BP355

Bass Multi-Effects Processor

::∷DigiTech®
by HARMAN

Owner's Manual

Professional audio equipment

BP355

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.

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Warranty

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

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty, or you can register via our website (www.digitech.com).

2. DigiTech warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.

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 burden of the consumer.

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.

DECLARATION OF CONFORMITY

Manufacturer's Name: DigiTech
Manufacturer's Address: 8760 S. Sandy Parkway
                               Sandy, Utah 84070, USA

declares that the product:
Product name: BP 355

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

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 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 external power supply 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 11, 2010

European Contact: Your local DigiTech / Johnson Sales and Service Office or

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Section 1 - Introduction

Getting Acquainted

Congratulations on your purchase of the BP355. You now have an incredibly advanced modeling bass processor that can keep up with your creative impulses and even increase them. Armed with DigiTech®'s patented AudioDNA2® custom audio DSP chip, the BP355 gives you a huge selection of tones and effects, right at your fingertips. When you easily dial up a tone or effect from the Tone Library or the Effects Library, you'll appreciate the accuracy in each model, and the dynamic interaction in each tone. Add USB support for computer recording with the included Cubase® LE software and a built-in drum machine, and you have the BP355: the key to unlock your creative potential.

Included Items

Before you get started, please make sure that the following items have been included:

- **BP355**
- **Cubase® LE Recording Software DVD**
- **PS0913B Power Supply**
- **Warranty Card**

The utmost care was taken while your BP355 was being manufactured. Everything should be included and in perfect working order. If anything is missing, contact the factory at once. Please help us become acquainted with you and your needs by sending us your completed warranty card or registering online at www.digitech.com. It is your safeguard should a problem arise with your BP355.

About the BP355

Performance Mode

When you first apply power to the BP355, it powers up in Performance mode. Performance mode provides access to all of the presets within the BP355 via the **Up** and **Down Footswitches**. The **Amp A/B Footswitch** toggles between two amp channels for the selected preset. **Knob 1** selects a tone from the Tone Library, **Knob 2** selects an effects chain from the Effects Library, **Knob 3** adjusts the Effects Level, and **Knob 4** adjusts the Amp Gain, **Knob 5** adjusts the Amp Level, and **Knob 6** adjusts the Master Level (volume).

Stompbox Footswitch Mode

The BP355 includes a very convenient Stompbox Footswitch mode, where the Up, Down, and Amp A-B footswitches function as on/off switches for the Distortion, Chorus/FX and Delay effects. To enable Stompbox Footswitch mode, press the **Up** and **Amp A/B Footswitches** simultaneously. The Display will read $STOMP$ briefly indicating Stompbox footswitch mode has been enabled. The **Down**, **Up**, and **Amp A/B Footswitches** will now turn Distortion, Chorus/FX, and Delay effects respectively on and off in the current preset. **Note:** While Stompbox footswitch mode is active, you cannot navigate through the BP355's presets, nor can you change the Amp A/B channels in the current preset.

To exit Stompbox footswitch mode and return to Preset footswitch mode, press the **Up** and **Amp A/B Footswitches** simultaneously again. The Display will read $PRESET$ briefly indicating Preset footswitch mode is now active again.

Bypass Mode

The BP355 presets can be bypassed via an analog bypass circuit for a clean, unprocessed bass signal. To bypass the BP355, press the **Up** and **Down Footswitches** simultaneously. The Display reads $BYPASS$ indicating the preset is bypassed. Press any footswitch to exit Bypass and return the BP355 to the last preset used.

Tuner Mode

The Tuner in the BP355 allows you to quickly tune or check the tuning on your bass. Enter Tuner mode by pressing and holding the **Up** and **Down Footswitches** simultaneously for 2 seconds. The Display briefly shows $TUNER$ indicating that you are in Tuner mode. To begin tuning, play a note on your bass (a harmonic at the 12th fret usually works best). The Display shows the note being played. The Matrix LEDs indicate whether you are sharp or flat. The top 5 red LEDs indicate the note is sharp and should be tuned down. The bottom 5 red LEDs indicate the note is flat and should be tuned up. The center green LED indicates the note is in tune. The output is muted in Tuner mode. The Expression Pedal controls the bass volume while tuning. Exit tuner mode by pressing any **Footswitch**.
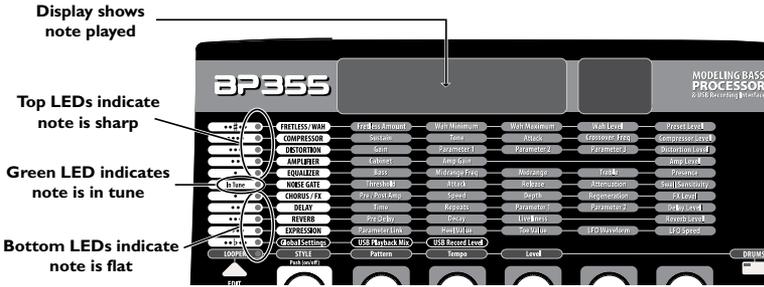
In Tuner mode, you can change your tuning reference. The default factory setting is A=440 Hz (displayed as $A=440$). Rotating **Knob 1** selects alternate dropped tunings and tuning references. Alternate tunings are A = A♭, A = G, A = G♭, and tuning references A=427 - A=453. The display window briefly flashes the current tuning reference.

Tone Library (Knob 1)

In Performance mode, this knob selects a variety of genre-based amp tone defaults ranging from Blues to Metal to Country. Behind the scenes, the Fretless/Wah, Compressor, Distortion, Amp/Cabinet model, EQ, and Noise Gate are configured to create a specified tone with a single click of this knob. You can further refine the sound by editing the preset (see ***Editing/Creating Presets*** on page 11). Changing between different Tone Library defaults does not change the Chorus/FX, Delay or Reverb, letting you experiment with different amp styles quickly in the context of the current effect chain.

Effects Library (Knob 2)

In Performance mode, this knob selects a variety of post-amplifier model effect chains (Chorus, Chorus + Delay, Delay + Reverb, etc.). You can further refine the sound by editing the preset (see ***Editing/Creating Presets*** on page 11). Changing between different Effects Library defaults does not change the Fretless/Wah, Compressor, Distortion, Amp/Cabinet model, EQ, and Noise Gate settings, letting you experiment with different effect chains quickly in the context of the current amp tone.

Effects Level (Knob 3)

In Performance mode, this knob changes the relative level of the post-amp effects (Chorus/FX, Delay, and Reverb). This can be thought of as an effects mix control, where turning this knob clockwise increases the level of these effects and turning it counter-clockwise decreases the level of these effects.

Amp Gain (Knob 4)

This knob adjusts the Gain (distortion) for the selected Amp model (not available for Direct).

Amp Level (Knob 5)

This knob adjusts the Level (volume) of the selected Amp model.

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Master Level (Knob 6)
This knob controls the overall output volume of all of the BP355's presets.

X-Edit™ Editor/Librarian
You can edit your BP355 with your computer, using the X-Edit™ Editor/Librarian. Download X-Edit™, USB drivers, and documentation from www.digitech.com.

Presets
Presets are named and numbered locations of programmed sounds which reside in the BP355. Presets are recalled with the Footswitches. The active effects in each preset are indicated by lighted LEDs in the Effect Matrix. The BP355 comes with 70 User presets (1-70) and 70 Factory presets (F1-F70). The User presets are locations where your creations may be stored. The Factory presets do not allow you to store any changes to them. From the factory, the 70 User presets are exact duplicates of the 70 Factory presets. This allows you to create your own presets without losing the sounds that came with the BP355.

Create Your Sound in Three Easy Steps

1.

Tone Library
Select one of 30 different tones from rock, metal, blues, funk, and more. The tones consist of a combination of Fretless/Wah, Compressor, Distortion Stompbox, Amplifier/Cabinet, EQ, and Noise Gate.

For a complete list of available tones, see page 33.

2.

Effects Library
Select one of 30 diffferent effects chains. The effects consist of a combination of Chorus/FX, Delay, and Reverb.

For a complete list of available effects chains, see page 33.

3.

Effects Level
Adjust the overall level of the post-amp effects to your liking.

... Rock on!
To make further edits, refer to page 11.
To store the preset, refer to page 12.

A Guided Tour of the BP355
Front Panel
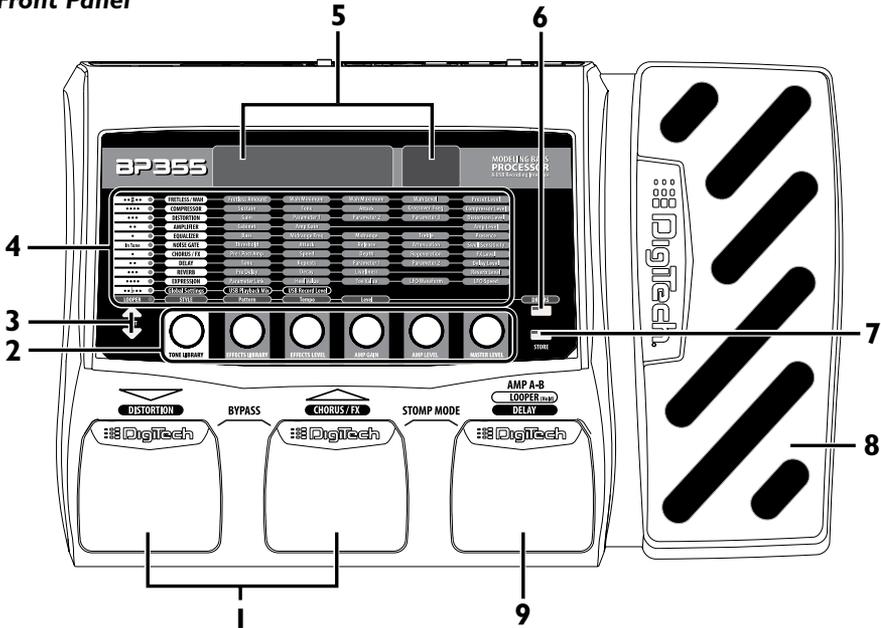
1. Up/Down Footswitches
These two Footswitches are used to select presets, access the Tuner, or bypass the BP355. The Footswitch on the right will select the next preset up, and the Footswitch on the left will select the next preset down. Pressing both Footswitches together will bypass the currently selected preset. Pressing and holding both Footswitches will access the Tuner. Press any Footswitch to exit Bypass or Tuner mode.

