DigiTech GSP 1101 Update

The Power to Create

I. NEW AMP AND EFFECTS MODELS

NEW AMP MODELS:

"62 BROWN BASSMAN",
"01 JCM2000",
"94 MARK IV",
"04 TRIPLE RECTIFIED",
"MESA 22 CALIBER"
"MATCH CHIEFTAIN"
"99 LEGACY VL-100",
"SUPERGROUP",
"GA-40",
"OR-120",
"PV 5150 ",
"RG100",
"JAZZ 120",
"SOLAR 100",
"DIGITECH CHUNK",
"DIGITECH BLUES",
"DIGITECH FUZZ",
"DIGITECH SPANK",
"DIGITECH CRUNCH",
"DIGITECH MONSTER",
"DIGITECH TWEEDFACE",
"DIGITECH BLACK BASSMAN",
"DIGITECH STONER ROCK",
"DIGITECH DARK METAL",
"DIGITECH TRANSISTOR",
"DIGITECH BROWN SOUND",
"DIGITECH MOSH"

NEW SPEAKER CABS

"BRITISH 1X12",
"GIBSON 1X12",
"JAZZ 2X12",
"RECTIFIED 4X12",
"DIGI CHUNK",
"DIGI SPANK",

"DIGI SPKR COMP",

NEW STOMPBOX EFFECTS

"REDLINE"
"TS MOD"
"AMPDRIVER"
"OC DRIVE"
"SD ODRV"
"3 BAND EQ"

NEW MODULATION EFFECTS

"GLISTENING CHORUS"
"SCATTER TREMOLO"

II. NOISE GATE UPDATES

PRE/POST NOISE GATING

The noise gate now changes places depending on the mode of the loop on the 1101. This is set in the I/O setup. In the FX loop position the noise gate is now set for pre loop so you can use an external effects processor in the loop of the 1101 on and not have the gate kill the effect tails. In the external amp position the loop will switch to post loop to gate the noise from the external preamp. The detection circuit still remains pre loop in the position to avoid noise from the preamp opening the noise gate.
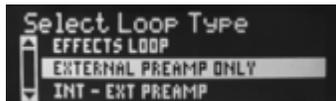
In effects loop mode the gate is before the 1101 insert send and after the amp model.

In the external pre-amp setting or external amp setting the noise gate processing is after the 1101 return.

Gate/IPS detection circuit can now switch between input and loop return. This is located under the I/O setup section. The loop return setting should only be used if you are not running into the guitar input of the 1101 (using only the return). This is automatically now set loop return in wizard 5. In the input setting the 1101 pitch and gate threshold are not influenced by amplifier/effect coloration from units in the 1101's loop.

When the GATE/IPS detection is set to the guitar input (default), the 1101 uses the guitar input jack for better tracking and noise gate headroom.

When GATE/IPS detection is set to loop return (Wizard 5), the 1101 listens to the return for pitch tracking and gate detection.

PRE-VOLUME POSITION

Pre-volume is now always post noise gate (it will follow the noise gate pre or post send). In the previous release the pre volume control was post FX and in some cases ended up being pre gate when the FX pre/post parameter was in the pre position which would cause issues.

III. ROUTING AND PANNING

PANNING

The Chorus, Delay, and Reverb now have panning parameters so you can pan the effects right and left and adjust the width of the stereo field. The pan parameters like most other parameters are controllable via continuous controller such the expression pedal. To control the stereo width, you can assign one controller to the right and left pan controls but reverse the minimum and maximum on one side.
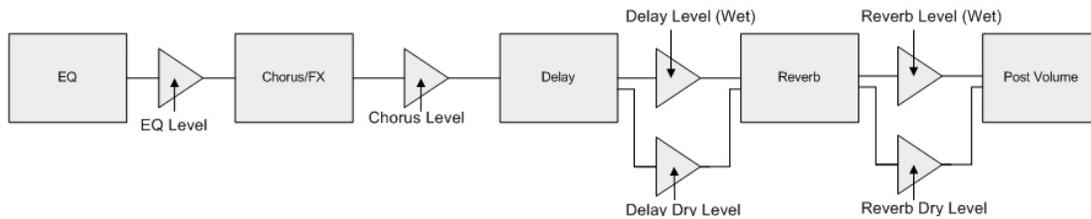
Pan controls are located under the effects edit of the effects block.

