HARDWIRE SP-7 STEREO PHASER OWNER'S MANUAL



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: SP-7

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 I

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: December 7, 2010

European Contact: Your local DigiTech Sales and Service Office or

Harman Signal Processing 8760 South Sandy Parkway Sandy, Utah 84070 USA Ph: (801) 566-8800 Fax: (801) 568-7583



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

- I. 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.
- 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.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 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 powersupply 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.
- II.WARNING:To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 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:

- 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.
- 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.
- 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.

Congratulations!

You have just purchased a DigiTech® digital effect pedal.

Unlike many analog pedals, the number of hours digital pedals can be powered with 9-Volt alkaline batteries is limited due to the constant draw which digital signal processors require. Until battery technology advances to meet the requirements of digital pedals, we suggest that a battery be used mainly for demonstration and practice purposes.

If you notice a change in the LED's brightness, or the pedal will not switch from Bypass to Effect, replace the battery with a new 9-Volt alkaline battery or visit your local DigiTech dealer to obtain a power adapter and unleash the pedal's full potential with unlimited power.

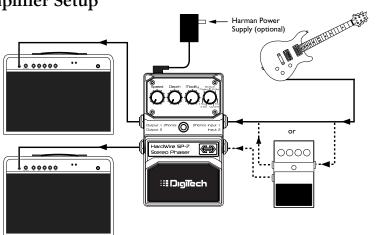
Introduction

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.

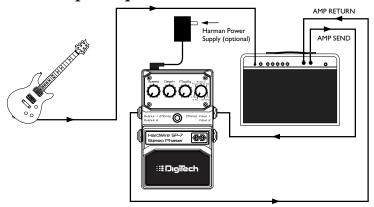
Included Items:

- HardWire SP-7 Stereo Phaser
- StompLock™
- Foot Switch Glow Sticker
- Hook-and-loop Pedalboard Pad
- Online Warranty Registration Information Card

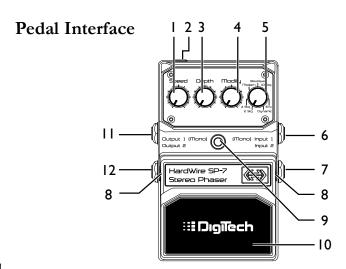
Amplifier Setup



Effects Loop Setup



NOTE: If the amp effects loop has a mix control, set the mix to 100% full wet.



What Does This Do?

- I. Speed Knob Controls the LFO speed of the Phaser effect. Turning the knob clockwise increases the speed and turning it counterclockwise decreases the speed.
- **2. DC Adapter Jack** Connect the optional Harman power supply to this jack. Use the proper supply for your area's mains line voltage.
- Depth Knob Controls the intensity of the Phaser effect. Turn the knob clockwise for a deep Phaser sound and counter-clockwise for a subtle Phaser sound.
- **4. Modify Knob** Controls various settings depending on which type is selected. See table on page 9 for Modify knob controls.
- **5. Type Knob** The Type knob selects one of the 7 Phaser types. See page 8 for more information.

- 6. Input I (Mono) When only a single input is needed, this jack must be used. Signals will still be heard at both outputs when only the Input I (Mono) jack is connected to. Connecting a guitar cable to the In I (Mono) jack supplies battery power even though the Indicator LED may not be lit. To prolong battery life, disconnect all cables from the pedal when not in use. If the optional power supply is used for power, the input can remain connected.
- 7. Input 2 Connect a second input to this jack for stereo operation. Inputs I and 2 are fed through the effect then to Outputs I and 2 and will keep true stereo separation between channels.
- **8.** Foot Switch Release Pins These two pins are spring-loaded hinges that hold the pedal in place. Push these pins in with the tip of a 1/4" guitar cable to release the pedal from the pedal chassis exposing the battery compartment (See battery replacement diagram).

