

## COWNER'S MANUAL

Individuation

Hilles

and Il finew

## WARRANTY

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

- 1. Please register online at <u>digitech.com</u> 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. A Return Authorization number may be obtained by contacting DigiTech. 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 since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

## **TECHNICAL SUPPORT & SERVICE**

If you require technical support, contact DigiTech Technical Support. Be prepared to accurately describe the problem. Know the serial number of your device – this is printed on a sticker attached to the chassis. If you have not already taken the time to register your product, please do so now at <u>digitech.com</u>.

Before you return a product to the factory for service, we recommend you refer to this manual. Make sure you have correctly followed installation steps and operating procedures. For further technical assistance or service, please contact our Technical Support Department at (801) 566-8800 or visit <u>digitech.com</u>. If you need to return a product to the factory for service, you MUST first contact Technical Support to obtain a Return Authorization Number.

#### NO RETURNED PRODUCTS WILL BE ACCEPTED AT THE FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER.

Please refer to the Warranty information, which extends to the first end-user. After expiration of the warranty, a reasonable charge will be made for parts, labor, and packing if you choose to use the factory service facility. In all cases, you are responsible for transportation charges to the factory. If the product is still under warranty, DigiTech will pay the return shipping.

Use the original packing material if it is available. Mark the package with the name of the shipper and with these words in red: DELICATE INSTRUMENT, FRAGILE! Insure the package properly. Ship prepaid, not collect. Do not ship parcel post.

## INTRODUCTION

Thanks for choosing the DigiTech<sup>®</sup> Obscura stereo delay pedal. The Obscura was designed for the selective guitarist who wants the highest quality delay in a compact package. The Obscura provides such distinguishing features as organic delay algorithms, true bypass, constant high voltage operation, and true stereo processing, making the Obscura an essential addition to the signal chain of players who know about sound quality and demand the utmost in performance with superior tone and control.

The Obscura is more than just a digital delay pedal. Using the Repeat Hold feature, it can be used for creating interesting real-time effects that will repeat as long as you like, even when the effect is bypassed, allowing you to create amazing ambient effects and textures that you can play over the top of.

The Obscura offers 4 delay types:

- Analog
- Tape
- Lo-Fi
- Reverse

To use the Obscura pedal, enable the effect with the Footswitch (the LED will light when the effect is enabled). Adjust the LEVEL control to mix in the amount of delay effect. Select the desired delay type with the DELAY TYPE selector knob. Adjust the TIME and REPEATS controls to set the delay time and adjust the length of the delay repeats (or tail). To use Tap Tempo, press and hold the FOOTSWITCH for 3 seconds then tap in the tempo. Change the tone and quality of the delay with the TONE and DEGRADE controls. Set the TAILS switch to the 'ON' position if you want the delay tails to decay naturally after switching the effect off or want to use the Repeat Hold feature for additional real-time effect control. Set the TAILS switch to the 'OFF" position if you want the delay tails to end abruptly when switching the effect off or want to utilize the true bypass feature.

## **FEATURES**

- 4 Delay Algorithm Types
- Up to 2 Seconds of Stereo Delay Time
- Tap Tempo
- Delay Repeat Hold
- Tails On/Off Switch
- True Bypass
- Stereo 1/4" Inputs & Outputs w/ True Stereo Processing
- Constant High Voltage Power Rails
- Effect On/Off LED Indicator
- Soft Touch Vacuum Switch
- Included StompLock<sup>™</sup> & Pedalboard Hook & Loop Pad

## **USER INTERFACE**



#### 1. Tails Switch

When this switch is set to the ON position, delay tails will decay naturally when the effect is switched to bypass. When set to the OFF position, delay decays will end abruptly when the effect is switched to bypass. When the Tails Switch is set to ON, the Obscura does not utilize true hardwire bypass. If you always want to use true hardwire bypass, set the Tails Switch to the OFF position.

#### 2. DC Power Jack

Connect the specified HARMAN power supply (sold separately) to this jack. Be sure to use the proper power supply for your area's mains line voltage. See *'Specifications' on page 14* for power supply model information. The Obscura can only be powered using the external power supply.

