HARDWIRE HT-2
CHROMATIC TUNER
OWNER'S MANUAL



DigiTech® by HARMAN

DECLARATION OF CONFORMITY

Manufacturer's Name: Harman Signal Processing
Manufacturer's Address: 8760 S. Sandy Parkway
Sandy, Utah 84070, USA

declares that the product:

Product name: HT-2

Product option: All (requires Class II power adapter that conforms to the requirements of EN60065, EN60742, or equivalent.)

conforms to the following Product Specifications:

Safety: IEC 60065 -01+Amd 1

EMC: EN 55022:2006
EN 55024:1998
FCC Part 15

Supplementary Information:

The product herewith complies with the requirements of the:

Low Voltage Directive 2006/95/EC
EMC Directive 2004/108/EC.
RoHS Directive 2002/95/EC
WEEE Directive 2002/96/EC
EC Regulation 278/2009

With regard to Directive 2005/32/EC and EC Regulation 1275/2008 of 17 December 2008, this product is designed, produced, and classified as Professional Audio Equipment and thus is exempt from this Directive.

With regard to the PS200R and Directive 2005/32/EC and EC Regulation 278/2009 of 6 April 2009, this regulation applies to Class A (single output) external power supplies. The PS200R used with this product is a multi-output power supply and thus is exempt from this Directive.

Roger Johnsen
Vice-President of Engineering
8760 S. Sandy Parkway
Sandy, Utah 84070, USA
Date: October 4, 2010

European Contact: Your local DigiTech Sales and Service Office or

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If you want to dispose of this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery, and recycling.

Private households in the 25 member states of the EU, in Switzerland and Norway may return their used electronic product free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery, and recycling and thus prevent potential negative effects on the environment and human health.

ELECTROMAGNETIC COMPATIBILITY

This device complies with part 15 of the FCC Rules and the Product Specifications noted on the Declaration of Conformity. Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Operation of this unit within significant electromagnetic fields should be avoided.

- use only shielded interconnecting cables.

WARNING

For your protection, read the following:

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Do not use this apparatus near water.
5. Clean only with dry cloth.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
9. Unplug this apparatus during lightning storms or when unused for long periods of time.
10. No user serviceable parts inside. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug 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.
11. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
12. Refer to labels on the unit, including bottom cover, for other markings and pertinent information.

WARRANTY:

We at **DigiTech®** are very proud of our products and back-up each one we sell with the following warranty:

1. Please register online at www.digitech.com within ten days of purchase to validate this warranty. This warranty is valid only in the United States.
2. DigiTech warrants this product, when purchased new from an authorized U.S. DigiTech dealer and used solely within the U.S., to be free from defects in materials and workmanship under normal use and service. This warranty is valid to the original purchaser only and is non-transferable.
3. DigiTech liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to DigiTech WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year (this warranty is extended to a period of six years when the product has been properly registered through our website). A Return Authorization number may be obtained from DigiTech by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. Proof-of-purchase is considered to be the responsibility of the consumer. A copy of the original purchase receipt must be provided for any warranty service.
5. DigiTech reserves the right to make changes in design, or make additions to, or improvements upon this product without incurring any obligation to install the same on products previously manufactured.
6. The consumer forfeits the benefits of this warranty if the product's main assembly is opened and tampered with by anyone other than a certified DigiTech technician or, if the product is used with AC voltages outside of the range suggested by the manufacturer.
7. The foregoing is in lieu of all other warranties, expressed or implied, and DigiTech neither assumes nor authorizes any person to assume any obligation or liability in connection with the sale of this product. In no event shall DigiTech or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

NOTE: The information contained in this manual is subject to change at any time without notification. Some information contained in this manual may also be inaccurate due to undocumented changes in the product or operating system since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

