

Owner's Manual

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.
- 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 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.

Congratulations on the purchase of your new Bass Whammy™ Pedal. Designed specifically for bass, the Bass Whammy offers DigiTech's latest pitch shifting technology, classic Whammy pitch bending effects, and true bypass operation. The added Classic/Chords switch toggles between single note and chordal Whammy modes, providing rock solid pitch shifting effects.

The Bass Whammy interface features the same legacy Bass Whammy pitch bending options you're accustomed to along with some additional pitch bend settings from its guitar counterpart.

Features:

- Whammy Pitch Bending Effects
- Classic Whammy Interface
- Classic/Chords Switch
- True Bypass Operation
- MIDI In for Remote Control of Whammy Effects
- Included Power Supply

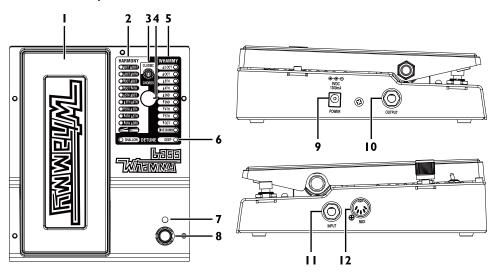
Included Items:

- · Bass Whammy Pedal
- Power Supply
- Warranty Registration Information Card

If anything is missing, please contact the factory at once.

Guided Tour

Detailed Description



1. Expression Pedal

This pedal is used to control the pitch bending amount of the selected Harmony, Whammy, or Detune effect. Rocking it forward (toe down) increases the amount of pitch bending while rocking it back (toe up) decreases the amount of pitch bending.

2. Harmony LEDs

One of these LEDs will light when a Harmony effect is selected. Harmony effects have dry signal added to the effect signal.

3. Classic/Chords Switch

This switch toggles between the classic Whammy algorithm (Classic) and modern chordal algorithm (Chords). The Classic setting is ideal for single note play while the Chords setting is best suited for bending of full chords.

4. Selector Knob

This knob is used to select one of the Whammy, Harmony, or Detune effects.

5. Whammy LEDs

One of these LEDs will light when a Whammy effect is selected. Whammy effects do not have dry signal added to the effect signal.

6. Detune LEDs

One of these LEDs will light when a Detune effect is selected. The Expression Pedal controls the amount of Detune signal mixed with the dry signal.

7. Status LED

This LED lights to indicate the effect is on. When the effect is bypassed, this LED will be off.

8. Effect On/Off Footswitch

This switch turns the Whammy, Harmony, or Detune effect on and off.

9. Power Input

Connect the power supply to this jack. Do not use any power supply other than the included power supply.

10. Output Jack

Connect this jack to another pedal input or the input of an amplifier.

11. Instrument Input

Connect your instrument to this jack.

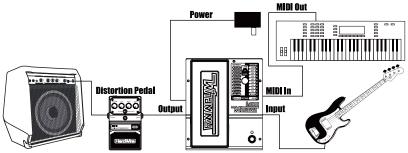
12. MIDI Input

Connect an external MIDI device to this jack for the purpose of controlling the Bass Whammy remotely.

Making Connections

The Bass Whammy pedal is extremely easy to set up and use. Follow these steps to get up and running.

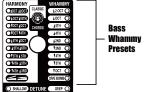
- 1. Connect your instrument to the Bass Whammy's Input Jack.
- Connect from the Bass Whammy's Output Jack to your favorite distortion pedal or to your amplifier.
- 3. If using an external MIDI device for control, connect from the MIDI out of the MIDI device to the Bass Whammy's MIDI Input.
- **4.** Connect the included power supply to an AC outlet and the other end to the Bass Whammy's **Power Input**.
- **5.** Turn on your amp and adjust the volume to the desired level.
- **6.** Use the **Effect On/Off Footswitch** to enable the effect, rotate the **Selector Knob** to select the desired effect, and rock the Expression pedal.