ROUTING

There is now a parallel effects mode with dry defeat on the loop return! This is especially useful for users that have parallel effects loops on their amplifiers. These features are located under the Edit EFEECTS/PRESET menu and EFFECT CONFIG. The default is series which is the way the 1101 is shipped. Selecting parallel puts the chorus, delay and reverb into a parallel routing configuration.
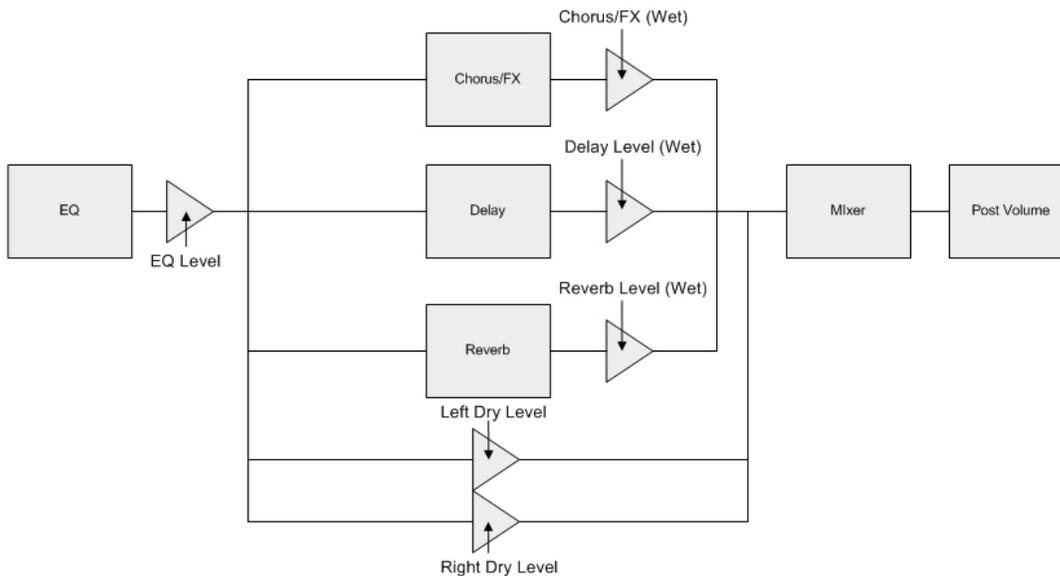
1101 Series Routing Configuration

The 1101 ships with the series configuration which has the above signal flow.

```
Select Effect To Edit
EFFECT CONFIG   SERIES
USE/KILL DRY    USE DRY LVL
POST DRY LEVELS          ▶
```
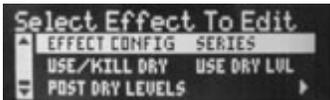
1101 Parallel Routing Configuration

Selecting parallel creates the routing shown above for the effects loop

```
Select Effect To Edit
EFFECT CONFIG   PARALLEL
USE/KILL DRY    USE DRY LVL
POST DRY LEVELS          ▶
```

DRY LEVEL CONTROL/DRY KILL

To get the most effective use of the various 1101 effects such as volume and EQ, we recommend running a series effects loop. Some amplifiers however, only have a parallel

loop and always pass dry audio even with the loop mix at 100%. These amplifiers will create an unwanted phasing effect in their loops due to the fact that one signal is slightly delayed and they are exact duplicates of each other. The 1101 now has a feature called DRY KILL that removes the dry signal from the loop return so your effects are 100% wet. You can access this feature under the EFFECT/PRESET edit menu. In this case your amplifier would provide its own dry signal which is parallel to the effects loop. The mix between the dry and effected signal is adjusted by the mix control on the amplifier and the output level on the 1101.