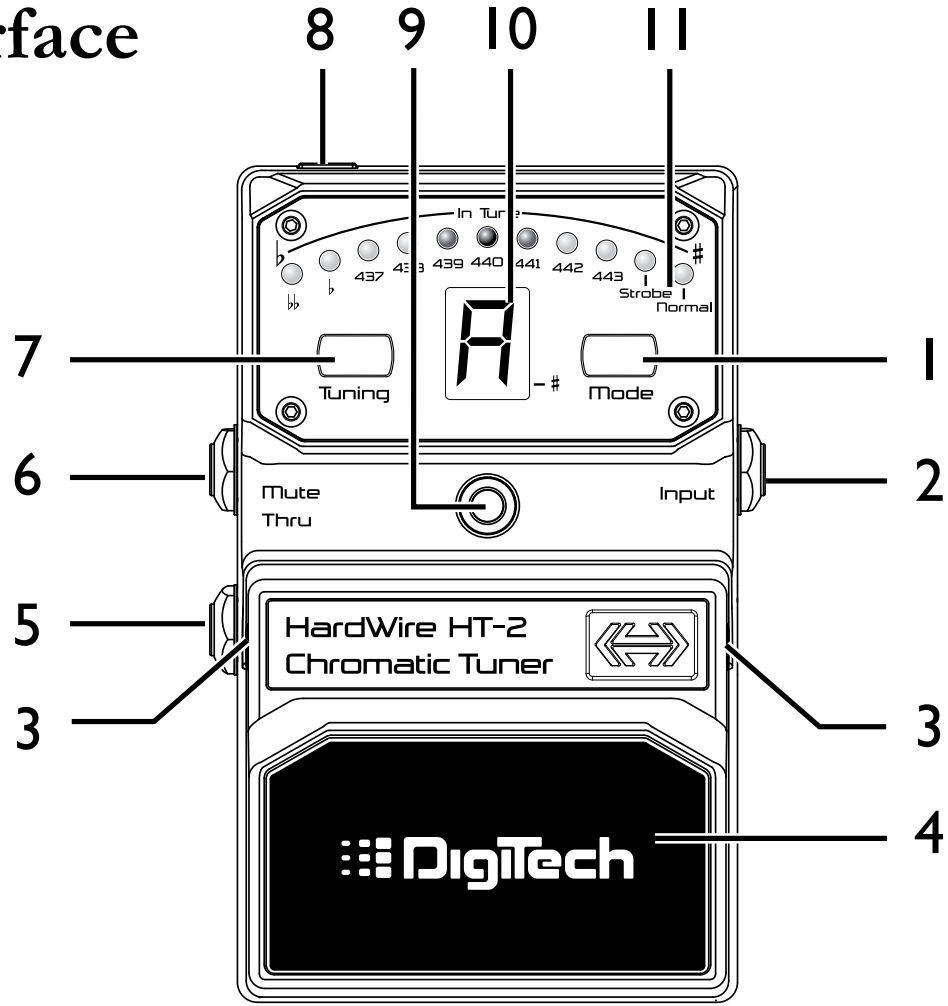
Introduction

More than a remarkable achievement, DigiTech's HardWire® series represents a collection of significant improvements in guitar effects pedals. The HardWire series pedals provide a suite of well-known effects, each with superior tone and control. But these pedals go above and beyond their peers to provide such distinguishing features as true bypass and high voltage operation, making them essential additions to the signal chain of players who know about sound quality and demand the utmost in performance.

Included Items:

- HardWire HT-2 Tuner
- Foot Switch Glow Sticker
- Hook-and-loop Pedalboard Pad
- Online Warranty Registration Information Card

Pedal Interface



What Does This Do?

1. **Mode Button** - Selects the display mode (Normal or Strobe) for the Tuning LED Array. The modes are labeled below the last two LEDs of the Tuning LED Array.
2. **Input** - Connect your instrument here. This jack enables battery power to the pedal when connected. To prolong battery life, disconnect the cable from the Input jack when not in use. If the optional Harman power supply is used, cables can remain connected.
3. **Foot Switch Release Pins** - These two pins are spring loaded hinges that hold the Foot Switch in place. See page 14 for information on accessing and changing the battery.
4. **Foot Switch** - Turns the Tuner on and off.

5. **Thru Output** - Connect this output to the input of your amp or the input of another pedal if you want the output signal from your instrument to be audible when the tuner is enabled.
6. **Mute Output** - Connect this output to the input of your amp or the input of another pedal if you want the output signal from your instrument to be muted when the tuner is enabled.
7. **Tuning Button** - Selects the different tuning references. The tuning references are labeled below the first 9 LEDs of the Tuning LED Array.
8. **DC Adapter Jack** - Connect the optional Harman power supply to this jack. Use the proper supply for your area's mains line voltage.