Effects

Whammy Effects

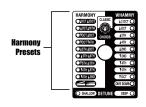
This group of effects will bend your incoming signal either up or down depending upon the effect setting you have chosen. As the Expression Pedal is rocked back and forth, the signal will bend from the original input pitch (toe up), to the pitch specified by the selected effect setting (toe down).



2 OCT UP – Bends your input note two octaves up.
1 OCT UP – Bends your input note one octave up.
5TH UP – Bends the input note 7 semitones (5th interval) up.
4TH UP – Bends the input note 5 semitones (4th interval) up.
2ND UP – Bends the input note 2 semitones (2nd interval) up
2ND DN – Bends the input note 2 semitones (2nd interval) down.
4TH DN – Bends the input note 5 semitones (4th interval) down.
5TH DN – Bends the input note 7 semitones (5th interval) down.
1 OCT DN – Bends your input note one octave down.
DIVE BOMB – Bends your input note three octaves down.

Harmony Effects

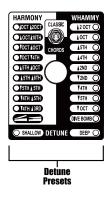
This group of effects add a harmony to your incoming signal. Both the harmony note and the input signal are mixed together as if two basses were playing simultaneously. As you rock the pedal back and forth, the harmony note bends between two intervals specified by the selected effect setting, but the input signal remains unchanged.



OCT UP/2 OCT UP-	Bends the harmony between one octave above (toe up)
	and 2 octaves above (toe down) the input note.
OCT UP/10TH UP -	Bends the harmony between an octave above (toe up)
	and a 10th above (toe down) below the input note.
OCT DN/OCT UP -	Bends the harmony between an octave below (toe up)
	and a octave above (toe down) the input note.
OCT DN/4TH DN -	Bends the harmony between an octave below (toe up)
	and a fourth below (toe down) the input note.
5TH UP/OCT UP -	Bends the harmony between a fifth above (toe up) and
	an octave above (toe down) the input note.
5TH UP/6TH UP -	Bends the harmony between a fifth above (toe up) and
	an sixth above (toe down) the input note.
5TH DN/5TH UP -	Bends the harmony between a fifth below (toe up) and a
	fifth above (toe down) the input note.
4TH DN/5TH UP -	Bends the harmony between a fourth below (toe up)
	and a 5th above (toe down) the input note.
4TH DN/3RD UP -	Bends the harmony between a fourth below (toe up)
	and a major third above (toe down) the input note.

Detune Effects

This group of effects create a copy of your input signal, shift the pitch of the copied signal, then mix it back with the original signal. As the Expression Pedal is rocked back and forth, the level of this detuned signal is changed. With the pedal in the toe up position, only the original dry signal is heard. As the pedal is rocked forward, more of the detuned signal is mixed with the dry signal.



SHALLOW – The copied signal is slightly detuned from the original pitch.

DEEP – The copied signal is substantially detuned from the original pitch.

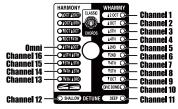
MIDI Functions

The Bass Whammy features a MIDI input for receiving incoming MIDI data. MIDI messages can select a Whammy effect and set whether the effect is in an active or bypassed state. MIDI CC messages can then be used to control the Bass Whammy Expression Pedal position.

MIDI Channel

The Bass Whammy can receive MIDI messages on any, or all MIDI channels. The following steps outline the procedure for accessing or changing the MIDI channel.

- 1. Disconnect the power from the Bass Whammy pedal.
- Press and hold the Effect On/Off Footswitch while reconnecting the power. One of the Effect LEDs will begin to flash indicating the currently selected MIDI channel.
- Using the reference chart below, rotate the Selector Knob to select the desired MIDI channel.
- 4. Press the Effect On/Off Footswitch again to exit the MIDI set up menu.



MIDI Program Changes

The Bass Whammy uses MIDI Program Change commands for effect selection. Effects can be selected in either an active or bypassed state. The following illustrations show the MIDI Program Change mappings for Classic mode and Chords mode.

Effects MIDI Program Change Mapping (Classic Mode)

When set to Classic mode, the following illustration outlines the Program Change commands recognized by the Bass Whammy and the corresponding effect setting and its status.