- 9. Indicator LED This LED indicates when the effect is turned on or off. When battery power is low (approximately 15 minutes before end of life), the Indicator LED will begin blinking to warn that the battery needs to be replaced.
- 10. Foot Switch Press the Foot Switch to turn the effect on and off.
- **II. Output I (Mono)** Connect this output to the input of a single guitar amplifier, another pedal input, or an amp effects return.
- **12. Output 2** Connect this output to the input of a second guitar amplifier when a second amp is being used.

NOTE: Use unbalanced mono instrument cables only.

Stereo Phaser Types

2 Stage: Subtle phase effect with adjustable bias control.

4 Stage: Classic 4 Stage vintage phaser.

Modern: Deep phaser with enhanced feedback and modulation.

Boutique: Unique 6 Stage phaser with deep feedback control.

10 Stage: Modern multi-stage phaser with flexible feedback/depth

controls.

Envelope: Triggered phaser where the LFO start point can be

retriggered with playing dynamics.

Dynamic: Phaser where the Depth is controlled using playing

dynamics.

Modify Knob Controls

Туре	Speed	Depth	Modify
2 Stage	Speed	Depth	Bias
4 Stage	Speed	Depth	Feedback
Modern (4 Stage)	Speed	Depth	Feedback
Boutique (6 Stage)	Speed	Depth	Feedback
10 Stage	Speed	Depth	Feedback
Envelope	Attack Time	Sweep Range	Sensitivity
Dynamic	Speed	Dynamics Range	Sensitivity

Tap Tempo

The SP-7 Phaser's Foot Switch can be used as a Tap Tempo switch for setting the phaser effect's modulation speed time during a live performance. To access Tap Tempo, do the following:

- Press and hold the Pedal Switch for 3 seconds. The effect first will turn on and the Indicator LED lights solid BLUE (NOTE: If the effect was already on, it will first turn off and then back on after 3 seconds).
- **2.** After 3 seconds of holding the Foot Switch, the Indicator LED will begin flashing BLUE indicating Tap Tempo mode is now active and the LED flashes at the current modulation Speed.
- 3. Tap the Foot Switch at least two times to set a new modulation speed. The last two pedal tap intervals set the modulation speed.

 After 4 seconds, the tap tempo function times out and you will need to tap 2 times again to set the tempo.

4. To exit Tap Tempo, press and hold the Foot Switch for 3 seconds until the Indicator LED stops flashing and lights solid BLUE again. Once Tap Tempo mode is exited, the tapped modulation speed remains active until either the Type is changed or the SPEED knob is used.

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)
- StompLock[™] (keeps your settings where you want them)

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 the adhesive protector 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:

- I. Peel the adhesive backing from the Foot Switch Glow Sticker.
- **2.** Apply the Glow Sticker to the top of the Foot Switch.



StompLock

To place the StompLock over the pedal knobs, do the following:

- Set the knobs to your preferred setting.
- **2.** Gently push the StompLock over the top of the knobs.
- **3.** To remove the StompLock, gently lift one side and then the other.



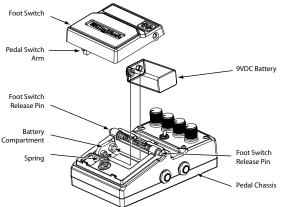
Battery Operation

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 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.



Specifications

Power Supply Polarity:

Controls: Speed, Depth, Modify, Type, On/Off Pedal

Jacks: Input I (Mono), Input 2, Output I (Mono), Output 2

Input Impedance: Effect on - $> 1 \text{ M}\Omega$ (stereo), $>500 \text{ k}\Omega$ (mono)

Effect off - True hardwire bypass

Power Supply: 9 V Alkaline Dry Battery or Harman power supply

Current Draw: 75 mA (typical at 9 VDC)

Power Consumption: 640 mW (typical w/optional power supply)

 $\textbf{Dimensions:} \hspace{1.5cm} 5.25\text{"(L)} \times 3.5\text{"(W)} \times 2.15\text{"(H)}$

Weight: 1.3 lbs.

Optional Power Supply: <u>Country (Voltage)</u>

| 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*

Compatible PSU Models

PS200R (9.6 VDC 300 mA), PS09 I 3DC* (9 VDC 1.3 A)

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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