2. Knobs 1-6 (From left to right)
These six knobs perform various functions, depending on which mode is currently active and what (if anything) is being edited. The functions are listed below:

Tone Library (Knob 1)
1. In Performance mode, this knob selects from a library of preset amp tones. (See page 33 for a list of preset amp tones.)
2. When editing a preset, this knob changes the Amp or Effect model for the selected row.
3. When editing an Effect row, press this knob to turn on or bypass the effect.
4. When the Drums row is selected, this knob selects the first pattern of each style (Rock, Blues, Jazz, etc.).
5. When the Expression row is selected, this knob selects the Expression Pedal, LFO 1, and LFO 2 parameter links.

Effects Library (Knob 2)
1. In Performance mode, this knob selects from a library of preset effect chains. (See page 33 for a list of preset effect chains.)
2. When editing a preset, this knob modifies the parameter listed in the column directly above it for the selected Effect row.
3. When the Drums row is selected, this knob selects the different drum patterns available.
4. When the Expression row is selected, this knob selects which parameter is assigned to the Expression Pedal, LFO1 or LFO2.

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Effects Level (Knob 3)
1. In Performance mode, this knob adjusts the overall level of post amp model effects (Chorus/FX, Delay, and Reverb).
2. When editing a preset, this knob modifies the parameter listed in the column directly above it for the selected Effect row.
3. When the Drums row is selected, this knob adjusts the playback Tempo of the drum machine.
4. When the Expression row is selected, this knob selects the heel value for the parameter linked to the Expression Pedal.

Amp Gain (Knob 4)
1. In Performance mode, this knob adjusts the Amp Gain (distortion) for the selected Amp model. To change the Amp Gain for Amp A or Amp B, select amp channels using the **Amp A/B Footswitch** and use this knob to change each channel's Amp Gain.
2. When editing a preset, this knob modifies the parameter listed in the column directly above it for the selected Effect row.
3. When the Expression row is selected, this knob selects the toe value for the parameter linked to the Expression Pedal.
4. When the Drums row is selected, this knob changes the drum machine playback level.

Amp Level (Knob 5)
1. In Performance mode, this knob adjusts the Amp Level (volume) of the selected Amp model. To change the Amp Level for Amp A or Amp B, select amp channels using the **Amp A/B Footswitch** and use this knob to change each channel's Amp Level.
2. When editing a preset, this knob modifies the parameter listed in the column directly above it for the selected Effect row.
3. When the Expression row is selected, this knob selects the LFO waveform. LFO 1 or LFO 2 must first be selected with **Knob 1** for this parameter to be available.

Master Volume (Knob 6)
1. In Performance mode, this knob adjusts the output level of the BP355.
2. When editing a preset, this knob modifies the parameter listed in the column directly above it for the selected Effect row.
3. When the Expression row is selected, this knob sets the LFO speed. LFO 1 or LFO 2 must first be selected with **Knob 1** for this parameter to be available.

3. Edit Buttons
These buttons navigate up and down the matrix, selecting the row of parameters which the knobs will edit. Press one of these buttons to step through the Effect rows, and return to the preset name display. See page 11 for more information about editing presets.

4. Matrix
The matrix provides information regarding the current preset and parameter edit functions. In Performance mode, the LEDs running down the left side of the Matrix provide a visual indication of which effects are in use for the selected preset. While editing a preset, the LEDs indicate that the Effect row is selected for editing. In Tuner mode, the LEDs indicate whether the note played is sharp, flat, or in tune.

5. Display
The Display provides information for different functions depending on the mode that has been selected. In Performance mode, the Display will show the currently selected preset name and number. In Edit mode, the Display will show the name and value of the parameter being adjusted. In Bypass mode, the Display will read $BYPASS$. In Tuner mode, the Display will show the note played.

6. Drums

The Drums button is used to turn on and off the BP355's built-in drum machine. When the Drums button is turned on, the Drums LED lights and the selected drum pattern plays continuously. Select the Drums row using the **Edit** buttons and use **Knobs 1-4** to change the style, pattern, tempo, and level of the drum machine. See page 26 for more information about the drum machine and a list of patterns.

Note: The drum machine cannot be used while the Phrase Looper is active.

7. Store

The Store button is used to save your custom edits to the user presets. See page 12 for more information about storing presets.

8. Expression Pedal

The Expression Pedal provides real-time control of the BP355's Volume, Wah, or one of several assignable effects parameters. Almost every parameter is available for Expression Pedal control. The Expression Pedal is equipped with a V-switch that turns the Wah feature on or off when you apply extra pressure to the toe. See page 13 for more information about Wah models; see page 28 to learn about adjusting V-switch sensitivity and calibrating the Expression Pedal; refer to page 32 for a list of parameters you can link to the Expression Pedal.

9. Amp A/B Footswitch

This Footswitch switches between two amp channels for the selected preset. The Display will read AMP A when channel A is selected, and AMP B when channel B is selected. Pressing and holding the Amp A/B footswitch enables and disables the Phrase Looper; see page 26 for more information about using the Phrase Looper.

Note: You can apply different EQ settings, Amp models and/or Amp settings to each amp channel (Amp A and Amp B). When the EQ or Amp row is selected, press the **Amp A/B Footswitch** to select a channel. The display will show which channel is selected (AMP A or AMP B).

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Rear Panel
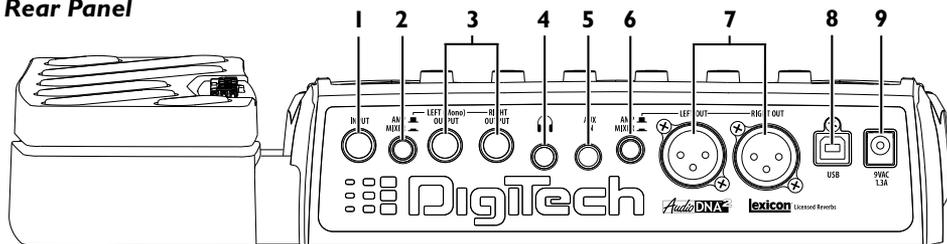
1. Input
Connect your instrument to this high-impedance TS input.

2. Amp / Mixer (for the 1/4" Outputs)
This button optimizes the BP355's 1/4" outputs for use when plugged into a bass amp or a mixer/recording device. When set to Mixer ("In" position; display reads $1/4MIX$), speaker compensation is turned on and the outputs are optimized for connecting to a mixer or recording device. When set to Amp ("Out" position; display reads $1/4AMP$), the outputs are optimized for running directly in to the input of a bass amp.

3. 1/4" Left (Mono) and Right Outputs
Connect the Left (Mono) output to the input of a single amplifier (or mixer input) for mono operation. Connect the Left and Right outputs to the inputs of 2 amplifiers (or 2 mixer channels) for stereo operation.

4. Headphones
Connect stereo headphones to this 1/8" jack. For proper frequency response, the **XLR Amp/ Mixer** switch should be set to Mixer ("In" position) when using headphones. Headphones with 16-100 Ohm impedance are recommended.

5. Aux In
Connect the headphone output of an MP3 or CD player using a stereo 1/8" cable to this 1/8" stereo TRS jack for rehearsing with your favorite pre-recorded material. Adjust the output level of your playback device and the BP355's **Master Level** knob for the proper volume balance.

6. Amp / Mixer (for the XLR Outputs)
This button optimizes the BP355's XLR outputs for use when plugged into a power amp/speaker system or a mixer/recording device. When set to Mixer ("In" position; display reads $XLRMIX$), speaker compensation is turned on and the outputs are optimized for connecting to a mixer, recording device or headphones. When set to Amp ("Out" position; display reads $XLRAMP$), the outputs are optimized for running directly in to the input of a bass amp or power amp.

7. XLR Balanced Line Outputs
Connect these outputs to your power amplifier/speaker system or to a mixing console that accepts balanced XLR connections. Speaker compensation can be enabled on these outputs when connected to a full-range speaker system. The XLR outputs are always configured for stereo operation.

8. USB Port
The USB port is for connecting the BP355 to a computer and serves two purposes: (1) for use with the downloadable X-Edit™ Editor/Librarian software, and (2) for streaming audio to and from the computer. The BP355 will stream 2 channels up and 2 channels down from the computer at 44.1kHz, 16 and 24 bit. A utility panel in the Editor/Librarian controls the direct/ playback mix and USB record level with the included Cubase® LE software, or any recording software the BP355 is connected to. **Knobs 4** and **5** also control the direct/playback mix and USB record level when USB is connected and the Fretless/Wah Row is selected.

Note: X-Edit Editor/Librarian software and USB drivers can be downloaded at www.digitech.com.

9. Power Input
Connect only the DigiTech® PS0913B power supply to this jack.

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Section Two - Getting Started

Making Connections
There are several different connection options available with the BP355. Before connecting the BP355, make sure that the power to your amplifier and the BP355 is turned off. There is no power switch on the BP355. To turn the BP355 on or off, connect or disconnect the included PS0913B power supply from the **Power Input** jack.

Mono Operation - Amplifier
Connect your bass to the **Input** of the BP355. Connect a single mono instrument cable from the **Left (Mono)** output of the BP355 to the instrument input or effect return on your amplifier. Set the **¼″ Amp/Mixer** switch to Amp.
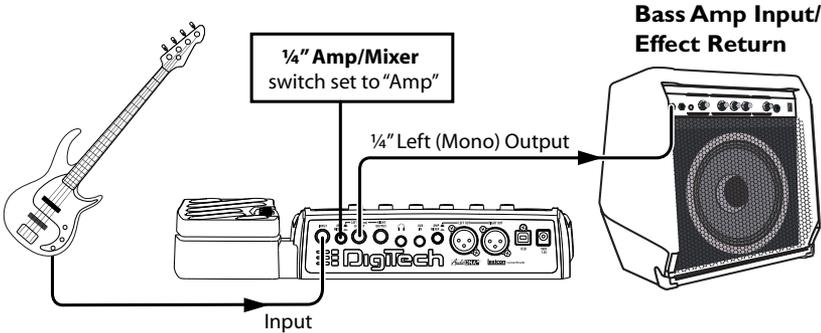
Stereo Operation
For stereo operation connect the bass to the **Input** of the BP355. Connect one cable to the BP355's **Left (Mono)** output, and another cable to the BP355's **Right** output. Connect one cable to the input of one amplifier, channel of a mixer, or power amp. Connect the second cable to a second amplifier, second channel of a mixer, or power amp. If connecting to a mixing console, set the pan controls of the mixer channels hard left and right in order to retain stereo separation. If connecting to a mixer, set the **¼″ Amp/Mixer** switch to Mixer. If connecting to two amplifiers, set the **¼″ Amp/Mixer** switch to Amp.

