

HEADRUSH[®]

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User Guide

English



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(1.0) Introduction

(1.1) Box Contents

FRFR-112 MK2

Power Cable

Quickstart Guide

Safety & Warranty Manual


(1.2) Support

For the latest information about this product (documentation, technical specifications, system requirements, compatibility information, etc.) and product registration, visit headrushfx.com.

For additional product support, visit headrushfx.com/support.

(2.0) Important Safety Precautions

Please note: HeadRush and inMusic are not responsible for the use of its products or the misuse of this information for any purpose. HeadRush and inMusic are not responsible for the misuse of its products caused by avoiding compliance with inspection and maintenance procedures. Please refer to the included safety and warranty manual for more information.

 **Caution:** To reduce the risk of electric shock, do not connect a FRFR-112 MK2 loudspeaker to a power outlet while the grille is removed.

Danger: Mounting of any heavy load can result in serious injury and equipment damage. This work should be done by qualified persons following safe mounting practices in accordance with all applicable safety and construction standards. Such persons must determine the required load ratings and design factors. They must determine the mounting method that meets static, dynamic, shock, and any other load requirements. All such work must be done in accordance with and in compliance with all federal, state, and local regulations governing such work.

(2.1) Preparation

Before placing, installing, or mounting any speaker product, inspect all hardware, cabinets, brackets, and associated equipment for damage. Any missing, corroded, deformed, or non-load rated component could significantly reduce the strength of the installation or placement. The above conditions and others like it severely reduce the safety of the installation and should be immediately corrected. Use only hardware which is rated for the loading conditions of the installation and any possible short-term, unexpected overloading. Ensure that all local, state, and national regulations regarding the safety and operation of loudspeakers and related equipment are understood and followed, paying special attention to applicable electrical and building codes.

(2.2) Stand-Mounting

- Always install loudspeakers in accordance with applicable electrical and building codes.
- Install the loudspeaker according to its maximum weight. Check the specifications of your stand or pole to ensure it can support the loudspeaker's weight. Also, observe all safety precautions specified by the manufacturer.
- Do **not** mount multiple loudspeakers on the same stand or pole.
- Always verify that the stand or pole is on a flat, level, and stable surface.
- Inspect the stand (or pole and associated hardware) before each use and do not use equipment with worn, damaged, or missing parts.
- Always be cautious in windy, outdoor conditions.
- Unless you are confident that you can handle the loudspeaker's weight, ask another person to help you lift it onto the stand or pole.
- Make sure your cables are out of the way of performers, production crew, and audience.

(2.3) Sound Level

Permanent hearing loss may be caused by exposure to extremely high noise levels. The U.S. Occupational Safety and Health Administration (OSHA) has specified permissible exposures to certain noise levels. According to OSHA, exposure to high sound pressure levels (SPL) in excess of these limits may result in hearing loss. When using equipment capable of generating high SPL, use hearing protection while such equipment is under operation.

