Gibson G FORCE User Manual 2.32 Gibson Brands Revision 1.0



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## **Basic Gibson G FORCE™ Functions: Start Here**

#### A) Tune to Standard Tuning

- 1. Press **On** button. Strum once.
- 2. When all LEDs are green, all six strings are tuned. Gibson G FORCE turns off automatically.

## B) For a Little More Precision (Spend a Few More Seconds, Tune One String at a Time)

- 1. *Press and hold* the **On** button until the **red E** LED lights.
- 2. Pluck the string with the **red** LED. Pluck each string individually until its LED is **green**, and Gibson G FORCE goes automatically to the next string.
- 3. When all LEDs are green, all six strings are tuned. Gibson G FORCE turns off.

#### C) Here's The Really Great Part!! Play In a Different Tuning

- 1. Press the **On** button two times.
- Press Up/Down to scroll through tuning preset banks (red, green, blue)
- 3. Press Left/Right to get to individual tunings.
- Press Enter briefly—wait until all LEDs are red—strum once (the tuners start working when you press Enter).
- 5. When all LEDs are **green**, all six strings are tuned. Gibson G FORCE turns off.
- 6. The new tuning is now your default. Just do either (A) or (B) to get back in tune to the new default tuning.

#### D) Return to Standard Tuning

- 1. Press the **On** button two times.
- Press Up/Down for the red tuning bank, then press Left/Right until the red E LED is on. Press Enter; strum once. Standard tuning is now the default.

# E) You can turn off Gibson G FORCE by pressing *and* holding the ON button

#### Do's and Don'ts

- **Don't** use string winding tools. Besides, Gibson G FORCE's string up/string down function is better.
- **Don't** tune manually while Gibson G FORCE is on.
- **Do** read Appendix 5 and Appendix 6 for important safety information about Gibson G FORCE.
- **Do** check the **BAT** LED periodically. **Green** = charged, **yellow** = acceptable, **red** = time to recharge.
- **Do** charge the battery before using Gibson G FORCE for the first time.
- Do read the rest of the manual to take advantage of the optional advanced Functions.
- **Do** visit <u>www.gibson.com/gforce</u> for news about the Gibson G FORCE system.





## Main Tuning Preset Bank Default Tunings

Red Ma	in Tuning Preset bank						
	string	E	Α	D	G	В	е
LED							
E	standard	E	Α	D	G	В	E
Α	DADGAD	D	Α	D	G	A	D
D	whole step	D	G	С	F	Α	D
G	drop D	D	Α	D	G	В	E
В	E flat	Eb	Ab	Db	Gb	Bb	Eb
е	double drop D	D	Α	D	G	В	D
Green I	Main Tuning Preset Bank						
	string	E	Α	D	G	В	е
LED							
E	open E	E	В	E	G#	В	E
Α	open A	E	Α	E	Α	C#	E
D	open D	D	Α	D	F#	Α	D
G	open G	D	G	D	G	В	D
В	dobro	G	В	D	G	В	D
е	all 4ths	E	Α	D	G	С	F
Blue Us	er Tuning Preset Bank						
LED	string	E	Α	D	G	В	е
E							
A							
D							
G							
B							
e							

The blue user tuning preset bank defaults to standard tuning (E, A, D, G, B, e). Use the chart to write in custom tuning names and tunings.

## Low Tuning Preset Bank Default Tunings

White	Low Tuning Preset Banks	;)					
	string	E	Α	D	G	В	е
LED							
E	C tuning	С	F	A#	D#	G	С
A	low C	С	G	D	G	Α	D
D	C sharp	C#	F#	В	E	G#	C#
G	B tuning	В	E	Α	D	F#	В
B	dropped C	С	G	С	F	Α	D
e	dropped B	В	F#	В	E	G#	C#
Yellow	(Low Tuning Preset Bank	s)					
	string	E	Α	D	G	В	е
LED							
Ε	open C	С	G	С	G	С	E
A	open C6	С	Α	С	G	С	E
D	open B	В	F#	В	F#	В	D#
G	double drop C#	C#	G#	C#	F#	A#	C#
В	double drop C	С	G	С	F	Α	С
<b>e</b>	double drop B	В	F#	В	E	G#	В
Magen	ta User Tuning Preset Ba						
LED	string	E	Α	D	G	В	е
<u>E</u>							
A D							
D G							
G B							
в e							
e							

