

FP12





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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 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 FP12 is the first choice for demanding musicians and DJs who work in loud environments.

A multi-purpose system (400 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 FP12 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 FP12 features provide musicians and audiences with an excellent acoustic experience, even on the most demanding stages.

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 severe 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. PHYSICAL



Weight: 15Kg (33.07 lb)

5. AMPLIFIER

5.1 AC POWER CONNECTOR

The amplifier module and any audio equipment connected to it (mixing consoles, processors, etc.) must be properly connected to the AC power distribution, preserving AC line polarity. All grounding points should be connected to a single node or common point, using the same cable gauge as the neutral and line cables. Bad grounding connections within an audio system can produce noise, hum and/or serious damage to the input/output stages in the system's electronic equipment.

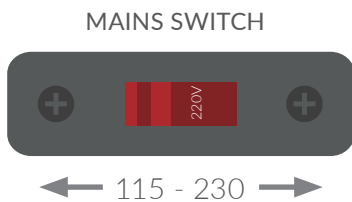


Before applying AC to any Frog self-powered speaker, be sure that the voltage potential difference between neutral and earth ground is less than 5 VAC.



5.2 VOLTAGE REQUIREMENTS

The FP12 operates safely and without audio discontinuity if the AC voltage stays within either of two operating windows: 95-125 V (Mains Switch set on 115 V) or 195-250 V (Mains Switch set on 230 V) at 50 or 60 Hz. Be sure that both voltage set on the selector and AC Power have the same value.