Stereo Amp Setup
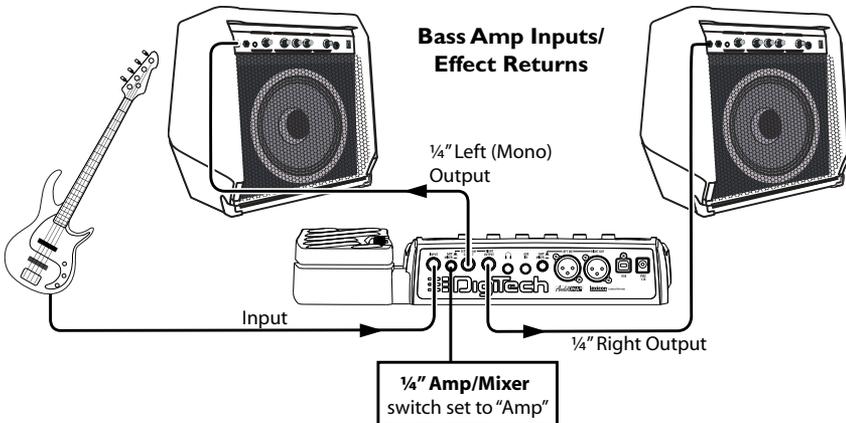
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Stereo Mixer Setup

XLR Amp/Mixer
switch set to "Mixer"

Input

XLR Left Out

XLR Right Out

Computer Recording Setup

Studio Reference
Monitors

XLR Left Out   XLR Right Out

USB

XLR Amp/Mixer
switch set to "Mixer"

Input

Amp/Mixer Setup

PA Speaker (Left)

PA Speaker (Right)

Stereo Power Amp
2- Speaker Cabs

Mixer

1/4" Left and
Right Outputs

XLR Left and
Right Outputs

Input

¼" Amp/Mixer
switch set to "Amp"

XLR Amp/Mixer
switch set to "Mixer"

9
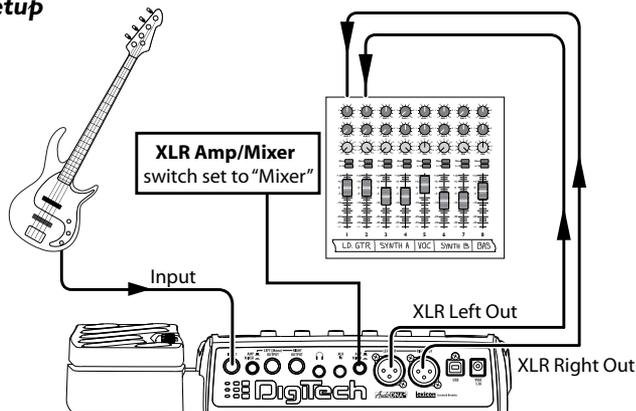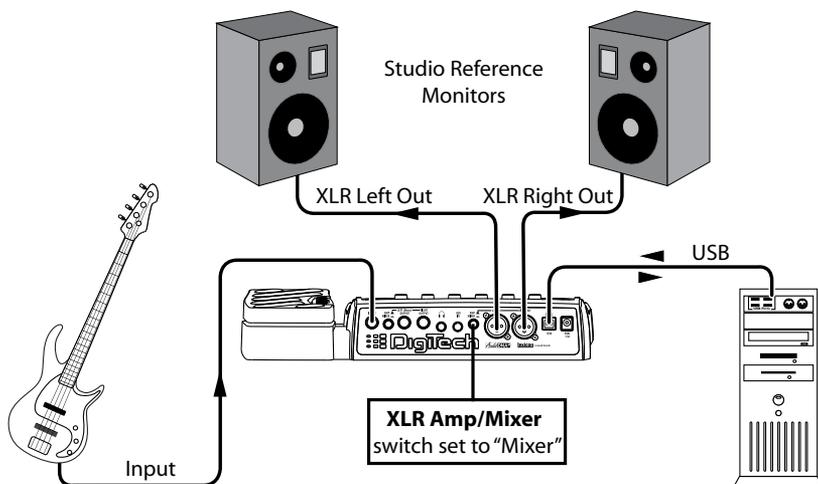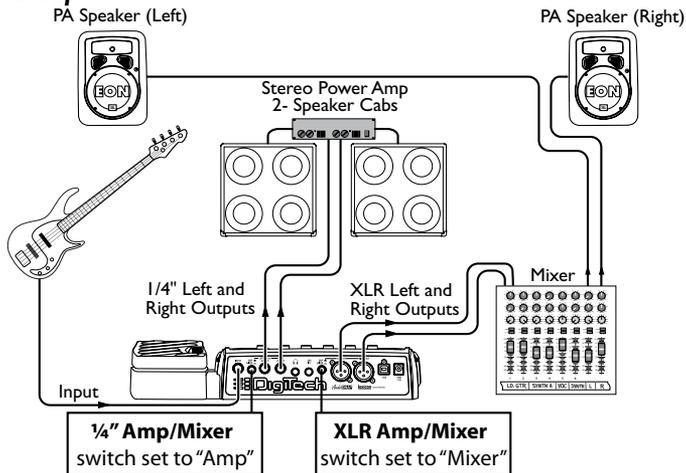
Applying Power

Before applying power to anything, set your amp(s) to a clean tone and set the tone controls to a flat EQ response (on most amps, this would be 0 or 5 on the tone controls). Then follow the steps listed below.

1. Turn the amp volume all the way down.
2. Connect the plug of the PS0913B power supply to the power jack on the rear panel of the BP355.
3. Connect the other end of the PS0913B power supply to an AC outlet. Turn the BP355's **Master Level** knob (**Knob 6**) down to "0".
4. Turn the power of your amplifier(s) to the on position and adjust the volume(s) to a normal playing level.
5. Gradually increase the BP355's **Master Level** knob to achieve the desired volume.

2. Connect PS0913B to power jack

4. Turn amp volume up
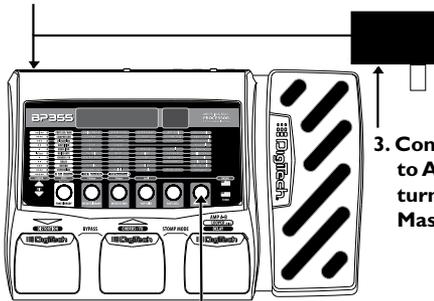
3. Connect PS0913B to AC outlet and turn the BP355's Master Level to "0"

1. Turn amp volume down

5. Turn the BP355's Master Level to the desired listening volume

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Section Three - Editing Functions

Editing/Creating Presets

The BP355 is designed to make preset editing and creation easy and intuitive. When creating your own sound, you must first start with an existing preset. Note that the preset you begin with doesn't have to be in the memory location you intend to have it reside, since you can store it to any User preset location during the store procedure.

The easiest way to start is by using the **Tone Library** and **Effects Library** knobs. The **Tone Library** knob will let you select from a variety of pre-programmed amp/distortion tones (see page 33) based on different musical styles. The **Effects Library** knob will then let you select from a palette of effects chains (see page 33), from simple delays to full multi-effect signals with modulation, delay and reverb. Use the **Effects Level Knob** to increase or decrease the overall Chorus/FX, Delay and Reverb levels if desired. Using these three controls should get you close to a sound you are after. From there you can then use the **Edit** buttons to navigate through the individual effects for some fine tune edits.
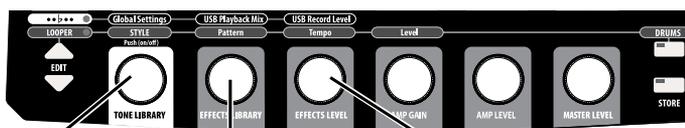
1. Select a tone with the Tone Library knob

2. Select an effect or effects chain with the Effects Library knob

3. Adjust the effects level with the Effects Level knob

To edit and create a preset:
1. Use the **Up** and **Down Footswitches** to select the preset you wish to edit.
2. If you find a preset close to what you want, you can begin editing the effect parameters by pressing the **Edit Up/Down** buttons and selecting the Effect row you want to edit.
3. If you are trying to find something different from the existing presets, begin by using the **Tone Library**, **Effects Library** and **Effects Level** knobs to get close to a sound you want.
4. Press the **Edit Up/Down** buttons to begin selecting the individual Effects rows to edit their parameters.
5. To bypass or enable an Effect row, press the **Tone Library** knob.
6. Use the **Knobs 2-6** to modify the effects' parameter settings.
7. When editing the Amp Model and EQ rows, use the **Amp A/B Footswitch** to select between the two amp channels. You can then edit each channel's Amp Model, Cabinet Model, Amp Gain, Amp Level, and EQ settings independently.
8. Select the **Fretless/Wah** row using the **Edit Up/Down** buttons and use **Knob 6** to set the overall Preset Level.

Note: Anytime a stored value within a preset is changed, the **Store** button LED lights up. This indicates that you need to store the changes. Changing presets, or turning the power off before storing any changes, erases any changes made and the BP355 will revert to the stored values for the preset.

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Storing/Copying/Naming a Preset

Once the preset has been modified to your liking, you may store your settings to any of the 70 User preset locations (presets 1-70). The following steps outline the procedure for storing changes to a preset or copying a preset to a different location:

1. Press the **Store** button once. The **Store** button LED blinks and the first character in the Display flashes, indicating that you can now name your custom creation.
2. Use **Knob 1** to select the alpha-numeric character and **Knob 2** to select the next character location.
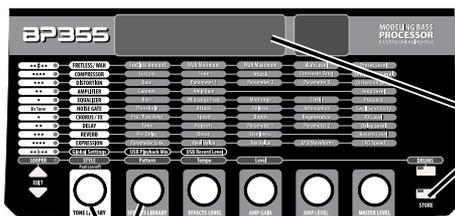
1. Press Store; characters in Display flash individually

2. Use Knobs to name Preset

3. Once the desired name is shown in the display, press the **Store** button again to enter the second stage of the storing process. The red Display begins to flash.
4. Select the User preset location where your new sound will reside using the **Up** and **Down Footswitches**. The displays show the preset name and User preset number about to be overwritten.
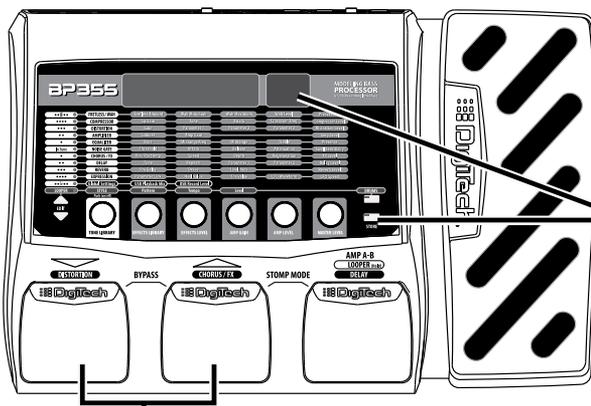
3. Press Store again; Preset number flashes

4. Select destination with Footswitches

5. Press the **Store** button again to save the changes.

The procedure for copying one preset to another preset location is the same. Use the **Footswitches** to select the preset that you want to copy, then follow steps 1-4 for storing a preset as described above. Press either **Edit** button at any time to abort the Store procedure.