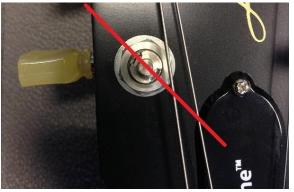
The magenta user tuning preset bank defaults to standard C tuning (C, F, A#, D#, G, C). Use the chart to write in custom tuning names and tunings.

### **Re-Stringing Guitars with Gibson G FORCE™**

For proper Gibson G FORCE operation, re-string your guitar following these instructions. To maintain a constant neck tension, Gibson recommends changing strings individually.

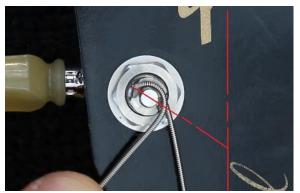
#### Bass Side Guitar Stringing for Gibson G FORCE

- 1. Unscrew the machine head cap.
- 2. Looking at the top of the headstock with the bass strings toward the left, the machine head's right recess should be between 4:00 and 5:00 o'clock, and the left recess between 10:00 and 11:00 o'clock.



Low E string machine head detail. The guitar body is below the picture.

3. Thread the string through the bridge and toward the machine head. Pull on the string to take up any slack as you wrap it partially around the part of the post below the flange that faces away from the guitar body. Then, bring the string up through the flange recess that faces the tuning pegs.



String winding technique. The string shaft slot (where to feed the string up toward the thread) is at an approximate 45 degree angle. The guitar body is below the picture.

4. Wind one turn clockwise around the part of the post directly above the flange.



Wind the strings in the same direction (clockwise) as the direction of tightening the machine head cap.

- 5. Screw the cap on as tight as you can with your fingers, then use a penny to give an additional 1/8<sup>th</sup> turn. *Do not overtighten*!
- 6. Use **String Up** mode (see page 11) to tune the string.

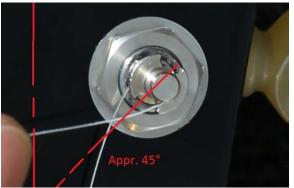
#### Treble Side Guitar Stringing for Gibson G FORCE

- 1. Remove the machine head cap.
- 2. Looking at the headstock from the top and with the treble strings toward the right, the machine head's right recess should be between 1:00 and 2:00 o'clock, and the left recess between 7:00 and 8:00 o'clock.



The red line indicates a 45 degree angle.

- 3. Thread the string through the bridge and toward the machine head. Pull on the string to take up any slack as you wrap it partially around the part of the post below the flange that faces away from the guitar body.
- 4. Bring the string up through the recess in the flange, and wind clockwise around the part of the post just above the flange.



String slot shaft (where to feed the string up toward the thread) with an approximate 45 degree angle.

5. When you wrap the string around the top part of the post, wind it directly on top of the flange, not partway up the upper part of the post. Wrap *two* full turns for the B and high e strings.



Wind the strings in the same direction (clockwise) as the direction of tightening the machine head cap. Make sure to wrap two full turns with the B and high e string before tightening the cap.

- 6. After wrapping the string around the top part of the post, pull it tight with one hand as you screw on the cap with the other hand.
- 7. Screw the cap on as tight as you can with your fingers, then use a penny to give an additional 1/8<sup>th</sup> turn. *Do not overtighten*!
- 8. Use **String Up** mode (see page 11) to tune the string.

## **Changing the Gibson G FORCE Battery**

A fully-charged battery provides approximately 100 tunings—more if you're just "touching up." **Please** read Appendix 5 (page 27) for information about proper battery care and charging.