MIDI Program Change

MIDI Program Change

Bypass	Active	HARMONY WHAMMY ACTIVE	Bypass
42	21 —	CLASSIC 12 OCT 0	22
41	20 —	1 OCT / LOCT C 2	23
40	19 —	VOCT LOCT CHORDS A5TH 3	24
39	18 —	TOCT V4TH A4TH C	25
38	17 —	7.5TH /OCT 12ND 5	26
37	16 —	15TH 16TH 12ND 0= 6	27
36	15 —	V4TH O	28
35	14 —	▼ 14TH 15TH ▼ 5TH ○ 8	29
34	13 —	VOCT O	30
		DIVE BOMB O	31
33	12 —	SHALLOW DETUNE DEEP11	32

Effects MIDI Program Change Mapping (Chords Mode)

When set to Chords mode, the following illustration outlines the Program Change commands recognized by the Bass Whammy and the corresponding effect setting and its status.

MIDI Program Change

MIDI Program Change

Bypass	Active (HARMONY WHAMMY Active	Bypass
84	63 CLASSIC 43	64
83	62 - 10CT (10TH) - 10CT (-44	65
82	61 TOCT LOCT CHORDS A5TH C 45	66
81	60 — 10CT V4TH A4TH — 46	67
80	59 — 15TH LOCT 12ND — 47	68
79	58 — TETH (SIH) 12ND — 48	69
78	57 — 15TH A 5TH 14TH — 49	70
77	56 <u>14TH 15TH</u> 15TH 50	71
76	55 14TH 13RD 10CT 51	72
	DIVE BOMB O	73
75	54 SHALLOW DETUNE DEEP 53	74

MIDI Continuous Control

Using MIDI continuous control commands, the Bass Whammy's Expression Pedal position can be remotely controlled. MIDI CC11 adjusts the Expression Pedal position. A value of 0 on MIDI CC11 corresponds to a toe up position and a value of 127 corresponds to a toe down position.

Calibrating the Expression Pedal

In the unlikely event that the Expression Pedal does not respond properly or that the note does not bend or return to the correct pitch, it may need to be re-calibrated. The following steps outline the procedure for Expression Pedal re-calibration:

- 1. Disconnect the power from the Bass Whammy pedal.
- Press and hold the Effect On/Off Footswitch while reconnecting the power. This
 enables MIDI and Calibration Setup. Wait for one of the Whammy, Detune, or
 Harmony LEDs to begin flashing (indicating the currently selected MIDI channel) then
 release the footswitch.
- 3. Rock the Expression Pedal fully forward (toe down) and fully back (toe up) at least two times. The 4 Harmony LEDs will light back and forth (from OCT DN/4TH DN to OCT UP/2 OCT UP) as the pedal is rocked indicating the pedal is calibrating.
- **4.** When finished, press the **Effect On/Off Footswitch** again to exit the MIDI and Calibration set up and return to normal operation.

Specifications

Instrument Input Type: 1/4" Unbalanced TS

Max Input Level:+5 dBuInput Impedance:1 MΩ

MIDI Input: 5-Pin Din

Output Type: 1/4" Unbalanced TS

Max Output Level:+10 dBuOutput Impedance: $1 \text{ k}\Omega$ Sample Rate:44.1 kHz

Frequency Response: 20 Hz to 20 kHz

Signal to Noise Ratio: > -105 dB (A weighted); ref = max level, 22 kHz bandwidth

THD: 0.004% @ 1 kHz; ref = 1 dBu w/ unity gain

A/D Conversion: 24 bit D/A Conversion: 24 bit

Power Consumption: 2.4 Watts (< 265 mA @ 9 VDC)

Power Requirements: 9 VDC External Adapter
Power Adapter: PS0913DC-01 (US, JA, EU)

PS0913DC-02 (AU, UK)

PS0913DC-04 (US, JA, EU, AU, UK)

Dimensions: $6.5" \text{ (W)} \times 7.75" \text{ (D)} \times 2.5" \text{ (H)}$

Shipping Weight: 3.6 lbs.





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Bass Whammy Owner's Manual PN:5044688-B

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