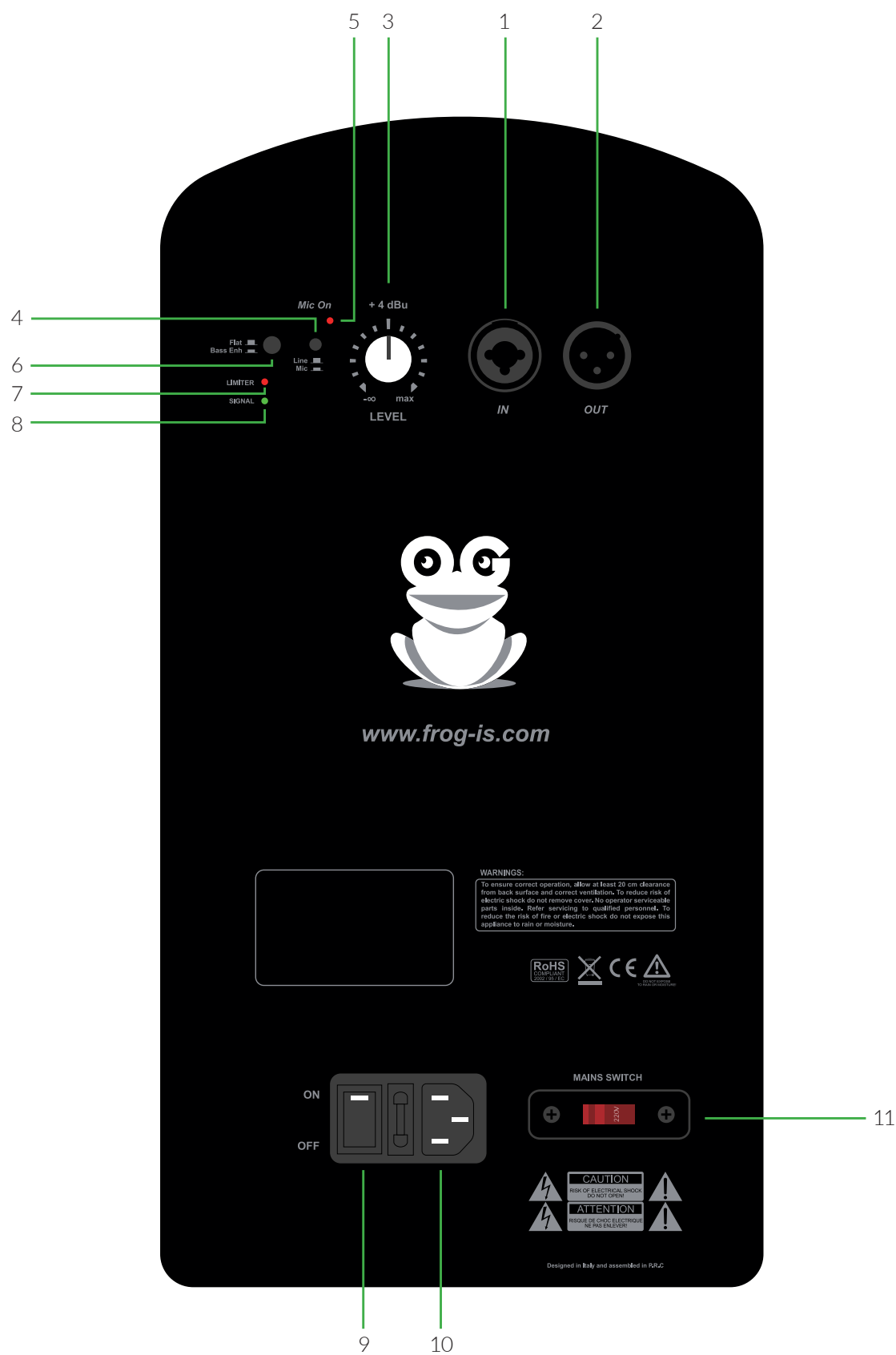


Connecting the speaker on a 230 V AC Power with the Mains Switch set on 115 V causes heavy damages to the device and serious risk for users.



5.3 CURRENT REQUIREMENTS

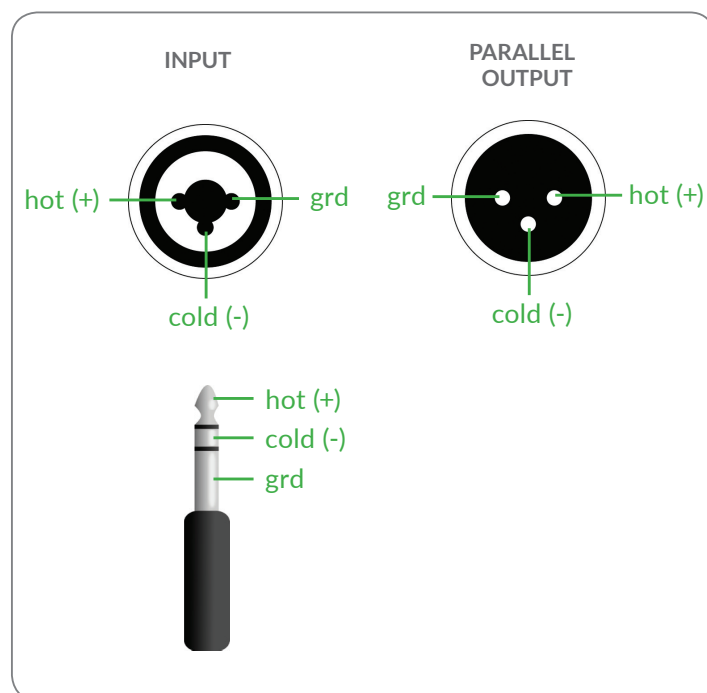
The FP12 presents a dynamic load to the AC mains, drawing additional current as operating levels increase. Different cables and circuit breakers heat up at varying rates, so it is essential to understand current ratings and how they correspond to circuit breaker and cable specifications. Maximum continuous RMS current - measured over a period of at least ten seconds - is used to calculate the temperature increase in cables, which drives the proper size and gauge cable and rating for slow-reacting thermal breakers. Maximum burst RMS current - measured over a period of approximately one second - is used to select the rating for fast reacting magnetic breakers.



- 1) Mic/Line Input. Female XLR and 1/4" TRS combo connector accepting balanced or unbalanced mic-level or line-level signals.
- 2) Parallel Output. Male XLR connector providing a direct signal from Mic/Line Input. Used to form a daisychain with the input signal to another speaker.
- 3) Level Control. Knob used to adjust the signal level from Off to 45 dB of gain.
- 4) Mic/Line selector. Leave this switch out when connecting a line-level signal to the Mic/Line Input (from a mixer, a CD player or other line-level signal source). Push this switch in when connecting a microphone to the Mic/Line Input. Since a microphone produces a much smaller signal than a line-level signal, this provides an additional 40 dB of gain to boost the microphone signal to a line level.
- 5) Mic On Indicator. This LED lights whenever the Mic/Line switch is pushed in.
- 6) Eq/Flat Switch. Pushing in this button engages a filter that provides 3 dB of boost to the low and high frequencies (below 100 Hz and above 12 kHz) to get a punchier sound.
- 7) Limiter Indicator. This LED lights whenever the limit circuit is active meaning that the signal level at the amplifier output is approaching clipping. The Limit Indicator may blink occasionally, but if it blinks frequently or continuously, turn down the signal level at the signal source, or turn down the FP12's Level Control.
- 8) Signal Indicator. This LED lights whenever there is a signal at the Mic/Line Input. It senses the signal just after the Level Control, therefore if the Level Control is turned down, the Signal Indicator will not light.
- 9) Power Switch. Move the switch up to turn the speaker on and move the switch down to turn it off. Make sure the Level Control is down before you turn it on/off.
- 10) AC Input. IEC socket for AC power. Always use a three-pin plug with a ground pin.
- 11) Mains Switch. Allows user to select different country voltage ratings

