a brand of K-gear surl - Via Paolina Romangnoli 17, 50038 Scarperia e San Piero, Firenze ITALY