#### 3. Delay Type Selector Knob

Selects from the following delay algorithm types:

- ANALOG Classic sound of a vintage bucket brigade analog delay circuit.
- TAPE Emulates a classic tube tape echo.
- LO-FI A low-fidelity delay that has limited bandwidth and reduced bit-depth to approximate the effects of low sample rate and 8-bit signal processing used in vintage digital delays.
- **REVERSE** A delay where the repeats are played backwards. No dry signal is present when REVERSE is selected.

#### 4. Tone Knob

Adjusts the frequency response of the delay effect, making it brighter or darker in tone.

#### 5. Degrade Knob

This knob controls the amount of degradation and its effect on the sound varies depending on which delay type is selected. Here's a description of the DEGRADE control for each delay type:

- ANALOG Increases aliasing and grit.
- TAPE Increases wow and flutter.
- LO-FI Increases "input channel overdrive".
- REVERSE Increases "tape saturation".

#### 6. Input 1 (Mono)

Use this jack when only a single connection is needed. Connect your instrument, the output of a pedal, or an amp effects send to this jack. Signals are heard at both outputs when only this jack is used.

#### 7. Indicator LED

This multi-color LED lights red to indicate when the effect is turned on. When using Tap Tempo, the LED will flash at the rate of the delay time and will flash yellow, red, or green, depending on the position of the TIME knob. See '*Tap Tempo' on page 8* for more information on using the Tap Tempo feature.

#### 8. Input 2

Connect a second input to this jack for stereo operation. Inputs 1 and 2 are processed separately through the stereo delay effect then fed to Outputs 1 and 2, keeping true stereo separation between channels.

#### 9. Footswitch

Turns the effect on and off. The Footswitch is also used for tapping in the delay time when using the Tap Tempo feature, see '*Tap Tempo' on page 8* for further information on using this feature.

#### 10. Output 2

Connect this output to the input of a second guitar amplifier when a second amp is being used. When only the Input 1 (Mono) jack is connected, guitar and delay signal can be heard in both Outputs 1 and 2 when they are used.

#### 11. Output 1 (Mono)

Connect this output to the input of a single guitar amplifier or amp effects return.

#### 12. Repeats Knob

Controls the number of delay repeats. Turn this knob clockwise to increase and counter-clockwise to decrease the number of repeats. Turn this knob to the 3 'o clock or higher position (indicated by the screened line next to the knob) to engage Repeat Hold, see 'Using Repeat Hold' on page 9 for more information.

#### 13. Time Knob

Controls the amount of delay time. When Tap Tempo is active, you can use the TIME knob to set the tap multiplier. See '*Tap Tempo' on page 8* for information on using this feature.

#### 14. Level Knob

Controls the delay level. Turn this knob clockwise to increase and counter-clockwise to decrease the delay level. Note that when the REVERSE delay type is selected, no dry signal is added, so when the LEVEL knob is at the minimum position, no signal will be heard.

## **MAKING CONNECTIONS/APPLYING POWER**

To connect the Obscura pedal to your rig:

- **1.** Turn down the amplifier's master volume control.
- 2. Make all audio connections to the Obscura as shown in 'Tap Tempo' on page 8.
- **3.** Connect the appropriate HARMAN power supply (sold separately) to the POWER input connector and connect the other end to an available AC outlet.
- **4.** Strum your guitar and gradually increase your amplifier's master volume control until the desired level is achieved.

## **CONNECTION DIAGRAMS**

#### **Mono/Stereo Amplifier Setup**



#### **Amplifier Effects Loop Setup**



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

## **EXAMPLE SETTINGS**

Try these settings to get started.

#### Get Out Of My Way





**Dirty Pulse** 

TAPE

TONE - DEGRADE

LO-FI





LEVEL

TIME- REPEATS



#### Tick Tock Runaway Clock (Oscillating)

Motion Of The Ocean (Oscillating)



Dark Stalker (Oscillating)





## ΤΑΡ ΤΕΜΡΟ

The Obscura's Footswitch can be used as a Tap Tempo switch for setting the delay time during a live performance.