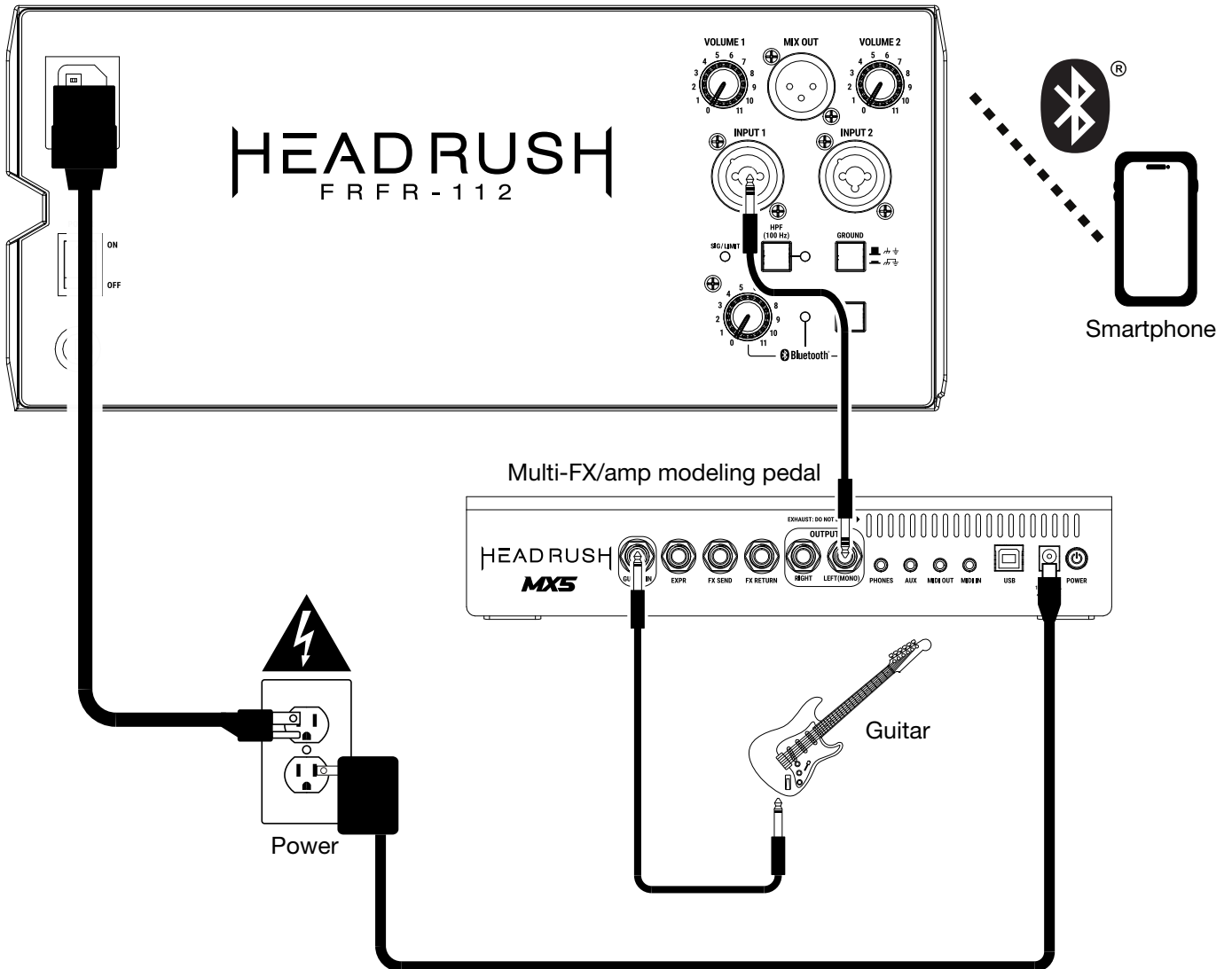
| Hours per day | SPL (dB) | Example |
|---------------|----------|-----------------------------|
| 8 | 90 | Small gig |
| 6 | 92 | Train |
| 4 | 95 | Subway train |
| 3 | 97 | High-level desktop monitors |
| 2 | 100 | Classical music concert |
| 1.5 | 102 | Riveting machine |
| 1 | 105 | Machine factory |
| 0.5 | 110 | Airport |
| 0.25 or less | 115 | Rock concert |

(3.0) Setup

Items not listed under [\(1.1\) Introduction > Box Contents](#) are sold separately.

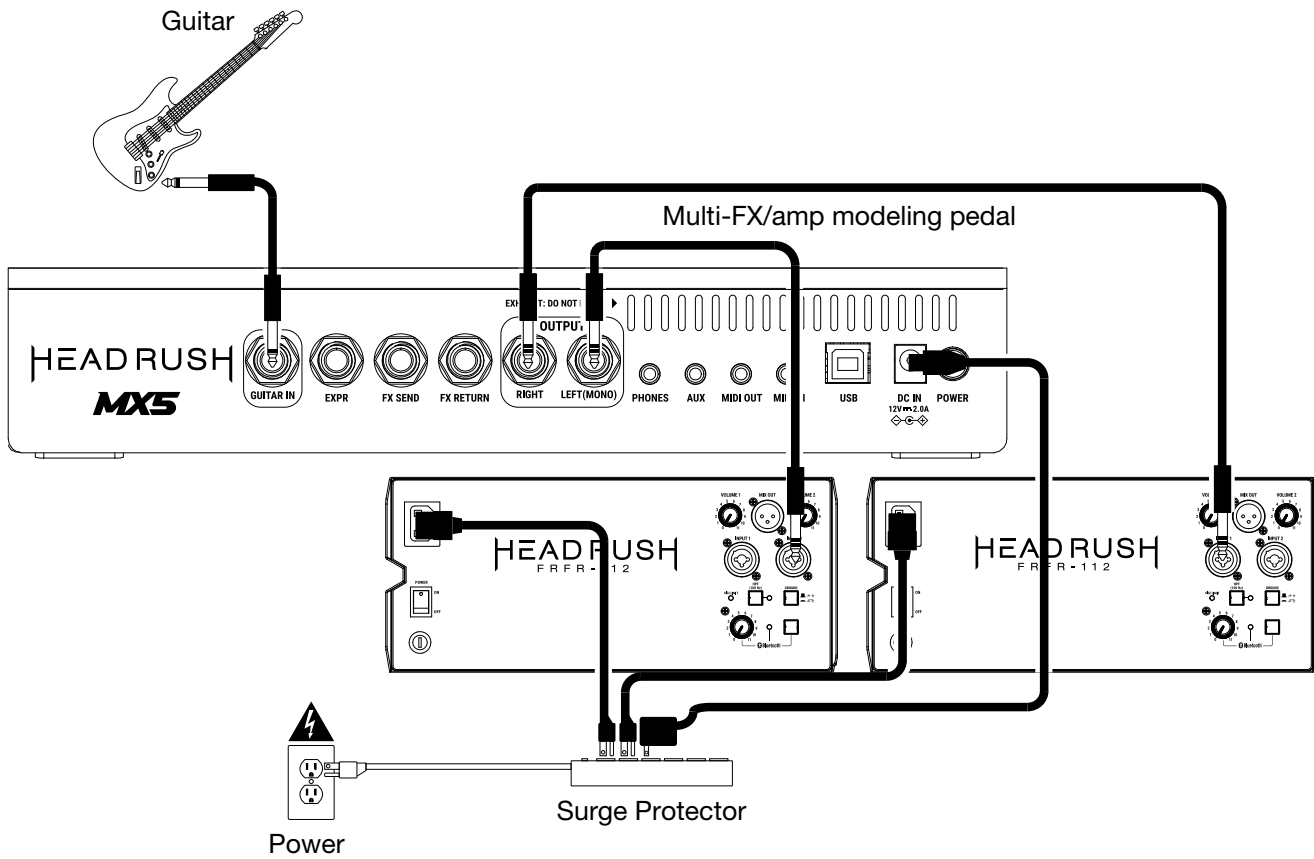
(3.1) Example A: One FRFR-112 MK2 (Mono)