9. **LED Indicator** - Lights when the effect is turned on. When battery power is low (approximately 15 minutes before it dies), the Indicator LED begins to dim giving you advanced warning that very shortly you will need to replace the battery.
10. **Note Display** - Displays the note being tuned. The decimal point in the lower right corner of the display will light to indicate the sharp of the note is played (i.e. 9. = G#).
11. **Tuning LED Array** - These eleven LEDs are used for displaying whether the note being tuned is sharp or flat. They are also used to indicate tuning references and tuning LED array modes.

Connecting the Tuner

The HT-2 Tuner has a single 1/4" Input and two 1/4" Outputs – MUTE and THRU. The HT-2 offers true hardwire bypass when not in use to preserve your guitar's signal without any loss or buffering into your amp and other effects.

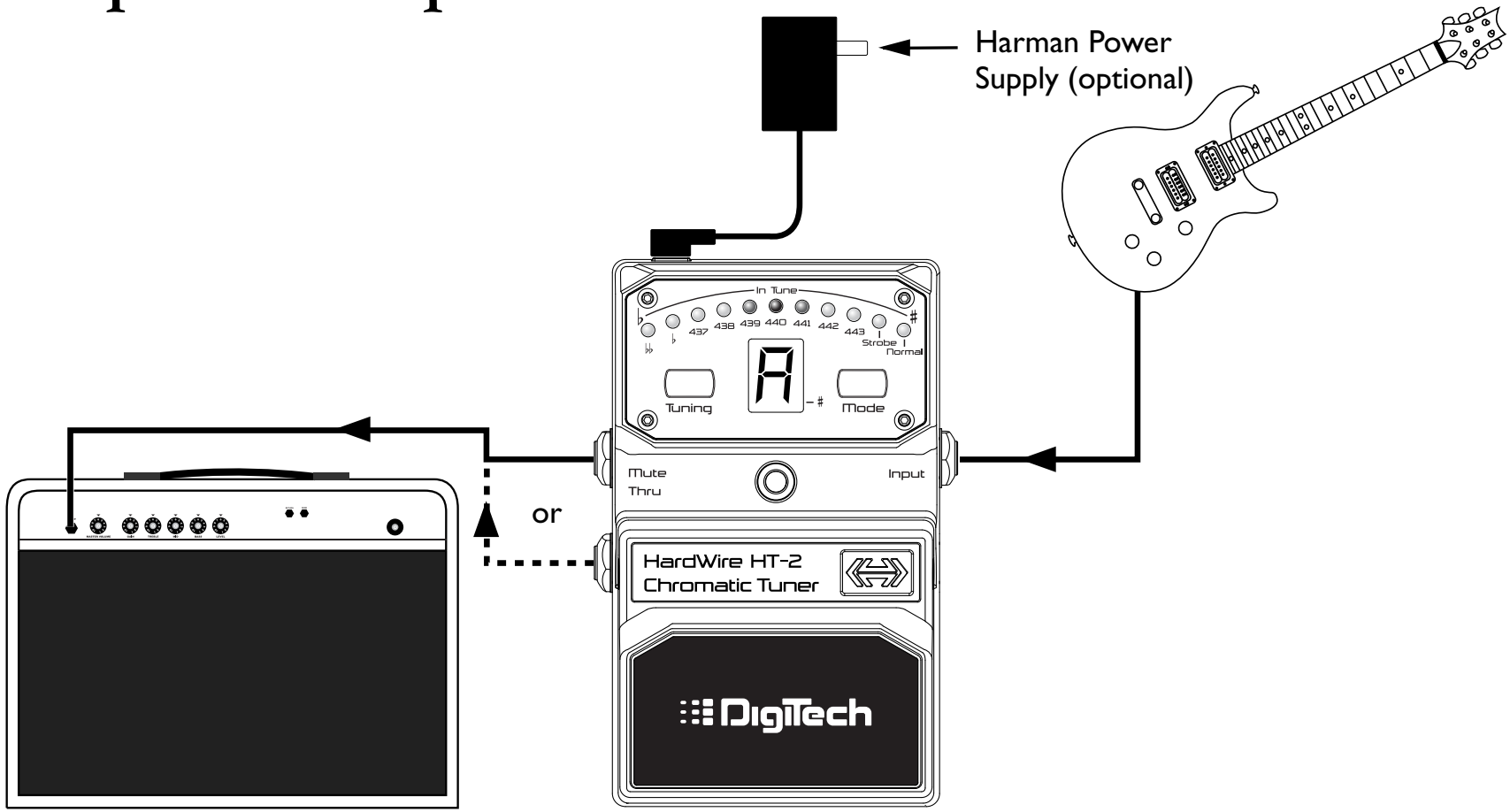
If you use the HT-2 on a pedal board with other effects devices, it doesn't really matter where in your effects chain the HT-2 is placed as long as any effects placed before it are bypassed before you use the HT-2. Therefore, we recommend placing the HT-2 before the rest of your pedal effects so you don't have to bypass other effects on your pedal board just to tune.