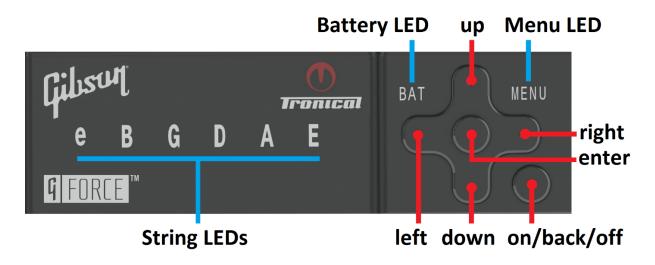
**To remove the battery:** The battery compartment is located in the Gibson G FORCE controller on the back of the headstock. Push down on the rectangle that's visible at the top of the controller (between the machine heads for the 3<sup>rd</sup> and 4<sup>th</sup> strings). The battery will pop up slightly. Note the groove facing outward at the top of the battery, and use it to pull the battery out of its compartment.

**To insert the battery:** *Never force the battery into its compartment. If it does not insert easily, it is not being inserted correctly.* 

Insert the battery with its two metal contacts facing outward and away from the headstock, and the pins pointing downward into the compartment. Push downward gently on the top of the battery until you hear/feel a click. If the top of the battery is flush with the top of the controller, it's seated correctly.

#### **Overview: How to Choose, Access, and Edit Advanced Functions**

Gibson G FORCE<sup>™</sup> is easy to use. The most common functions—tuning a guitar to standard and alternate tunings—take a few button presses. The string LEDs (from "E" for the 6<sup>th</sup>, lowest-pitched string to "e" for the 1<sup>st</sup>, highest-pitched string) show the system status.



Gibson G FORCE stores standard, alternate, and custom tunings in *presets*. Each preset contains a *tuning*. This can be a factory default tuning, or a custom tuning you create and store.

Follow the simple instructions in the Quick Start guide, and your guitar will always be in tune.

However, Gibson G FORCE is like a video game with additional "levels." These levels offer advanced tuning functions. Use them or not; it's your choice. Here's an overview of how to choose, access, and edit the advanced functions.

Categories. Gibson G FORCE has six main Categories.

- After pressing the **On** button three times (don't press too fast—each one should be about a second apart), press the **Left/Right** buttons to select a **Category**, and then press **Enter**.
- Each Category has an associated color. *Examples:* The Yellow Category is mostly advanced software functions. The Magenta Category handles string pitch offsets.
- When choosing a Category, the **Menu LED** *flashes* the Category color.

Functions. Each Category offers various Functions.

- After selecting a Category, press the Left/Right buttons to select a Function within the Category, and then press Enter to access the Function.
- When the **Menu** LED lights solid with the Category color, you can edit the Function with the **Up/Down/Left/Right** and **Enter** buttons.

**On/Back/Off button.** The **On** button becomes a **Back** button when editing. It can also turn Gibson G FORCE **Off**.

- If Gibson G FORCE is in a **Function**, press the **On** (**Back**) button to return to the Function's **Category**.
- Press the **Back** button again, and Gibson G FORCE is in **Tuning Selection** mode.
- *Press and hold* the **On (Off)** button to turn off Gibson G FORCE (if G FORCE doesn't turn off, release the button then *press and hold* again).

After pressing **Enter** to complete a Function, Gibson G FORCE usually returns to Function selection so you can select another Function quickly. Or if you're done, *press and hold* the **On (Off)** button to turn off Gibson G FORCE.

# Note: Please read the important legal and safety information regarding Gibson G FORCE in Appendix 5 (page 27) and Appendix 6 (page 28) prior to using Gibson G FORCE.

### **Advanced Functions**

### Tuning Functions (White Category)

## E String Up/Down Wind or unwind strings rapidly

- 1. With Gibson G FORCE off, press **On** three times. Then press **Enter** twice.
- 2. The LED for the string to wind or unwind flashes red. The Left/Right buttons select a string.
- 3. *Press and hold* **Down** to wind down, **Up** to wind up.