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Section Four - Models and Parameters

About the Models
The BP355 can be thought of as several different "virtual" amplifiers and individual, high-tech stompboxes in a single programmable package. With stompboxes, the order in which they are connected affects the overall sound. The BP355 has placed the Amp and Effect models in an order for optimum results. The following diagram shows the order in which they are connected.
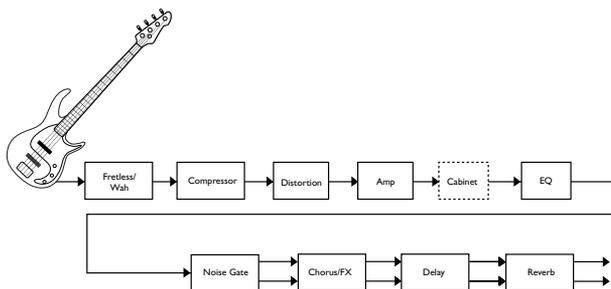
Model Definitions
Each Amp and Effect model within the BP355 can be programmed to suit your personal taste and application. Understanding how these components alter the sound, and how each parameter alters the effect, will help you achieve the sound you are looking for. The following overview of the BP355's effects outlines what each effect and parameter does.

Fretless/Wah
The **Fretless** simulator creates a fretless bass sound when using a fretted bass. **Wah** is an effect controlled by an Expression Pedal making the bass sound as if it's saying "Wah."

> **Fretless/Wah Model** - **Knob 1** selects the Fretless Simulator or Wah model.
> *FRET 1 - 3* (Fretless Simulator), *CRYWAH* (based on a Dunlop® Cry Baby Wah®), *CLYDE* (based on a Vox® Clyde McCoy™ Wah), and *FULRNG* (DigiTech® Full Range Wah sweeps the entire spectrum of audible frequencies). Press this knob to turn the model on and off.

> **Fretless Amount - Knob 2** adjusts the amount of Fretless Simulator mixed in with the dry signal. Ranges from *0* to *99*.

> **Wah Minimum - Knob 3** adjusts the Wah Pedal Minimum. Ranges from *0* (toe up) to *99* (toe down).

> **Wah Maximum - Knob 4** adjusts the Wah Pedal Maximum. Ranges from *0* (toe up) to *99* (toe down).

> **Wah Level - Knob 5** adjusts the Wah Level. Ranges from 0dB to +12dB.

Note: If any of the 3 Wah types are selected in Fretless/Wah, the wah can be turned on and off by pressing firmly on the Expression pedal toe. The Expression pedal will override any expression link and control the wah when it is enabled. If any of the 3 Fretless types are selected, Wah cannot be used and pressing on the Expression pedal toe will do nothing.

Compressor

A **Compressor** is used to increase sustain, tighten up the bass, and prevent the signal from clipping the input of other effects. It sets a maximum boundary for the strength of a signal.

Comp Model - Knob 1 selects one of three Compressor models: $BIGCMP$ (DigiTech® Compressor), $CSCOMP$ (Based on a Boss® CS-2 Compressor/Sustainer), or $DYNCOMP$ (Based on an MXR® Dynacomp). Press this knob to turn the selected Compressor model on and off.

Knobs 2-6 have the following functions for the various Compressor models:

Compressor Model	Knob 2 (Sustain)	Knob 3 (Tone)	Knob 4 (Attack)	Knob 5 (Crossover Freq)	Knob 6 (Compressor Level)
$BIGCMP$	Sustain	Tone	Attack	Crossover	Level
$CSCOMP$	Sustain	Attack	--	--	Level
$DYNCMP$	Sensitivity	--	--	--	Output

Distortion

The BP355 models the tones of 18 popular distortion stompboxes, each of which can be tweaked and modified, just like the real thing.

Distortion Model - Knob 1 selects one of 18 Distortion models. Press this knob to turn the selected Distortion model on and off.

$SCREAM$	Based on an Ibanez® TS-9	$DSDIST$	Based on a Boss® DS-1™ Distortion
808	Based on an Ibanez TS-808 Tube Screamer	$GRUNGE$	DigiTech® Grunge®
$SPARK$	Based on a Voodoo Lab Sparkle Drive	$ZONE$	Based on a Boss MT-2 Metal Zone®
$ODDRIV$	Based on a Guyatone® Overdrive OD-2	$DEATH$	DigiTech Death Metal™
$DOD250$	Based on a DOD® 250 Overdrive/Preamp	$GONKLT$	Based on a DOD Gonkulator Ring Mod
$REDLNE$	DigiTech Redline Modified Overdrive	$OTAVIA$	Based on a Roger Mayer Octavia™
$RODENT$	Based on a Pro Co RAT™	$FUZLTR$	Based on a Demeter Fuzzulator
$MXDIST$	Based on an MXR® Distortion +	$CLASFZ$	Based on a DOD Classic Fuzz
		$FUZZY$	Based on an Arbiter® Fuzz Face™
		$BIG MP$	Based on an Electro-Harmonix® Big Muff Pi®

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Knobs 2-6 have the following functions for the various Distortion models:

Dist. Model	Knob 2 (Gain)	Knob 3 (Param. 1)	Knob 4 (Param. 2)	Knob 5 (Param. 3)	Knob 6 (Distortion Level)	P7 (X-Edit™ only)
SCREAM	Drive	Tone	--	--	Level	--
808	Overdrive	Tone	--	--	Level	--
SPARK	Gain	Tone	Clean	--	Volume	--
ODDRIV	Drive	--	--	--	Level	--
DOD250	Gain	--	--	--	Level	--
REDLNE	Gain	Low	High	--	Level	--
RODENT	Distortion	Filter	--	--	Level	--
MxDIST	Distortion	--	--	--	Output	--
DSDIST	Gain	Tone	--	--	Level	--
GRUNGE	Grunge	Butt	Face	--	Loud	--
ZONE	Gain	Low	Mid Level	High	Level	Mid Freq
DEATH	--	Low	Mid	High	Level	--
GONKLT	Gunk	Smear	Suck	--	Heave	--
8TAVIA	Drive	--	--	--	Volume	--
FUZLTR	Fuzz	Tone	Loose/Tight	--	Volume	--
CLASFZ	Fuzz	Tone	--	--	Volume	--
FUZZY	Fuzz	--	--	--	Volume	--
BIG MP	Sustain	Tone	--	--	Volume	--

Amplifier

Amp Modeling is a technology which applies the tone of several popular modern and vintage amps.

Note: You can select different Amp models and/or modify Amp settings for each amp channel (Amp A and Amp B). When the Amp row is selected, press the **Amp A/B Footswitch** to select a channel. The display will show which channel is selected (𝐴𝑀𝑃 𝐴 or 𝐴𝑀𝑃 𝐵).

Amp Model - Knob 1 selects one of the classic, modern, and DigiTech custom Amp models. Press this knob to turn Amp and Cabinet modeling on and off. Note that when you select an Amp model, the default Cabinet model is automatically selected. You can, however, change the Cabinet model after selecting an Amp model.

RCKSVT	Based on an Ampeg® SVT	DEMTER	Based on a Demeter™ VTBP-201S
ASHDWN	Based on an Ashdown™ Bass Magnifier	57DLUX	Based on a '57 Fender Tweed Deluxe
BASSMN	Based on a Fender® Bassman®	65TWIN	Based on a '65 Fender Blackface Twin Reverb®
SOLAR	Based on a Sunn® 200S		
STELAR	Based on an SWR® Interstellar Overdrive™	77MSTR	Based on a '77 Marshall® Master Volume
COMNDO	Based on a Trace-Elliot® Commando™	TOPBST	Based on a '63 Vox® AC30 Top Boost
BOMBER	Based on an Ampeg B15	RECTFR	Based on an '01 Mesa Boogie® Dual Rectifier™
HIWTAG	Based on a Hiwatt® Custom 50		
BOOGIE	Based on a Mesa Boogie® 400+	DIGSLO	DigiTech® Solo
BASIC	Based on a SWR® Basic Black	DIGCLN	DigiTech Clean Tube
900JCM	Based on a Fender Dual Showman™	DIGGAN	DigiTech High Gain
		DIRECT	Direct

Cabinet - When the Amp/Cabinet row is selected, **Knob 2** selects the speaker Cabinet model.

AC1X18	Based on an Acoustic® 360 1x18	DL1X12	Based on a Fender Tweed Deluxe 1x12
AM1X15	Based on an Ampeg® Portaflex 1x15	TW2X12	Based on a Fender Dual Showman® 2x12
SW1X15	Based on an SWR® Basic Black 1x15	VX2X12	Based on a Vox® AC30 Top Boost 2x12
SU2X15	Based on a Sunn® 2x15		
ED4X10	Based on an Eden™ 4x10 with horn	MA4X12	Based on a Marshall® 1969 Straight with Celestion® G12-T70 speakers
BM4X10	Based on a Fender® Tweed Bassman® 4x10		
HW4X12	Based on a Hiwatt® 4x12 with Fane speakers	VTG412	Based on a Mesa Boogie® with Celestion Vintage 30's
AMB8X10	Based on an Ampeg 8x10	DIRECT	No cabinet model

Amp Gain - Knob 3 adjusts the Gain (distortion) for the selected Amp model (not available for Direct). The Gain parameter ranges from 𝟶 to 99.

Amp Level - Knob 6 adjusts the Level (volume) of the selected Amp model. The Level parameter ranges from 𝟶 to 99.