When using a parallel loop, enable the 1101 dry kill to prevent phasing issues caused by two different dry signals

Amps with parallel loops use a mix control on the loop to control the wet to dry mix..
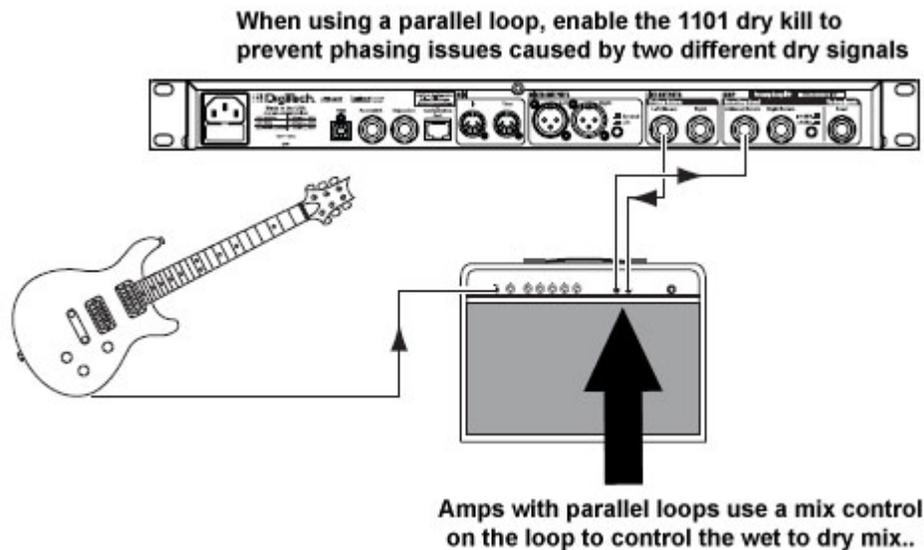
In parallel configuration setting the USE/KILL DRY to KILL LEVEL removes the dry signal by setting the DRY LEFT and DRY RIGHT to 0. When chorus, delay and reverb are all bypassed in this mode the 1101 loop will not pass audio on the loop to avoid phasing issues.

In series configuration, setting the USE/KILL DRY to KILL LEVEL removes the dry signal by setting the DELAY DRY AND REVERB DRY to 0. This allows you to get effects like a delayed reverb or a chorus delay while running in a parallel. The 1101 loop will not pass any audio in this mode if both reverb and delay are bypassed to avoid phasing.

INPUT MUTE

An input mute parameter has been added to the delay and reverbs effects under the I/O setup page. Now with input mute parameter, you can keep the effect tails while bypassing

an effect in the same preset (no preset change) as well as when changing presets. When ON/BYPASS is selected the effects tails will mute when an effect is bypassed.

```
I/O Setup
  GATE/IPS DETECT  INPUT
  USB SETUP                ▶
  DELAY REVERB    INPUT MUTE
```

III. MIDI & CONTROL

TAP TEMPO

The 1101 now accepts tap tempo via midi controller. To make this work, press the edit select once. Go to the midi/controllers menu and press select again. Scroll down to tap it CC and assign a CC number to the CC Tempo. To tap a tempo, just send the same controller number to the 1101 with a value of 127. For Control 2 users this same CC (value 127) is sent out of the unit midi thru on the 1101. This allows you to send a tap tempo command to another unit such as a second 1101. Some midi controllers don't have momentary buttons so they toggle between 127 and 0. For these midi device you can select RCV CC as on/off for latching buttons and still have the same functionality.
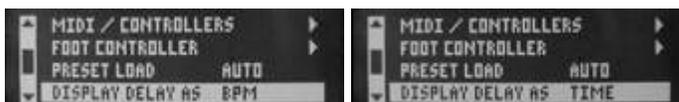
```
MIDI / CONTROLLERS
  SEND MIDI PGMS    ON
  MIDI TEMPO        ON
  CC TEMPO         OFF     ▶
```
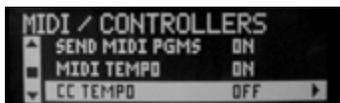
BEAT DIVISIONS