To connect the Tuner to your amp, do the following:

1. If you are not using battery power, connect the optional power supply to the HT-2's power input.
2. Connect a cable from your instrument's 1/4" jack to the 1/4'' Input.
3. Connect the Tuner's THRU output to the input of your amplifier to hear your guitar while tuning. Connect the Tuner's MUTE output to the input of your guitar amplifier if you do not want to hear your guitar while tuning.

NOTE: **Use unbalanced mono instrument cables only.**

Amplifier Setup



Select A Tuner Reference

The HT-2 has multiple tuning references to select from: A=A 440 (standard tuning), A=A flat (tuned half step down), A=G (tuned whole step down), and alternate tuning references (A=A 437 - A=A 443). To select the tuner reference, do the following:

1. Press the Foot Switch to turn on the tuner. A dash appears in the note display.
2. Press the TUNING button. A ♭ appears in the note display and the LED above the current tuning reference lights. Press the TUNING button to select the next tuning reference. The reference is a 1/2 step down (A=A flat) if the LED above ♭ is lit. The reference is a whole step down (A=G) if the LED above ♭♭ is lit.
3. Once the selected tuning reference LED is lit, wait 3 seconds and the pedal returns to normal operation. The last tuning reference selected is automatically saved.

Select A Display Mode

The HT-2 has two different display modes – Strobe and Normal.

When **Strobe** mode is selected, the tuning LED's move in the direction of the input note's tuning. If the note is flat, the LED's move to the left indicating the note needs to be tuned up. If the note is sharp, the LED's move to the right indicating the note needs to be tuned down. How fast the LED's move indicates how far out of tune the note is. The speed will gradually slow down as the note is tuned. When the note is in tune, the cycling LED's turn off and only the center blue LED is lit.

When **Normal** mode is selected, single or pairs of LEDs light indicating tuning status. LEDs to the left of the center blue LED light if the note is flat and needs to be tuned up. LEDs to the right of the center blue LED light if the note is sharp and needs to be tuned down. When only the center blue LED is lit, the note is in tune.

To select a display mode, do the following:

1. Press the Foot Switch to turn on the tuner. A dash appears in the note display.
2. Press the MODE button. A 0 appears in the note display and the LED above the current Mode (STROBE or NORMAL) lights. Press the MODE button until the LED above the Mode you want to use is lit.
3. Once the selected Mode LED is lit, wait 3 seconds and the pedal returns to normal operation. The last display mode selected is automatically saved.

Tuning Your Instrument

To tune your guitar or bass in **Strobe** mode, do the following:

1. Press the Foot Switch to turn the tuner on. A dash appears in the note display until a note is played.
2. Play a note with your instrument. The note being played displays in the Note Display. If it is a sharp note, a decimal point lights in the lower right of the Note Display (i.e. d . = D#).
3. Tune your instrument based on the indication of the LED array. If LEDs move to the left, the note is flat and needs to be tuned up. If LEDs move to the right, the note is sharp and needs to be tuned down. As the string gets closer to being in tune, the LED movement slows. When the note is in tune the LED array turns off leaving only the center blue LED lit.
4. Continue to tune the rest of your strings in the same manner.
5. When tuning is complete, press the Foot Switch to bypass it.