Connect the Left (Mono) output of your guitar or bass multi-FX/amp modeling pedal to the input on a FRFR-112 MK2.



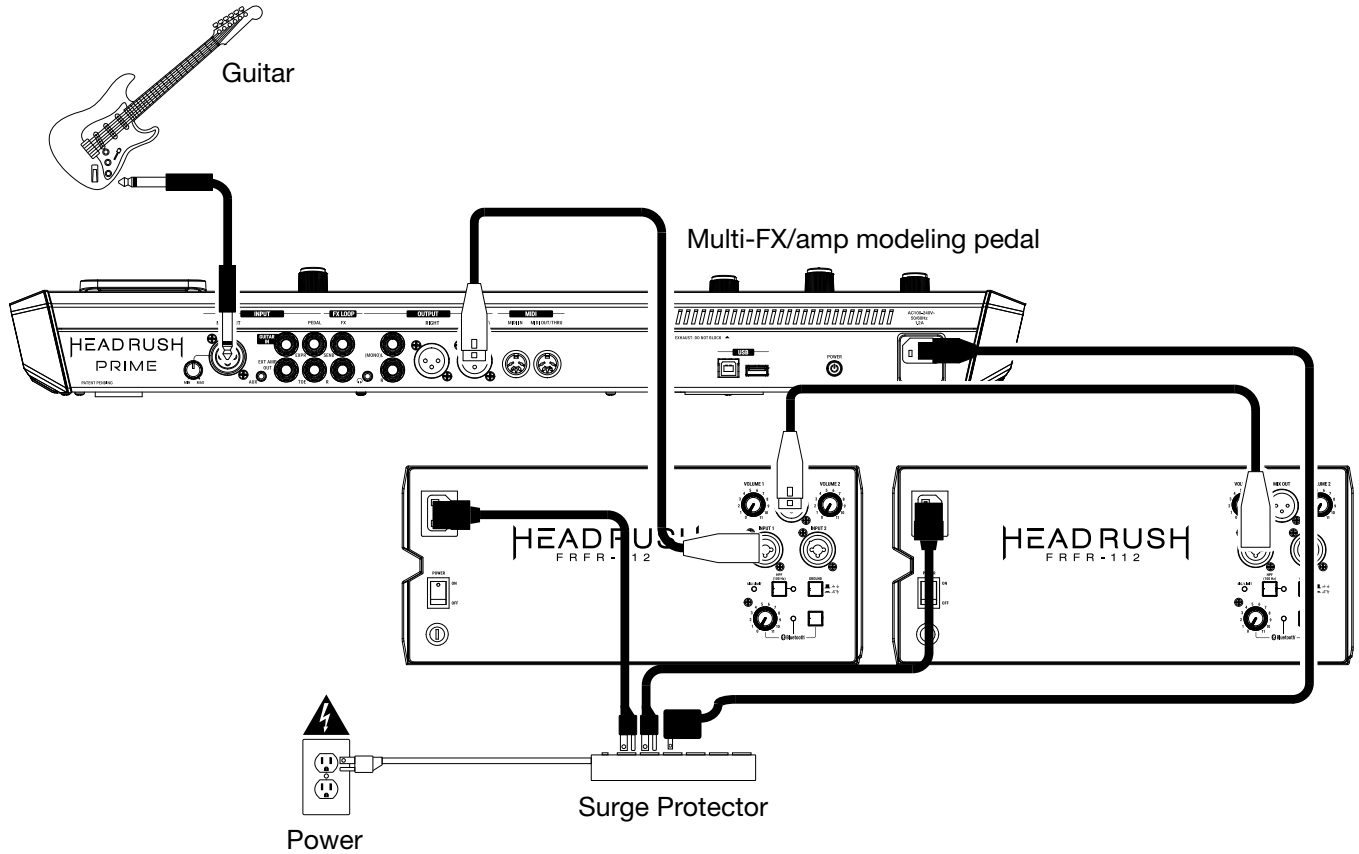
(3.2) Example B: Two FRFR-112 MK2s (Stereo)