Beat divisions have been added to each of the delay types. These show up under the delay edit menu. The values are sixteenth, triplet, eighth, dotted eight, quarter, quarter triplet, dotted quarter, half and whole note. The value default is a quarter note (1/4). These values may also be assigned to a controller such as the footswitch to change between values on the fly in a program. They are currently not visible in the X-Edit delay section but are available through the expression assignment menu in X-Edit.

```
Editing Delay          TEMPO DIVISION          TEMPO DIVISION
  PAN LEFT    LEFT 49  ▶   <1/6>  QUARTER TRIPLET 3♩   <1/12> EIGHT TRIPLET 3♪
  PAN RIGHT   RIGHT 49 ▶   <3/16> DOTTED EIGHT ♪       <1/8>  EIGHT ♪
  DIVISION    1/4 ♩    ▶   <1/4>  QUARTER ♩            <1/6>  QUARTER TRIPLET 3♩
```

DELAY TIME

Delay Time now can be shown in MS or BPM values globally. This can be selected under the edit menu.

```
  MIDI / CONTROLLERS   ▶     MIDI / CONTROLLERS   ▶
  FOOT CONTROLLER      ▶     FOOT CONTROLLER      ▶
  PRESET LOAD     AUTO       PRESET LOAD     AUTO
  DISPLAY DELAY AS  BPM      DISPLAY DELAY AS  TIME
```

GLOBAL TEMPO

Setting the midi tempo to on will now activate global tempo between presets. Turning this on enables you to change presets in the middle of a song and have tap tempo track from preset to preset. Turning midi tempo off will disable global tempo allow each preset to have its own tempo. This is located under the Midi/Controllers menu.

CONTROL 2 PEDAL 2 UPDATE

Like the Control 2 Pedal 1, the Pedal 2 on the Control 2 can now send midi controller out of the midi thru. This is located under CC send in the Foot Controllers menu.
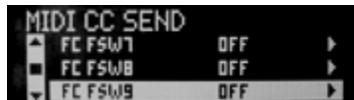

CONTROLLER UPDATES

An option has been added to send a midi CC from the Control 2 stomp box buttons so they can be reassigned to work like a midi controller. Assigning any of these controls to a controller removes the default function on the pedal that is assigned. This assignment is located under the Edit/Foot Controller/Midi CC Send menu.

The menu is labeled as follows"

Distortion= FC FSW6
Chorus/FX=FC FSW7
Delay=FC FSW8
Reverb=FC FSW9

CONTROL 2 TOE SWITCH UPDATE

You can now assign a midi controller number to be sent out when you activate the toe switch on the Control 2. Assigning a controller send to the toe switch does not remove the wah on/off function. Therefore you can have the toe switch turn on and off the wah and other effects at the same time by pressing the down on the Control 2 toe switch. This assignment is located under the Edit/Foot Controller/Midi CC Send menu.

Control 2 Toe Switch=FC TOE
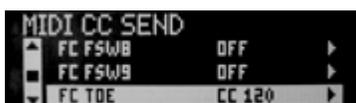
FS300 UPDATE

CC send menu has new functionality that allows you to use the FS300 to send midi as well as the other top row of buttons on the Control 2 and the Control 2 toe switch. This assignment is located under the Edit/Foot Controller/Midi CC Send menu

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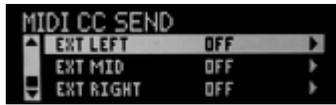
Control 2 Toe Switch=FC TOE
FS300 Left button=EXT LEFT
FS300 Middle button=EXT MID
FS300 Right button=EXT RIGHT

CONTROLLER MERGING

The 1101 will now respond to the midi controller numbers it sends from the Control 2 and FS300. For example, if you assign the FS300 to send midi controller number 6 and want this to turn on and off the EQ, you can simply assign controller number 6 to the EQ on/off in the expression links of your preset. That way the 1101 sends midi controller 6 out the midi thru and also responds to the same command.

TUNER ACCESS VIA MIDI CONTROLLER

You now can now access the tuner via midi CC sent to the 1101 with a value of 127. This function is located under the midi/controllers menu. Selecting a CC number will make the 1101 go in and out of tuner mode when the matching midi CC is sent to the 1101 midi input with a value of 127. Some midi controllers toggle between 127 and 0. For these controllers you can select RCV CC as on/off for discrete commands and still have the same functionality.