To tune your guitar or bass in **Normal** mode, do the following:

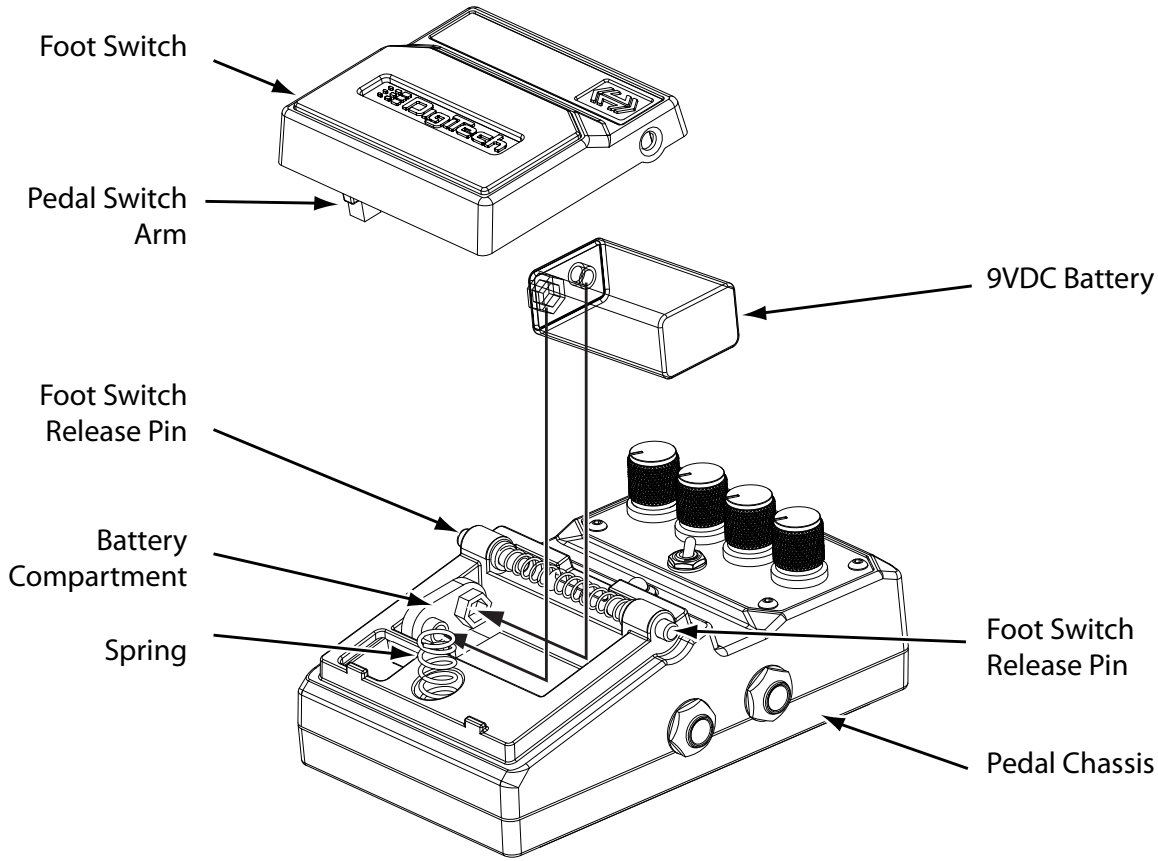
1. Press the Foot Switch to turn the tuner on. A dash appears in the Note Display until a note is played.
2. Play a note with your instrument. The note being played displays in the Note Display. If it is a sharp note, a decimal point lights in the lower right of the note display (i.e. 9 . = G#).
3. Begin adjusting the tuning of your instrument based on the behavior of the LED array. If LEDs to the left of the blue LED are lit, the note is flat and needs to be tuned up. If LEDs to the right of the blue LED are lit, the note is sharp and needs to be tuned down. When only the center blue LED is lit, the note is in tune.
4. Continue to tune the rest of your strings in the same manner.
5. When tuning is complete, press the pedal Foot Switch to bypass the Tuner.

Battery Operation

In the event that battery power is completely depleted, HardWire pedals automatically switch into bypass. This eliminates the need to remove the pedal from your pedal chain if the battery is dead. To replace the battery, do the following:

1. Using the tip of a 1/4" guitar cable, push in one of the Release Pins in on either side of the Foot Switch, and remove it from the pedal chassis.
2. Remove the battery from the battery compartment and disconnect the battery cable.
3. Connect a new battery to the battery cable and put it back in the battery compartment. Make sure the battery cable does not interfere with the spring or pedal switch arm.
4. Place one hole of the Foot Switch over its corresponding pin.
5. Push the opposite pin in and lower the other side of the Foot Switch

into place over the depressed pin. Release the pin. When the Foot Switch is properly fastened, both Release Pins are flush with the outer side of
the pedal.