Connect the Right and Left (Mono) outputs of your or guitar bass multi-FX/amp modeling pedal to the inputs of your FRFR-112 MK2.



(3.3) Example C: Two FRFR-112 MK2s (Mono)

Connect the Left (Mono) output of your guitar or bass multi-FX/amp modeling pedal to the input of one FRFR-112 MK2, and then connect the Mix Out of that FRFR-112 MK2 to the input of another.



(4.0) Features



A. Power Input

Use the included power cable to connect this input to a power outlet. Make sure the **Power Switch** is set to **OFF** when connecting or disconnecting the cable.

B. Power Switch

Use this switch to power the loudspeaker **ON** or **OFF**. Make sure the **Volume 1/2** knobs are set to the minimum (counterclockwise) positions before turning it on.

C. Fuse

If the unit's fuse is broken, lift the tab to replace it with an appropriately rated fuse (printed under the **Power Input**). Using a fuse with an incorrect rating can damage the unit and/or fuse.

D. Input 1/2

Use a standard XLR cable or 1/4" (6.35 mm) TRS cable (not included) to connect your audio source to these inputs.

E. Volume 1/2

Turn each knob to adjust the volume of each input. Set these to the minimum (counterclockwise) position before turning on the power.

F. Mix Out

Use a standard XLR cable (not included) to connect this output to a mixer or the input of another loudspeaker (i.e., another FRFR-112 MK2).

G. HPF

If the speaker sounds too muddy or boomy due to a large stage or rehearsal room, press this button to reduce the speaker's low-end frequencies. This will simulate the speaker being put on a standard speaker stand.



H. Ground

Press this button to reduce hum or noise.

I. Bluetooth® Pair

Press and release this button to put the speaker into Bluetooth Pairing mode, and then select "FRFR-112 MK2" from your device's Bluetooth settings. To disconnect a paired Bluetooth device, press and release this button again. See the section [\(5.1\) Pairing a Bluetooth Device](#) for more details.

J. Bluetooth LED

This blue LED is flashing when the speaker is in pairing mode, lit solid when a device is paired, and off when a Bluetooth device is not paired.

K. Bluetooth Volume

Turn to adjust the Bluetooth signal's volume.

L. Sig/Limit

This LED lights up green when an audio signal is sent to the loudspeaker—it flashes at lower levels and lights solidly at higher levels. The LED lights up red when output limit/protection is active—if the LED is lit red continuously, reduce the volume of your audio source.

(5.0) Operation

(5.1) Pairing a Bluetooth Device

1. Power on the FRFR-112 MK2. The Bluetooth LED will not be lit when the speaker is first powered on unless it was previously paired with a device before being powered off.
2. Press and release the **Bluetooth Pair** button. The **Bluetooth LED** will flash blue when in pairing mode.
3. Navigate to your Bluetooth device's setup screen, find **FRFR-112 MK2**, and connect. The **Bluetooth LED** will be lit solid when a device is paired.

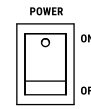
Note: If your Bluetooth device prompts that a pairing code is required, use "0000".

Adjust the volume using the **Bluetooth Volume** knob.