CONTROL 2 WAH MIN/MAX

The wah now features a minimum and max range limit for the Control 2 pedal 1. To set this, just edit the wah and scroll down to FC PDL1 Min and Max to set the range.

SYSEX BULK DUMP

Sysex Bulk dump has been added. This is located under the midi/controllers menu. This

feature allows you to dump programs and settings directly from one 1101 to another. Simply connect the midi thru of one 1101 to the midi in of the next. Choose Midi Bulk dump on the menu and select yes. The first unit will begin dumping its programs to the second unit.

```
MIDI / CONTROLLERS        Send MIDI dump ?
  CC TUNER      OFF    ▶     NO
  REV CC AS     ON / OFF      YES
▼ BULK DUMP             ▶
```

V. IMPROVEMENTS

PEDAL POLARITY

Switching polarity has been added for the two expression pedals under the foot controller menu. This is for users that have a reverse polarity expression pedal such as a Yamaha expression pedal. Now you can switch the polarity in one place globally for all your programs.

```
FOOT CONTROLLER           FOOT CONTROLLER
  BOUNCE BACK    OFF        BOUNCE BACK    OFF
  VOLUME UPDATE  ON         VOLUME UPDATE  ON
▼ EXT PDL POLARITY NORMAL ▼ EXT PDL POLARITY REVERSE
```

EXPRESSION PEDAL RESPONSE CURVES

There is now a setting for different response curves for the 1101 expression pedal. We found that many volume pedals act smoother with the linear setting and other CV pedals tend to work smoother with the squared setting.

```
FOOT CONTROLLER           FOOT CONTROLLER
  EXT PDL POLARITY NORMAL   EXT PDL POLARITY NORMAL
  FC PDL2 POLARITY NORMAL   FC PDL2 POLARITY NORMAL
▼ EXT PDL CURVE   LINEAR  ▼ EXT PDL CURVE   SQUARED
```

WAH NOW DEFAULTS TO -6dB

Some users found the wah to be too loud when used with some amp models. Since previously the minimum volume was 0 there was no way to turn the wah down. Now the minimum output on the wah has been lowered from 0 dB to -6dB. The wah still has a maximum output level setting of 12dB.

```
Editing Wah
  ×WAH       ON      ▶
  MODEL      CRY WAH ▶
▼ WAH LEVEL  -6 dB   ▶
```

SWITCHING SPEAKER COMPENSATION

Speaker compensation is now disabled on the XLR, ¼ and headphones in wizard 3 when using the direct speaker cab selection. This removes the compensation for acoustic guitar models as well since they default to using direct as their speaker cab selection.

HARMONIZER/WHAMMY UPDATES

Harmonizer, pitch shifting and Whammy effects have had several improvements and now offer better tracking. Note the guitar must still be in tune to track the correct notes.

The harmonizer now also includes more interval selections such as seconds and sevenths.

GUITAR TUNER UPDATE

Tuner DSP algorithms have been updated to match those of the hardwire series for better tuning accuracy.

UPDATED PRESET CONTROLS

The Control 2 pedal 1 now controls the pre-volume control by default. The factory presets have been updated to include Pedal 1, Pedal 2, Expression Pedal, and CC7 to control pre volume.

VI. BUG FIXES

-Pedal memory (volume update) now works with midi CC's and the Control 2.

-File system issues caused by using the front panel and using X-Edit at the same time have been fixed.

-A rare X-Edit copy and paste bug has been fixed which could cause the file system to become corrupt

-Midi clock forcing the delay times out of bounds on the analog delays has been fixed.

-Minor file system fixes for the naming dialog.

-Fix for control assignments that link both to pre/post volume and wah pedal

-Stomp box names have been corrected.

-Fixes for the midi thru so correct data is sent

-A bug where audio fade or loss of audio could occur has been fixed through optimizing the DSP code.

-All system parameters and foot controller settings are now store when you do a system backup.

-Volume update now works correctly when exiting tuner and changing presets

-The tone controls have been fixed on the new amplifiers.

-Flash Memory code has been updated for smoother performance when storing presets.