To use Tap Tempo:

- 1. Press and hold the FOOTSWITCH for 3 seconds. The Indicator LED will begin flashing to indicate Tap Tempo mode is now active and the LED will flash at the current delay time rate.
- 2. Tap the FOOTSWITCH at least two times to set a new delay time. The last two pedal tap intervals set the delay time.
- 3. While Tap Tempo is active, the TIME knob can be used to set the multiplier value of eighth note, dotted eighth note (quarter note triplet), and quarter note (1:1 tap ratio). A flashing green LED indicates eighth note multiplier is selected, a flashing yellow LED indicates dotted eighth multiplier is selected, and a flashing red LED indicates the quarter note multiplier is selected.



**4.** To exit Tap Tempo, press and hold the FOOTSWITCH for 3 seconds until the Indicator LED stops flashing and lights solid RED again. Once Tap Tempo mode is exited, the tapped delay time remains active until either the delay type is changed or the TIME knob is adjusted.

## **USING REPEAT HOLD**

The Obscura has some musically useful behaviors that may not be apparent at first glance. The Repeat Hold feature can be used to create delays that repeat infinitely (or at least until you stop them). This allows you to:

- Create sonically interesting noises, rhythmic glitches, and ambient soundscapes that you can play over the top of.
- Manipulate and destroy time using Tap Tempo, the TAILS switch, and the control knobs.
- Create effects that build up or delays that run away, then fade them out or stop them abruptly.

Repeat Hold is enabled by setting the REPEATS knob to the 3 'o clock or higher position (indicated by the screened line next to the knob).



The following section describes how to use Repeat Hold and the various ways to manipulate the delay, and then it is up to your creativity to discover the musical application (that's the fun part).

To use the Repeat Hold feature:

- 1. Set the REPEATS knob somewhere below the 3 'o clock position.
- 2. Make sure the effect is enabled using the FOOTSWITCH (LED should be on).
- **3.** Play something on the guitar then turn the REPEATS knob to the full clockwise position.
- **4.** The delayed signal will now repeat infinitely and you can play over the top of it or manipulate the controls to perform real-time special effects as outlined in the following section.

**TIP:** With Repeat Hold active, setting the TAILS switch to ON will keep the Repeat Hold repeating forever, even when the effect is bypassed. When used in this way, any of the following actions can be performed while the effect is on or bypassed.

**TIP:** When performing any of the following actions, runaway oscillation can be controlled at any time by turning up the DEGRADE knob, turning down the TONE knob, or a combination of the two. To quickly stop runaway oscillation or clear the delay repeats, set the TAILS switch to OFF then bypass the effect or simply change the DELAY TYPE SELECTOR knob.

Action	Control(s) Manipulated	Instructions
Manipulate Time	TIME	<ul> <li>If starting in with a quick delay, the TIME knob can be increased to cause the delay pitch to drop and the repeats to slow.</li> <li>If starting in with a long delay, the TIME knob can be decreased to cause the delay pitch to rise and the repeats to speed up.</li> </ul>
Manipulate Time (w/ Subdivisions)	TAP TEMPO/ TIME	<ol> <li>Enter Tap Tempo mode (see 'Tap Tempo' on page 8) then tap in new times and the repeating delay will change abruptly to the new division, giving you blipping, cycling, repeats that can be timed to the tempo of your song.</li> <li>Turning the TIME knob while in the Tap Tempo mode alters the delay by changing the subdivision note values (see 'Tap Tempo' on page 8), .</li> </ol>
Manipulate Tone, Create Build-Up or Runaway	TONE	<ul> <li>Increase the TONE knob to make the delay "stand out" more and/or cause the delay to go into runaway.</li> <li>Decrease the TONE knob to move the delay "underneath" your guitar tone and/or tame runaway.</li> </ul>
Modify Character, Create Build-Up or Runaway	DEGRADE	<ul> <li>Increase the DEGRADE knob to modify the character of the sound and/or tame runaway.</li> <li>Decrease the DEGRADE knob to modify the character of the sound and/or cause the delay to go into runaway.</li> <li>NOTE: DEGRADE can alter the repeats in various ways depending on the delay type selected, see the 'Degrade Knob' section under 'User Interface' on page 2 for more information.</li> </ul>