Performance Accessories

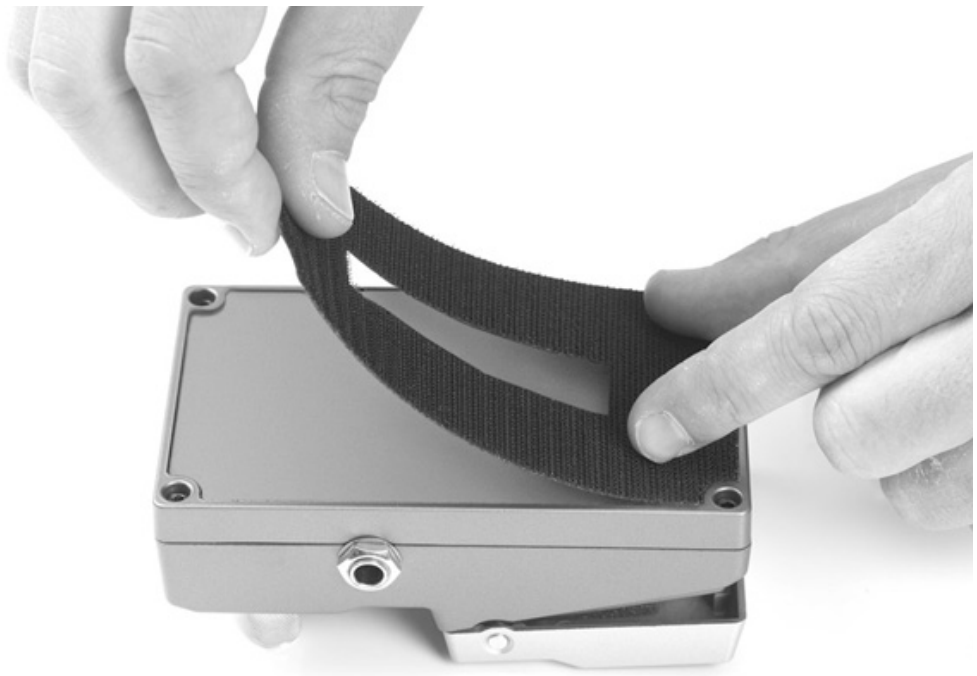
The performance accessories make integrating a HardWire pedal into any pedal board a snap. The following accessories are included:

- Hook-and-loop Pedalboard Pad (designed to attach to the surfaces found on most commercial pedalboards)
- Foot Switch Glow Sticker (easily visible on dark stages)

Hook-and-loop Pedalboard Pad

To attach the Pedalboard Pad, do the following:

1. Peel off the existing rubber skid pad from the bottom of the pedal.
2. Peel off the adhesive backing from the back of the Pedalboard Pad.
3. Apply the Pedalboard Pad to the bottom of the pedal.



Foot Switch Glow Sticker

To attach the Foot Switch Glow Sticker, do the following:

1. Peel the adhesive backing from the Foot Switch Glow Sticker.
2. Apply the Glow Sticker to the top of the Foot Switch.



Specifications

Controls:	Mode Button, Tuning Button, On/Off Pedal
Jacks:	Input, Mute, Thru
Input Impedance:	>1 MΩ - tuner on
Input Impedance:	True hardwire bypass - tuner off
Power Supply:	9 V Alkaline Dry Battery or Harman power supply
Current Draw:	40 mA (typical at 9 VDC)
Power Consumption:	365 mW (typical w/optional power supply)
Dimensions:	5.25"(L) x 3.5"(W) x 2.15"(H)
Weight:	1.3 lbs.

Optional Power Supply:

Country (Voltage)	**Compatible PSU Models**
Japan (100 VAC, 50/60 Hz):	PS200R-100 or PS0913DC-01*
US and Canada (120 VAC, 60 Hz):	PS200R-120 or PS0913DC-01*
Europe (230 VAC, 50 Hz):	PS200R-230 or PS0913DC-01*
UK (240 VAC, 50 Hz):	PS200R-240 or PS0913DC-02*
Australia (240 VAC, 50 Hz):	PS200R-240-AU or PS0913DC-02*

Power Supply Polarity: 

Power Supply Output: PS200R (9.6 VDC 300 mA), PS0913DC* (9 VDC 1.3 A)

*Recommended power saving GreenEdge power supply models.

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