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EQ

The BP355's EQ helps further shape your tone with Bass, Midrange, and Treble controls. To help get you started, there are four preset EQ curves: Mid Boost (MIDBST), Scoop (SCOOP), Bright (BRIGHT), and Warm (WARM) that can be selected using **Knob 1**. Bass, Midrange, and Treble parameters range from -12dB to +12dB.

Note: You can modify EQ settings for each amp channel (Amp A and Amp B). When the EQ row is selected, press the **Amp A/B Footswitch** to select a channel. The display will show which channel is selected (AMP A or AMP B).

EQ Model - Knob 1 selects between 4 different EQ modes (Mid Boost, Scoop, Bright, and Warm), each with different frequency centers for Mid and Treble. Pressing this knob turns the EQ on and off.

Bass - Knob 2 adjusts the amount of low end level (Bass). Ranges from -12dB to 12dB.

Mid Frequency - Knob 3 selects the frequency that the Mid parameter adjusts. Ranges from 300 Hz to 5000 Hz.

Mid Range - Knob 4 adjusts the amount of midrange level. Ranges from -12dB to 12dB.

Treble - Knob 5 adjusts the amount of high end level (Treble). Ranges from -12dB to 12dB.

Presence - Knob 6 boosts or cuts the Presence level for the selected channel. Ranges from -12dB to 12dB.

Treble Frequency *(X-Edit™ only)* - This parameter selects the frequency that the Treble parameter adjusts. Ranges from 500 Hz to 8000 Hz.

Noise Gate/Auto Swell

A **Noise Gate** is designed to eliminate noise while you are not playing, or provide an auto volume swell effect.

Gate Model - Knob 1 selects between the DigiTech® noise gate or the volume swell effect. Values include: GATE (Selects the Noise Gate) and SWELL (Selects the Auto Swell effect.) Press this knob to turn the Noise Gate/Auto Swell on and off.

Threshold *(Noise Gate only)* - Knob 2 sets the signal strength (Threshold) required to open or close the Noise Gate. Parameters range from 0 (opens easily) to 99 (requiring strong signals to open).

Attack Time - Knob 3 sets the attack time. Ranges from 0 (shorter attack time) to 99 (longer attack time).

Release - Knob 4 sets the Release parameter. Ranges from 0 to 99.

Attenuation - Knob 5 sets the Attenuation parameter. Ranges from 0 to 99.

Swell Sensitivity *(Auto Swell only)* - Knob 6 sets the Swell Sensitivity parameter of the Auto Swell. Ranges from 0 to 99.

Chorus/FX

The Chorus/FX row in the BP355 is a multi-function module, allowing you to select Effect models such as Chorus, Flanger, Phaser, Vibrato, Rotary Speaker, Tremolo, Panner, Envelope Filter (auto wah), AutoYa™, YaYa™, SynthTalk™, Step Filter, Whammy™, Pitch Shift, Detune, Harmony, and Octaver effects. When the Chorus/FX row is selected, **Knob 1** is used to choose the Effect model. Press this knob to turn these Effect models on and off. Only one of the effects in this row can be used at a time. After selecting the type of effect in this module, **Knobs 2-6** can then be used to adjust the individual parameters associated with the selected effect. The following list describes each Effect model and its parameters in more detail:

Chorus

A Chorus adds a short delay to your signal. The delayed signal is modulated in and out of tune and then mixed back with the original signal to create a thicker sound. The BP355 includes the following Chorus Effect models: CE CHS (based on the classic Boss® CE-2 Chorus), TC CHS (based on the TC Electronic Chorus), CHORUS (DigiTech®'s Dual Chorus), and MCHORS (Digi-Tech's famous Multi Chorus®).

Knobs 2-6 have the following functions for the various Chorus models:

Chorus Model	Knob 2 (Pre/Post Amp)	Knob 3 (Speed)	Knob 4 (Depth)	Knob 5 (Regeneration)	Knob 6 (FX Level)
CE CHS	Pre/Post Amp	Speed	Depth	--	--
TC CHS	Pre/Post Amp	Speed	Width	Chorus/Flange	Intensity
CHORUS	Pre/Post Amp	Speed	Depth	Waveform	Level
MCHORS	Pre/Post Amp	Speed	Depth	Waveform	Level

Flanger

A Flanger uses the same principle as a Chorus but uses a shorter delay time and adds regeneration (or repeats) to the modulating delay. This results in an exaggerated up and down sweeping motion to the effect. The BP355 includes the following Flanger Effect models: FLANGR (the DigiTech® Flanger), TRGFLG (the DigiTech Triggered Flanger), MXFLGR (based on an MXR® Flanger), and EHFLGR (based on an Electro-Harmonix® Electric Mistress).

Knobs 2-6 have the following functions for the various Flanger models:

Flanger Model	Knob 2 (Pre/Post Amp)	Knob 3 (Speed)	Knob 4 (Depth)	Knob 5 (Regeneration)	Knob 6 (FX Level)
FLANGR	Pre/Post Amp	Speed	Depth	Regen	Level
TRGFLG	Pre/Post Amp	Speed	Sensitivity	LFO Start	Level
MXFLGR	Pre/Post Amp	Speed	Width	Regen	Manual
EHFLGR	Pre/Post Amp	Rate	Range	Color	--

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Phaser

A phaser splits the incoming signal, and then changes the phasing of the signal. This signal is then taken in and out of phase and mixed back in with the original signal. As the phasing changes, different frequencies get canceled resulting in a warm sort of twisting sound. The BP355 includes the following Phaser models: PHASER (the DigiTech Phaser), TPHASE (the DigiTech Triggered Phaser), MXPHAS (based on an MXR Phase 100), and EHPHAS (based on an Electro-Harmonix Small Stone).

Knobs **2-6** have the following functions for the various Phaser models:

Phaser Model	Knob 2 (Pre/Post Amp)	Knob 3 (Speed)	Knob 4 (Depth)	Knob 5 (Regeneration)	Knob 6 (FX Level)
PHASER	Pre/Post Amp	Speed	Depth	Regen	Level
TPHASE	Pre/Post Amp	Speed	Sensitivity	LFO Start	Level
MXPHAS	Pre/Post Amp	Speed	Intensity	--	--
EHPHAS	Pre/Post Amp	Rate	--	Color	--

Vibrato (VIBRAT)

The DigiTech Vibrato effect modulates the pitch of the incoming signal at an even rate.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts the rate (Speed) at which the pitch modulates. Ranges from 0 to 99.

Depth - Knob 4 adjusts the intensity (Depth) of the modulating pitch. Ranges from 0 to 99.

Rotary Speaker (ROTARY)

The Rotary Speaker emulates a device that included a spinning horn and woofer. The rotation of these two speakers produced an interesting combination of the sound panning from side to side. This produced a slight pitch change due to the speed of the sound coming towards, and then going away from the listener.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts the rate (Speed) of the spinning speakers. Ranges from 0 to 99.

Intensity - Knob 4 controls the intensity of the effect. Ranges from 0 to 99.

Doppler - Knob 5 controls the Pitch Shift effect that is the ratio between the horn and the rotor positions. Ranges from 0 to 99.

X-Over - Knob 6 sets the crossover frequency between the rotor and the horn. Ranges from 0 to 99.

VibroPan ($VIBPAN$**)**
A vibrato is an effect that modulates the pitch of the incoming signal. This will take the whole signal slightly in and out of tune at a steady pace. The DigiTech® VibroPan also incorporates an automatic panner with the vibrato effect that creates a lush chorus-like sound.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts how fast the signal is being modulated.

Depth - Knob 4 adjusts the amount of pitch change.

Vibrato/Pan- Knob 5 adjusts the amount of panning incorporated with the vibrato effect. When set at 0, this effect is a standard vibrato. As the parameter is turned up, the phase difference of the vibrato signal sent to the two channels is changed until a full stereo image is obtained at 99.

Waveform - Knob 6 selects a waveform: $TRIANG$, $SINE$, or $SQUARE$.

Unicord Uni-Vibe™ ($UNOVIB$**)**
Based on the Unicord® Uni-Vibe™ pedal, Uni-Vibe adds a lush chorus or rotary speaker (vibrato) effect to your tone.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts the rate (Speed) of the chorus modulation or spinning speaker (vibrato) effect. Ranges from 0 to 99.

Intensity - Knob 4 controls the intensity of the effect. Ranges from 0 to 99.

Chorus/Vibrato - Knob 5 selects either the chorus or vibrato effect. Turn counter-clockwise for Chorus, or clockwise for Vibrato.

Volume - Knob 6 adjusts the volume of the effect.

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Tremolo/Panner

A Tremolo effect modulates the volume of the signal at an even rate. The BP355 includes the following Tremolo models: TRMOLO (the DigiTech® Tremolo), OPTREM (based on the Fender® Opto Tremolo), BITREM (based on the Vox® Bias Tremolo), and PANNER (the DigiTech Panner),.

> **Pre/Post Amp - Knob 2** determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

> **Speed - Knob 3** adjusts the rate (Speed) at which the volume modulates. Ranges from 0 to 99

> **Depth - Knob 4** adjusts the intensity (Depth) of the modulating volume. Ranges from 0 to 99.

> **Waveform** *(DigiTech Tremolo and Panner only)* **- Knob 5** selects a waveform: TRI-ANG, SINE, or SQUARE.

Envelope Filter (ENVLOP)

The DigiTech Envelope Filter is a dynamic Wah effect that alters your sound based upon how hard you play.

> **Pre/Post Amp - Knob 2** determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

> **Sensitivity - Knob 3** adjusts the sensitivity or the input signal required to trigger the Wah effect. Ranges from 0 to 99.

> **Range - Knob 4** controls the range of the Envelope effect. Ranges from 0 to 99.

DOD FX25 (FX25)

This envelope filter is based on the DOD FX25.

> **Pre/Post Amp - Knob 2** determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

> **Sensitivity - Knob 3** adjusts the sensitivity or the input signal required to trigger the Wah effect. Ranges from 0 to 99.

> **Range - Knob 4** controls the range of the envelope effect. Ranges from 0 to 99.

AutoYa™ (AUTOYA)

An AutoYa™ combines the characteristics of a Wah and a Flanger together creating an almost human vowel characteristic as if the bass were saying "Yah." The AutoYa automatically provides this animation to the sound at an even rate.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts the speed of the AutoYa sweep. Ranges from 0 to 99.

Intensity - Knob 4 adjusts the intensity of the AutoYa effect. Ranges from 0 to 99.