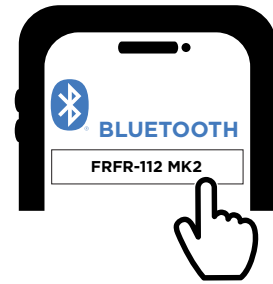
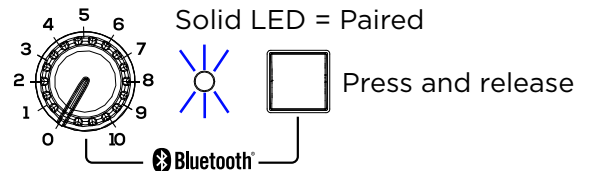
Note: For the best sound quality, set your input source volume to 100% and use the Bluetooth volume knob to set the overall level.

To unpair a device, press and hold the **Bluetooth Pair** button for 3 seconds.

To unpair a device and remove it from memory, press and hold the **Bluetooth Pair** button for 10 seconds.



Flip the switch to ON



(6.0) Troubleshooting

If the sound is distorted: Try lowering the volume control of your sound source, musical instrument, or microphone.

I hear a hum when cables are connected:

- Disconnect cables from the input jacks to see if it's a faulty cable.
- Use balanced cabling connections whenever possible.
- Make sure the signal cables are not placed near power cables.
- Connect all audio equipment power cables to outlets which share a common ground.

If there is too much bass: Try adjusting the tone or EQ control on your sound source to lower the bass level. This will allow you to play the music louder before clipping (distortion) occurs.

If there is a high-pitched whistling noise when using microphones: This is probably feedback. Point the microphone away from the speaker.

If you can't hear the microphone over the music volume: Turn down the music volume from your source.

If you cannot connect your audio device to FRFR-112 MK2 via Bluetooth:

- Have your audio device (e.g., smartphone or tablet) and FRFR-112 MK2 as close together as possible while trying to connect. Make sure both the audio device and FRFR-112 MK2 are unobstructed by walls, furniture, etc.
- Reset the Bluetooth connection on FRFR-112 MK2 to disconnect FRFR-112 MK2 from any other audio device and restart the search process. If this does not work right away, power off FRFR-112 MK2 and then power it back on.
- Reset the Bluetooth connection on your audio device by turning Bluetooth off and back on. You can find this under the Bluetooth menu in the Settings for your phone or other audio device.

If this does not work, and you have connected to FRFR-112 MK2 before, press and hold the **Bluetooth Pair** button on FRFR-112 MK2 for 10 seconds. Turn FRFR-112 MK2 off and back on and try pairing again once it reappears in your available devices list.

Note: If FRFR-112 MK2 has been paired to another audio device recently that is still within range, you may need to repeat this process with that audio device to fully disconnect.

(7.0) Appendix

(7.1) Technical Specifications

| | |
|---|---|
| Output Power | 2500 W |
| Drivers | Low-Frequency: 12.0" (305 mm) driver, 2.5" (63 mm) high-temperature voice coil. High-Frequency: 1.0" (25 mm) exit ceramic driver with 1.4" (35 mm) coil. |
| Crossover Frequency | 2 kHz |
| Maximum SPL | 132 dB (peak) dB-SPL @ 1 m |
| Frequency Response | 53 Hz – 20 kHz (+/-3 dB) |
| Frequency Range | 44 Hz – 20 kHz (-10 dB) |
| Horn Coverage | 90° horizontal x 60° vertical (nominal) |
| Connectors | (2) XLR+1/4" (6.35 mm) TRS combo inputs (Balanced) (1) XLR output (Link) (1) IEC power cable input |
| Input Impedance | Line: 10 KΩ balanced, 20 KΩ unbalanced |
| Gain/Volume Control Range | -∞ to 0 dB, +4 dBu nominal, +10 dBu for max output |
| HPF Switch | 100 Hz |
| Bluetooth | Version: 5.0 Profile: A2DP, AVRCP Codec: SBC Range: up to 100 feet (30.5m) |
| Power | Connection: IEC Input Voltage: 100-120V, 50/60 Hz; 220-240V, 50/60 Hz Consumption: 1100W Fuse: T15AL AC250V; 220-240V T6.3AL AC250V |
| Protection | Electronic clip, thermal, and transducer overdrive protection |
| Mounting/Installation | Standard 36 mm pole socket |
| Operating Temperature | 14°F to 113°F (-10°C to 45°C) |
| Dimensions (width x depth x height) | 13.9" x 13.8" x 23.9" 351 mm x 354 mm x 607 mm |
| Weight | 34.7 lbs. 15.7 kg |

Specifications are subject to change without notice.

(7.2) Trademarks & Licenses

HeadRush is a trademark of inMusic Brands, Inc., registered in the U.S. and other countries.

The *Bluetooth* word mark and logos are owned by the Bluetooth SIG, Inc., and any use of such marks by HeadRush is under license.

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