Action	Control(s) Manipulated	Instructions
Adjust Level or Manually Fade In/Out	LEVEL	<ol> <li>Adjust the LEVEL control to alter the direct guitar vs. delayed signal levels or to manually fade delay signals in and out.</li> <li>NOTE: Delays will continue to repeat-hold under the hood until the TAILS switch is turned OFF and the effect is bypassed, the REPEATS knob is lowered to disable the Repeat Hold feature, or the DELAY TYPE SELECTOR knob is changed.</li> </ol>
Automatic Fade Out	REPEATS/ TAILS/ FOOTSWITCH	<ul> <li>To cause a delay signal to fade out automatically, lower the REPEATS knob into the delay repeats range. This will cause the Repeat Hold feature to be disabled and the delays will then repeat as long as dictated by the REPEATS knob setting (the further counter-clockwise you turn the REPEATS knob, the faster the fade out will be).</li> <li>Another option is to set the TAILS switch ON, enable bypass with the FOOTSWITCH, lower the REPEATS knob to disable Repeat Hold, then play over top the repeating delays as they fade out.</li> </ul>
Stop Abruptly and Clear Delay Repeats	TAILS/ FOOTSWITCH/ DELAY TYPE SELECTOR	<ul> <li>To abruptly stop and clear the delay repeats, bypass the effect (LED off) and set the TAILS switch to OFF or change the DELAY TYPE SELECTOR knob</li> <li>NOTE: Performing the above actions will cause the delay repeats to be lost.</li> </ul>

Using the Obscura's controls as previously described will yield a dizzying array of otherwise obscure altered delays that can be modified in real-time to create an extremely dynamic and interesting performance.

## **PERFORMANCE ACCESSORIES**

The performance accessories make integrating the Obscura pedal into any pedalboard a snap. The following accessories are included:

- Hook-and-loop Pedalboard Pad (designed to attach to the surfaces found on most commercial pedalboards)
- StompLock<sup>™</sup>
  - (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.





#### Stomplock™

The included StompLock lets you lock your settings in place, while the open-top design lets you see your settings.

To place the StompLock over the pedal knobs:

- 1. Set the knobs to your preferred settings.
- 2. Orient the StompLock so that it lines up with the knobs and gently push it over the top of the knobs.
- **3.** To remove the StompLock, grip it from the sides and gently lift it up and off the knobs.



## **SPECIFICATIONS**

Interface			
Controls:	Level, Delay Type, Time, Repeats, Tone, Degrade, Tails On/Off, Effect On/ Off		
Jacks:	Input 1 (Mono), Input 2, Output 1 (Mono), Output 2		
Inputs			
Input Impedance:	Effect on: >1 M $\Omega$ (stereo), >500 k $\Omega$ (mono)		
	Effect off: >1 M $\Omega$ (stereo), >500 k $\Omega$ (mono) with Tails switch on		
	Effect off: True hardwire bypass with Tails switch off		
Outputs			
Output Impedance:	Effect on: 1 kΩ		
	Effect off: 1 k $\Omega$ with Tails switch on		
	Effect off: True hardwire bypass with Tails switch off		
Physical			
Dimensions:	4.40" (L) x 2.65" (W) x 2.0" (H)		
Weight:	1.0 lb.		
Power			
Power Requirements:	9V DC external power supply		
Power Consumption:	1.2 W (< 125 mA @ 9V DC)		
Current Draw:	125 mA (typical at 9V DC)		
Recommended Power Sup	ply (Sold Separately)		
Power Supply Model:	PS0913DC-01 (US, JA, EU)		
	PS0913DC-02 (AU, UK)		
	PS0913DC-04 (US, JA, EU, AU, UK)		
Power Supply Polarity:	$ \textcircled{\begin{tabular}{c} \hline \hline$		
Power Supply Output:	9V DC 1.3 A		

Specifications subject to change without notice.

# HARMAN

PHONE: (801) 566-8800WEB: digitech.comSUPPORT: digitech.com/en-US/support

Obscura Owner's Manual 5085508-B

© 2017 HARMAN. All rights reserved.

DigiTech is a registered trademark of HARMAN.