Range - Knob 5 adjusts the throaty quality of the AutoYa effect. Ranges from 0 to 49.

YaYa™ (YAYA)

The YaYa™ is another effect exclusive to DigiTech products. Like the AutoYa, it combines the characteristics of a wah and a flanger together providing a unique talk box type of effect when linked to and controlled by the Expression Pedal.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Pedal - Knob 3 adjusts the Ya pedal position. Ranges from 0 to 99.

Intensity - Knob 4 adjusts the intensity of the YaYa effect. Ranges from 0 to 99.

Range - Knob 5 adjusts the throaty quality of the YaYa effect. Ranges from 0 to 49.

SynthTalk™ (SNTHTK)

SynthTalk™ is another effect exclusive to DigiTech®. It makes your bass appear to speak based upon the dynamics of your playing style.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Attack - **Knob 3** adjusts the attack of the synthesized voice. Ranges from 0 to 99.

Release - **Knob 4** adjusts the release of the synthesized voice. Ranges 0 to 99.

Vox - **Knob 5** changes the characteristics of the various synth voices. Ranges from 0 to 99.

Sensitivity - **Knob 6** adjusts the sensitivity of the input signal required to trigger the SynthTalk effect. Ranges from 0 to 99.

Balance *(X-Edit™ only)* - adjusts the left to right balance of the wet signal, Ranges from LEFT 99 to RIGHT 99.

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Step Filter (*STPFLT*)
The DigiTech Step Filter is like an automatic "random wah" with a square waveform.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Speed - Knob 3 adjusts the speed of the Wah effect. Ranges from *0* to *99*.

Intensity - Knob 4 controls the intensity of the Wah effect. Ranges from *0* to *99*.

DigiTech Whammy® (*WHAMMY*)
The DigiTech Whammy® is an effect that uses an Expression Pedal to bend the pitch of the incoming signal, or add a bendable harmony with the original signal. As the Pedal is moved, the note bends either up or down. When DigiTech Whammy is selected, it is automatically placed before the Amp modeling as shown in the block diagram on page 13.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Shift Amount - Knob 3 selects the interval and direction of the pitch bend. Choices are as follows:

Whammy™ (no Dry Signal)	**Harmony Bends** (Dry Signal Added)
OCT UP (1 octave above)	*M3:MJ3* (a minor third to a Major third)
2OCTUP (2 octaves above)	*2NDMJ3* (a second above to a Major third above)
2ND DN (a second below)	*3RD4TH* (a third above to a fourth above)
RV2NDN (a second below reversed pedal action)	*4TH5TH* (a fourth above to a fifth above)
4TH DN (a fourth below)	*5THOCT* (a fifth above to an octave above)
OCT DN (an octave below)	*HOCTUP* (one octave above)
2OCTDN (2 octaves below)	*HOCTDN* (one octave down)
DIVEBM (Dive Bomb)	*OCTU:D* (octave up/down)

Pedal Position - Knob 5 provides a manual control of the Whammy pedal position. Ranges from *0* to *99*.

Mix - Knob 6 adjusts the Whammy mix. Ranges from *0* to *99*.

Pitch Shift (*PITCH*)
A Pitch Shifter copies the incoming signal, then shifts the pitch of the copy to a different note. The shifted note is then mixed back with the original signal, sounding as if two basses were playing different notes.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Shift Amount - Knob 3 selects the interval of the shifted pitch. Ranges from *-24* (2 octaves below) to *24* (2 octaves above).

Mix - Knob 6 controls the mix level of the shifted pitch. Ranges from *0* to *99*.

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Detune (⍑ETUNE)

A Detuner makes a copy of your incoming signal, takes the copied signal slightly out of tune from the original, then mixes the two signals together. The result is a doubling type of effect as if two basses were playing the same part together.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Shift Amount - Knob 3 adjusts the amount of detune shift. Ranges from ⁻24 to 24 cents.

Level - Knob 6 controls the mix of the detuned note. Ranges from 0 to 99.

Harmony (HARMNY**)**

Harmony pitch shifting makes a copy of the incoming signal, and then changes the pitch of the copied note to a diatonically correct interval specified by the Amount parameter. Harmony sharpens or flattens the shifted pitch in order to keep the specified interval within the selected key and scale creating a true harmony.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Shift Amount - Knob 3 selects the amount or harmony interval for the Harmony. Interval choices include:

OCT DN (octave down)	2ND UP (a second above)
7TH DN (a seventh below)	3RD UP (a third above)
6TH DN (a sixth below)	4TH UP (a fourth above)
5TH DN (a fifth below)	5TH UP (a fifth above)
4TH DN (a fourth below)	6TH UP (a sixth above)
3RD DN (a third below)	7TH UP (a seventh above)
2ND DN (a second below)	OCT UP (an octave above)

Key - Knob 4 selects the musical key that the Harmony uses. Key choices range from the Key of E (KEY E) through the Key of E♭ (KEY E♭).

Scale - Knob 5 selects the scale the Harmony will use. Scale choices include: Major (MAJOR), Minor (MINOR), Dorian (DORIAN), Mixolydian (MIXLYD), Lydian (LYDIAN), and Harmonic Minor (HMINOR).

Level - Knob 6 adjusts the Harmony Level of all the pitch-altering effects in this module. Ranges from 0 to 99.

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Boss® OC-2 Octaver™ ($OCTAVR$)

Based on the Boss® OC-2 Octaver™, this model adds two signals to your original bass signal. The first is one octave below your bass, and the second is two octaves below your bass. Each additional signal has its own volume control.

Pre/Post Amp - Knob 2 determines where the effect appears in the effects chain. Turn counter-clockwise for Pre (appears before the Distortion effect), or clockwise for Post (appears after the Noise Gate effect).

Octave 1- Knob 3 adjusts the the volume of the signal 1 octave below the input signal. Ranges from 0 to 99.

Octave 2 - Knob 4 controls the volume of the signal 2 octaves below the input signal. Ranges 0 to 99.

Dry Level - Knob 6 controls the volume of the dry signal. Ranges from 0 to 99.

Delay

Delay is an effect that records a portion of the incoming signal, and then plays it back a short time later. The recording can repeat just once or several times.

Delay Model - Knob 1 selects one of the 7 different Delay models. Values include: $ALGDLY$ (DigiTech® Analog Delay), $DM\ DLY$ (Based on the Boss DM-2 Analog Delay), $DIGDLY$ (DigiTech Digital Delay), $MODDLY$ (DigiTech Modulated Delay), $PNGDLY$ (DigiTech Pong Delay), $TAPDLY$ (DigiTech Tape Delay), and $ECOPLX$ (Based on the Maestro™ EP-2 Echoplex® Tape Echo). Press this knob to turn the Delay models on and off.

Knobs 2-6 have the following functions for the various Delay models:

Delay Model	Knob 2 (Time)	Knob 3 (Repeats)	Knob 4 (Param. 1)	Knob 5 (Param. 2)	Knob 6 (Delay Level)
$ALGDLY$	Time	Repeats	--	--	Delay Level
$DM\ DLY$	Repeat Rate	Echo	Intensity	--	--
$DIGDLY$	Time	Repeats	Ducker Threshold	Ducker Level	Delay Level
$MODDLY$	Time	Repeats	Depth	--	Delay Level
$PNGDLY$	Time	Repeats	Ducker Threshold	Ducker Level	Delay Level
$TAPDLY$	Time	Repeats	Wow	Flutter	Delay Level
$ECOPLX$	Time	Repeats	--	--	Volume

Note: The **Repeats** parameter (Knob 3) ranges from 0 to Repeat Hold ($RPTHLD$) for all models except the Echoplex® and DM-2. Repeat Hold is one click past 99, and acts as an infinite repeat.

Reverb

Using reverb in recorded program material gives the listener a sense that the material is being performed in an actual room or hall. It is this similarity to actual acoustic spaces that makes reverberation a useful tool in recorded music. The BP355 features genuine Lexicon® reverbs, whose rich, lush effects have been heard in countless songs, soundtracks, and live performances for decades.

Reverb Model

Knob 1 selects the Reverb model or acoustic space. Press this knob to turn the Reverb models on and off. The following models are available:

LEXAMB - Lexicon® Ambience   LEXHAL - Lexicon Hall
LEXSTD - Lexicon Studio   EMTPLT - Based on an
LEXROM - Lexicon Room   EMT240 Plate

Knobs 2-6 have the following functions for the various Reverb models:

Reverb Model	Knob 2 (Pre Delay)	Knob 3 (Decay)	Knob 4 (Liveliness)	Knob 6 (Reverb Level)
LEXAMB	Pre Delay	Decay	Liveliness	Reverb Level
LEXSTD	Pre Delay	Decay	Liveliness	Reverb Level
LEXROM	Pre Delay	Decay	Liveliness	Reverb Level
LEXHAL	Pre Delay	Decay	Liveliness	Reverb Level
EMTPLT	Pre Delay	Decay	Liveliness	Reverb Level

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Section Five - Other Functions

Phrase Looper
The BP355 features a built-in 20 second Phrase Looper for creating on the fly performance loops of the music you play. The Phrase Looper can be accessed any time during performance and used with any of the BP355's presets.

To use the Phrase Looper, follow these steps:

1. Press and hold the **Amp A/B Footswitch** for 2 seconds until $LOOPER$ appears in the display. The Looper LED in the matrix will also light indicating the Looper is now active.
2. Arm the Phrase Looper to record by pressing the **Amp A/B Footswitch** again. The display will read $ARMED$ meaning it is ready for you to start playing (You can also start recording immediately when this footswitch is pressed).
3. Begin playing a phrase on the bass. The Phrase Looper will begin recording anything that is played. The display will read $RECORD$.
4. Once you are ready to set the loop point, press any footswitch. The display will briefly read $PLAY$ and the recorded phrase will now begin playing back.
5. To add an overdub to the looped phrase, press and hold the **Amp A/B Footswitch**. The display will read $OVRDUB$. While holding the footswitch, begin playing the overdub phrase to be added to the loop. When the **Amp A/B Footswitch** is released, the display will briefly flash $PLAY$ and the looped phrase will continue with the newly added overdub phrase added.
6. To stop the Phrase Looper, press and release the **Amp A/B Footswitch** quickly. You can resume playback by pressing this footswitch again.
7. To clear a recorded loop, stop the loop playback first as outlined in step 6 and then press and hold the **Amp A/B Footswitch** for 2 seconds until the display read $CLEARD$.