5.5 AUDIO INPUT CONNECTOR WIRING

Line/Mic Input (female XLR/TRS 1/4") is wired in parallel to Line/Mic Parallel Output (male XLR). To create your own audio cables, please use the following wiring diagrams:



6. QUICK START

1. Turn the Power switch off (down). Set the voltage on the Mains Switch according to your country voltage rating.
2. Set the Eq/Flat and Mic/line switches out. If using a microphone as the input to the KP8, push the Mic/Line switch in. If using a mixer, a CD player or other line-level source as the input to the KP8, leave the Mic/Line switch out. Turn the Level Control down (counterclockwise).
3. Connect the output from your signal source directly to the Mic/Line Input connector.
4. Connect the supplied AC power cord to the IEC socket. Plug the other end into an AC outlet properly grounded
5. Turn on your signal source. Make sure its Master Volume (if it has one) is turned all the way down.
6. Turn on the KP8 Power Switch.
7. Start the signal source, whether it be speaking into a microphone or starting a CD player. Adjust any volume controls on the signal source for normal operation.
8. Slowly turn up the Level Control on the KP8 until the desired volume is reached (and the Limiter Indicator light does not come on). Always wear hearing protectors if you are close when it is playing at high levels.
9. If there is no sound, always turn down the KP8 Level Control before investigating.

7. 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:

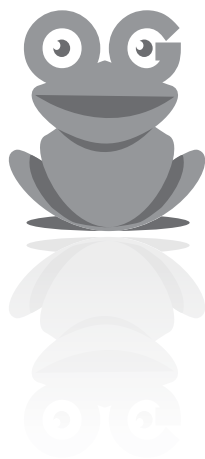
Use only a soft, dry cloth to clean the product. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

10. SPECIFICATIONS

	Acoustics
Frequency range	50 Hz - 20 kHz (± 3 dB)
SPL 1W/1mt	99 dB
Maximum SPL	125 dB @ 1 m peak
	Coverage
Horizontal	90°
Vertical	70°
	Transducers
Low Frequency	12" woofer
High Frequency	1" compression driver, horn loaded
	Preamp and Processors
Input Sensitivity	Mic In: 8 mV
	Line In: 125 mV
Input Impedance	Mic In: 650 Ω unbalanced - 1.3 kΩ balanced
	Line In: 10 kΩ unbalanced - 19 kΩ balanced
Crossover	Frequency: 2.3 kHz Slope: 24 dB/octave
Speaker Protection	Thermal, Over-excursion
Music Equalization	+3 dB @ 75 Hz
	+3 dB @ 11 kHz
	Power ON, Signal, Limiter
	Amplifiers
Amplifier Power	LF: 350 W RMS
	HF: 50 W RMS
Distortion	< 0.1% THD at rated power
Amplifier Protection	Thermal, Limiter, Short circuit
	AC Power
Nominal voltage	100 / 240 ± 10%, 50/60 Hz with PFC 95
Operating range	95 – 125 Vac / 195 – 250 Vac
	Physical
Mounting	Lockable 1-3/8" (35 mm) stand mount
Rigging Inserts	3 points, accepts M8 threaded hardware
Input Connector	1 XLR and 1/4" TRS balanced
Output Connector	1 XLR balanced
Net Weight	15 kg (33.07 lb)
Dimensions WxHxD	40 cm x 60 cm x 35 cm (15.75" x 23.62" x 13.78")







FROG-IS

WWW.FROG-IS.COM

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