To exit the Phrase Looper mode, press and hold left **Amp A/B Footswitch** for 4 seconds until the display reads $LPEXIT$. Exiting the Looper clears the recorded loop.

While the Phrase Looper is active, the **Amp A/B Footswitch** cannot be used to select the amp A/B channels in the BP355's presets. The preset **Up** and **Down Footswitches** can still be used navigate through all of the BP355's presets.

Note: While the Phrase Looper feature is active, the Drum Machine feature is not available.

Drum Machine
The BP355 includes a built-in drum machine loaded with 60 useful patterns and 5 metronome settings that are easily accessible at the touch of a button (the **Drums** button, specifically). Pressing the **Drums** button will enable the drum machine and start playback of the selected drum pattern (except when in Store or Bypass mode). When you turn the drum machine on, the display reads $DRUMS \ ON$; when you turn the drum machine off, the display reads $DRUMS \ OF$.

When the **Drums** row is selected (using the **Edit** buttons), **Knob 1** selects the drum Style, **Knob 2** adjusts the drum Pattern, **Knob 3** adjusts the Tempo of the drum pattern and **Knob 4** adjusts the drum machine playback level. Press the **Drums** button again to stop playback of the drum loop.

Drum Pattern List

$BEATS$ (8th beat)	$1-5$		$JAZZ$		$1-4$
$BEATS$ (16th beat)	$6-8$		$HIPHP$		$1-4$
$ROCK$	$1-8$		$WORLD$		$1-4$
$HROCK$	$1-8$		MET		$4/4$
$METAL$	$1-8$		MET		$3/4$
$BLUES$	$1-8$		MET		$5/8$
$GROOV$	$1-4$		MET		$7/8$
$CNTRY$	$1-4$		MET		$MTRNOM$

Aux Input

The Aux Input allows you to connect an MP3 or CD player to the BP355 and jam with your favorite artists. The signal from your MP3 or CD player is output through the left, right, and headphone outputs of the BP355. To use the Aux Input, connect the headphone output of your MP3 or CD player to the **Aux Input** on the rear panel of the BP355 using an 1/8" stereo cable, and press play on your MP3 or CD player. Use the playing device's volume control and the BP355's **Master Level** knob to balance the levels.

Expression Pedal

The Expression Pedal on the BP355 can be linked to control the BP355's Volume, Wah, Whammy™, YaYa™, or almost any of the BP355's other parameters in real time with your foot. When a parameter has been linked to the Expression Pedal, a minimum (heel) and maximum (toe) value can also be specified. Apply extra pressure to the toe of the Expression Pedal to activate the V-switch, and the Expression Pedal switches between the linked parameter and the Wah. The procedure for linking a parameter to the Expression Pedal is as follows:

1. Press either **Edit** button until the Expression row has been selected (indicated by the LED lighting on the Expression row).
2. Rotate **Knob 1** until $EXPPDL$ appears in the Display.
3. Rotate **Knob 2** until the desired parameter to be linked appears in the Display. See page 32 for a complete list of parameters that can be linked to the Expression Pedal.
4. Rotate **Knob 3** to select the minimum (heel) value the assigned parameter will reach with the Expression Pedal in the toe up position.
5. Rotate **Knob 4** to select the maximum (toe) value the assigned parameter will reach with the Expression Pedal in the toe down position.
6. Store your Expression Pedal assignment to your preset. See page 12 for more information on the storing procedure.

LFOs

The BP355 includes two assignable low frequency oscillators (LFO 1 and LFO 2) which can be assigned to any of the same parameters available for assignment to the **Expression Pedal**. A low frequency oscillator will automatically vary the value of the assigned parameter at a steady rate. A minimum and maximum value each LFO will reach may be also be assigned. For instance, if the Amp Gain was assigned to LFO 1, and the minimum value was set at 1 and the maximum value was set at 99, the BP355 would automatically sweep the amount of

distortion from a clean sound to a distorted sound. Individual LFO speeds are also available for assignment. In the previous example, the LFO speed would determine the length of time it took the LFO to sweep from the clean to the distorted sound. The procedure for assigning the LFOs in the BP355 is as follows:

1. Press the **Edit** button until the Expression row has been selected (indicated by the LED lighting on the Expression row).
2. Rotate **Knob 1** to select one of the two LFO links, LFO 1 ($LFO1$) or LFO 2 ($LFO2$).
3. Rotate **Knob 2** to select the parameter you want linked to the LFO 1 or LFO 2. See page 32 for a list of assignable parameters.
4. Rotate **Knob 5** to select which waveform you want the LFO to use, Triangle ($TRIANG$), Sine ($SINE$), or Square ($SQUARE$).
5. Rotate **Knob 6** to select the speed you want the parameter to be controlled at.

Factory Reset
This function resets the BP355 to its original factory settings. This procedure erases all custom User presets, and recalibrates the Expression Pedal.

ATTENTION: Performing this function will erase all user-programmed data. All such data will be lost forever! Be sure you want to erase the memory and start fresh before continuing with this procedure.

The procedure for performing a Factory Reset is as follows:

1. Press and hold the **Store** button while powering up the BP355.
2. When the display prompts you with $FACRST$, release the **Store** button, which is now flashing.
3. Press and hold the flashing **Store** button for 3 seconds until $RSTORD$ appears in the display and release. The Restore procedure takes several seconds to complete; during the procedure, the display will count up. After the Restore procedure is complete, the Expression Pedal calibration procedure will begin. See step two of the Expression Pedal Calibration section below.

Expression Pedal Calibration
The Expression Pedal on the BP355 needs to be recalibrated for use after a factory reset has been performed. This calibration procedure is automatically entered after a factory reset procedure. (You can also initiate the calibration procedure by pressing and holding the **Up** and **Down Footswitches** for approximately 5 seconds.) In the event the Pedal's calibration fails, or if the Pedal does not function properly, it can be re-calibrated using the Pedal Calibration procedure. This will not erase the User presets. The procedure for Calibrating the Expression Pedal is as follows:

1. Press and hold the **Up/Down Footswitches** until $PDLCAL$ appears in the display ($BYPASS$, $TUNER$, and $EXIT$ will be displayed before $PDLCAL$ is accessed, after about 5 seconds.)
2. When the Display prompts you with $TOE\ DN$, rock the **Expression Pedal** forward (toe down) and press either the **Up** or **Down Footswitch**.
3. When the Display prompts you with $TOE\ UP$, rock the **Expression Pedal** back (toe up) and press either the **Up** or **Down Footswitch**.
4. The Display now prompts you to calibrate the V-Switch sensitivity ($VSWXXX$), where XXX is the current V-Switch threshold. Rock the **Expression Pedal** forward and press firmly on the toe once to turn the V-Switch on ($WAH\ ON$), and again to turn the V-Switch off ($WAHOFF$).

5. If the V-Switch is too sensitive, press the right **Up Footswitch** to raise the threshold (range is 0-200). Keep testing the V-Switch sensitivity and adjust the threshold until it only engages when you want it to (too sensitive a setting will lead to the V-Switch falsely triggering on or off when using the Expression Pedal).

6. When the V-Switch sensitivity is set to your satisfaction, press both **Up/Down Footswitches** simultaneously to exit.

Note: If the Display shows $ERROR$, an error has occurred and steps 2 through 5 should be repeated.

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Section Six - Appendix

Specifications

General Specifications
A/D/A Converter: 24-bit high performance audio
Sampling Frequency: 44.1 kHz
DSP Section: AudioDNA2™ DSP Processor
Simultaneous Effects: 10
Preset Memory: 70 User Presets (1-70) / 70 Factory Presets (F1-F70)
Phrase Looper: 20 seconds of record time
Drum Machine: 60 Patterns
Dimensions: 17.5″ Length x 8.75″ Width x 2.5″ Height
Unit Weight: 6.2 lbs.

Analog Input Connections:
Bass Input: 1/4″ Unbalanced (TS)
Input Impedance: 500k Ohms
Aux Input: 1/8″ Stereo (TRS)

Analog Output Connections:
1/4″ Outputs
Left/Right Outputs: 1/4″ Impedance Unbalanced
Left/Right Output Impedance: 500 Ohms per side
Maximum Output: +10 dBu

XLR Outputs
Left/Right Outputs: Impedance Balanced
Left/Right Output Impedance: 1 kohm per side
Maximum Output: +16 dBu

Headphones: 1/8″ Stereo (TRS) – 13.6mW per channel @ 50 Ohms

Digital Connections:
Universal Serial Bus (USB): Type B, supports USB1.1 Full Speed (12 Mbps Bandwidth USB 2.0 compatible)

BP355 USB Recording Specifications:
Sample Rate: 44.1 kHz
Bit depth: supports 16-bit or 24-bit (depends on setup in Recording Software)

Power Requirements:
US and Canada: 120 VAC, 60 Hz Adapter: PS0913B-120
Japan: 100 VAC, 50/60 Hz Adapter: PS0913B -100
Europe: 230 VAC, 50 Hz Adapter: PS0913B -230
UK: 240 VAC, 50 Hz Adapter: PS0913B -240

Windows® Software Requirements
Windows 7 32/64-bit, Vista 32/64-bit, XP Home/Professional 32-bit (SP3 installed, .NET 2.0 installed*)
Pentium®/Athlon™ 2GHz or later 1GB RAM (2GB RAM recommended) 180MB hard disk space for application
DVD-ROM drive
USB Port
Internet connection required for Cubase activation
*.NET 2.0 will be installed during installation of X-Edit software if required on XP systems

Mac® Software Requirements
OS 10.5.8 or later
PowerPC G5/Intel Core 2GHz or later
1GB RAM (2GB RAM recommended)
180MB hard disk space for application
DVD-ROM drive
USB Port
Internet connection required for Cubase activation

Expression Pedal - Assignable Parameters

Fretless/Wah Effects based on:	Wah Model	Wah Minimum	Wah Maximum	Wah Level	–	–	X-Edit
Dunlop® Cry Baby Wah®	CRYWAH	Wah Minimum	Wah Maximum	Wah Level	–	–	–
Vox® Clyde McCoy Wah	CLYDE	Wah Minimum	Wah Maximum	Wah Level	–	–	–
DigiTech® Full Range Wah	FULRNG	Wah Minimum	Wah Maximum	Wah Level	–	–	–

Compressor Effects based on:	Comp Model	Sustain	Tone	Attack	X-Over	Level	X-Edit
DigiTech Compressor	DIGCMP	Sustain	Tone	Attack	X-Over	Level	–
Boss® CS-2 Compressor/Sustainer	CSCOMP	Sustain	–	Attack	–	Level	–
MXR® Dynacomp	DYNCMP	Sensitivity	–	–	–	Output	–

Distortion Effects based on:	Dist. Model	Gain	Param 1	Param 2	Param 3	Distortion Level	X-Edit
Ibanez® TS-9	SCREAM	Drive	Tone	–	–	Level	–
Ibanez TS-808 Tube Screamer	808	Overdrive	Tone	–	–	Level	–
Voodoo Lab Sparkle Drive	SPARK	Gain	Tone	Clean	–	Volume	–
Guyatone® Overdrive OD-2	ODDRIV	Drive	–	–	–	Level	–
DOD® 250 Overdrive/Preamp	DOD250	Gain	–	–	–	Level	–
DigiTech Redline Modified Overdrive	REDLNE	Gain	Low	High	–	Level	–
Pro Co RAT™	RODENT	Distortion	Filter	–	–	Level	–
MXR® Distortion +	MXDIST	Distortion	–	–	–	Output	–
Boss DS-1™ Distortion	DSDIST	Gain	Tone	–	–	Level	–
DigiTech Grunge®	GRUNGE	Grunge	Butt	Face	–	Loud	–
Boss MT-2 Metal Zone®	ZONE	Gain	Low	Mid Level	High	Level	Mid Freq
DigiTech Death Metal™	DEATH	–	Low	Mid	High	Level	–
DOD Gonkulator Ring Mod	GONKLT	Gunk (Dist Gain)	Smear (Ring Mod Level)	Suck (Dist Level)	–	Heave (Output Level)	–
Roger Mayer Octavia™	OTAVIA	Drive	–	–	–	Volume	–
Demeter Fuzzulator	FUZLTR	Fuzz	Tone	Loose/Tight	–	Volume	–
DOD Classic Fuzz	CLASFZ	Fuzz	Tone	–	–	Volume	–
Arbiter® Fuzz Face™	FUZZY	Fuzz	–	–	–	Volume	–
Electro-Harmonix® Big Muff Pi®	BIG MP	Sustain	Tone	–	–	Volume	–

Amp	Amp Model	Cabinet Model	Amp Gain	–	–	Amp Level	X-Edit
All amp models (A and B channels)	–	Cabinet Model	Amp Gain	–	–	Amp Level	–

EQ	On/Off	Bass	Mid Frequency	Mid Level	Treble	Presence	X-Edit
4 band EQ	–	Bass	Mid Frequency	Mid Level	Treble	Presence	–

Noise Gate/Auto Swell	Gate Type	Threshold	Attack Time	Release	Attenuation	Swell Sensitivity	X-Edit
DigiTech Noise Gate	GATE	Threshold	Attack Time	Release	Attenuation		–
DigiTech Auto Swell	SWELL	–	Attack Time	Release	Attenuation	Swell Sensitivity	–

Chorus Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
Boss CE-2 Chorus	CE CHS	Pre/Post Amp	Speed	Depth	–	–	–
TC Electronic® Chorus	TC CHS	Pre/Post Amp	Speed	Width	–	Intensity	–
DigiTech Dual Chorus	CHORUS	Pre/Post Amp	Speed	Depth	Waveform	Level	–
DigiTech Multi Chorus	MCHORS	Pre/Post Amp	Speed	Depth	Waveform	Level	–

Flanger Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech Flanger	FLANGR	Pre/Post Amp	Speed	Depth	Regen	Level	Waveform
DigiTech Triggered Flanger	TRGFLG	Pre/Post Amp	Speed	Sensitivity	LFO Start	Level	–
MXR Flanger	MXFLGR	Pre/Post Amp	Speed	Width	Regen	Manual	–
EH Electric Mistress	EHFLGR	Pre/Post Amp	Rate	Range	Color	–	–

Phaser Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech Phaser	PHASER	Pre/Post Amp	Speed	Depth	Regen	Level	Waveform
DigiTech Triggered Phaser	TPHASE	Pre/Post Amp	Speed	Sensitivity	LFO Start	Level	–
MXR Phase 100	MXPHAS	Pre/Post Amp	Speed	Intensity	–	–	–
EH Small Stone	EHPHAS	Pre/Post Amp	Rate	–	Color	–	–

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Vibrato/Rotary Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech® Vibrato	VIBRAT	Pre/Post Amp	Speed	Depth	–	–	–
DigiTech Rotary	ROTARY	Pre/Post Amp	Speed	Intensity	Doppler	X-Over	–
DigiTech Vibro/Pan	VIBPAN	Pre/Post Amp	Speed	Depth	Vibrato/Pan	Waveform	–
Unicord® Uni-Vibe™	UNOVIB	Pre/Post Amp	Speed	Intensity	Chorus/Vibrato	Volume	–

Tremolo Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech Tremolo	TRMOLO	Pre/Post Amp	Speed	Depth	Waveform	–	–
Fender® Opto Tremolo	OPTREM	Pre/Post Amp	Speed	Depth	–	–	–
Vox Bias Tremolo	BITREM	Pre/Post Amp	Speed	Depth	–	–	–
DigiTech Panner	PANNER	Pre/Post Amp	Speed	Depth	Waveform	–	–

Envelope/Special Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech Envelope Filter	ENVLOP	Pre/Post Amp	Sensitivity	Range	–	–	–
DOD FX25	FX25	Pre/Post Amp	Blend	Sensitivity	Range	–	–
DigiTech AutoYa™	AUTOYA	Pre/Post Amp	Speed	Intensity	Range	–	–
DigiTech YaYa™	YAYA	Pre/Post Amp	Pedal	Intensity	Range	–	–
DigiTech Synth Talk	SNTHTK	Pre/Post Amp	Attack	Release	Vox	Sensitivity	Balance
DigiTech Step Filter	STPFLT	Pre/Post Amp	Speed	Intensity	–	–	–

Pitch Effects based on:	Effect Model	Pre/Post Amp	Speed	Depth	Regen	FX Level	X-Edit
DigiTech Whammy®	WHAMMY	Pre/Post Amp	Shift Amount	–	Pedal Position	Mix	–
DigiTech Pitch Shift	PITCH	Pre/Post Amp	Shift Amount	–	–	Mix	–
DigiTech Detune	DETUNE	Pre/Post Amp	Shift Amount	–	–	Level	–
DigiTech Harmony	HARMNY	Pre/Post Amp	Shift Amount	Key	Scale	Level	–
Boss OC-2 Octaver	OCTAVR	Pre/Post Amp	Octave 1	Octave 2	–	Dry Level	–

Delay Effects based on:	Delay Model	Time	Repeats	Parameter 1	Parameter 2	Delay Level	X-Edit
DigiTech Analog Delay	ALGDLY	Time	Repeats	Delay Level	–	Delay Level	–
Boss DM-2 Analog Delay	DM DLY	Repeat Rate	Echo	Intensity	–	–	–
DigiTech Digital Delay	DIGDLY	Time	Repeats	Ducker Threshold	Ducker Level	Delay Level	–
DigiTech Modulated Delay	MODDLY	Time	Repeats	Depth	–	Delay Level	–
DigiTech Pong Delay	PNGDLY	Time	Repeats	Ducker Threshold	Ducker Level	Delay Level	–
DigiTech Tape Delay	TAPDLY	Time	Repeats	Wow	Flutter	Delay Level	–
Maestro™ EP-2 Echoplex® Tape Echo	ECOPLX	Time	Repeats	–	–	Volume	–

Reverb Effects based on:	Reverb Model	Pre Delay	Decay	Liveliness	–	Reverb Level	X-Edit
Lexicon® Ambience	LEXAMB	Pre Delay	Decay	Liveliness	–	Reverb Level	–
Lexicon Studio	LEXSTD	Pre Delay	Decay	Liveliness	–	Reverb Level	–
Lexicon Room	LEXROM	Pre Delay	Decay	Liveliness	–	Reverb Level	–
Lexicon Hall	LEXHAL	Pre Delay	Decay	Liveliness	–	Reverb Level	–
EMT 240 Plate	EMTPLT	Pre Delay	Decay	Liveliness	–	Reverb Level	–

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Tone Library

1	Rock 1	ROCK 1	16	Sinister	SINSTR
2	Rock 2	ROCK 2	17	Punchy	PUNCHY
3	Slap 1	SLAP 1	18	Fingerstyle	FINGER
4	Slap 2	SLAP 2	19	Mid Boost	MIDBST
5	Compressed	CMPRSD	20	Big Bottom	BIGBTM
6	Funk	FUNK	21	Pick Style	PICK
7	Clean	CLEAN	22	Groove	GROOVE
8	Drive	DRIVE	23	Solo Bass	SOLO
9	Metal	METAL	24	Honky	HONKY
10	Warm	WARM	25	Sustain	SUSTAN
11	Bright	BRIGHT	26	Dirty Wah	DRTWAH
12	Heavy	HEAVY	27	Grind	GRIND
13	Clean Wah	CLNWAH	28	Smooth	SMOOTH
14	British Classic	BRTCLS	29	Motown	MOTOWN
15	British Modern	BRTMOD	30	Vintage	VINTAG

Effects Library

1	Chorus	CHORUS	16	Chorus + Digital Delay	CHRDLY
2	Phaser	PHASER	17	Chorus + Delay + Reverb	CHDLRV
3	Flanger	FLANGR	18	Flanger + Analog Delay	FLGDLY
4	Pitch	PITCH	19	Phaser + Tape Delay	PHSDLY
5	Tremolo	TREMLO	20	Phaser + Mod Delay	PHMDLY
6	Octaver	OCTAVR	21	Phaser + Room Reverb	PHSRVB
7	Envelope Filter	ENVFLT	22	Digital Delay + Hall Reverb	DDLYRV
8	Digital Delay	DDELAY	23	Pitch + Plate	PCHPLT
9	Analog Delay	ADELAY	24	Chorus + Hall Reverb	CHRRVB
10	Pong Delay	PDELAY	25	Pong Delay + Hall Reverb	PNGHAL
11	Mod Delay	MDELAY	26	Mod Delay + Room	MDLYRM
12	Tape Delay	TAPDLY	27	Tremolo + Tape Delay	TRMTAP
13	Hall Reverb	HALRVB	28	Pitch + Digital Delay	PCHDLY
14	Plate Reverb	PLTRVB	29	Mod Delay + Plate Reverb	MODPLT
15	Ambience	AMBIEN	30	Octaver + Tape Delay	OCTTAP

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