**Note:** During String Up/Down, Single-String Tuning Mode (tunes each string individually) is active. When approaching the correct pitch during string wind up, release the **Up** button and pluck the string. A flashing **yellow** string LED indicates the string is close to the pitch defined by the last completed tuning. Gibson G FORCE takes over, tunes the string to pitch, then moves automatically to the next string. (If tuning starts but does not complete, pluck the string again.)

## A Custom Tuning

# Create a custom tuning, then store it as a user tuning preset in the blue tuning preset bank. See Appendix 3 and Appendix 4 for more custom tuning options.

- 1. With Gibson G FORCE off, tune your guitar to a custom tuning.
- 2. Press **On** three times. Press **Enter**.
- 3. Press the **Left** button once to select the **white A** string LED, then press **Enter**.
- 4. When a string flashes **red**, pluck it. (**Tip:** Mute a string after its string LED turns **green** to speed up the process.)
- When a string LED flashes blue, use the Left/Right buttons to select a blue bank preset. Press Enter = stores the tuning in the selected preset.

### A Custom Tuning with "Pitch Assist" Mode

# Create a custom tuning, then store it as a pitch-corrected user preset in the blue tuning preset bank

Enabling Pitch Assist mode before saving a custom tuning automatically pitch-corrects notes that are within 40 cents of correct pitch.

- 1. With Gibson G FORCE off, tune your guitar to a custom tuning.
- 2. Press **On** three times. Press **Enter**.
- 3. Press the **Left** button once to select the **white A** string LED, then *press and hold* **Enter** for more than 3 seconds to engage Pitch Assist.
- 4. When a string flashes **red**, pluck it. (**Tip:** Mute a string after its string LED turns **green** to speed up the process.)
- When a string LED flashes blue, use the Left/Right buttons to select a blue bank preset. Press Enter = stores pitch-corrected tuning in the selected preset.

### D Reference Tuning Tune the guitar to itself, but reference a non-standard pitch

*Example:* A piano is in tune with itself, but slightly flat. Tune one string to the piano, make that the reference pitch, and the guitar will be in tune with the piano.

*Note:* Loading any other tuning erases the reference tuning. To save this tuning as a user tuning preset, treat it as a Custom Tuning and follow the steps in **A Custom Tuning** above. Do not use Pitch Assist.

- 1. With Gibson G FORCE off, tune one string to the new reference pitch.
- 2. Press **On** three times. Press **Enter**.
- 3. Press the **Left** button twice to select the **white D** string LED. Press Enter.
- 4. E string flashes **red**. Use the **Left/Right** buttons to select the string you tuned to the new reference pitch.
- 5. Pluck the string. When the string LED shines green and all others red, strum to tune the guitar.
- 6. LEDs turn off = reference tuning is complete.

## **G** Firmware Version

#### **Display Gibson G FORCE firmware version number**

- 1. With Gibson G FORCE off, press **On** three times. Press **Enter**.
- 2. Press the Left button three times to select the white G string LED. Press Enter.
- You'll see three sequences of lit LEDs. The number of lit green LEDs is the version number's first digit, the number of lit blue LEDs is the second digit, and the number of lit red LEDs is the third digit. All white LEDs = zero. Example: 2 lit green LEDS + 3 lit blue LEDs + 1 lit red LED = version 2.3.1
- 4. The sequence occurs rapidly. If you need to see it again, press Enter.

# B Battery Level Check battery charge

- 1. With Gibson G FORCE off, press **On** three times. Press **Enter**.
- Press the Left button four times (selects the white B string LED). Press Enter. More lit LEDs = stronger charge. If only one or two red LEDs are lit, recharge the battery.
- 3. The status indication occurs rapidly. If you need to see it again, press Enter.

# Temporary Global Tuning Offset Change reference from A=440 Hz to between 434 Hz and 446 Hz

A = 440 Hz is an international tuning standard. However, some orchestras tune to A = 442 Hz or 443 Hz, and some musicians tune to a higher pitch for a "brighter" sound.

- 1. With Gibson G FORCE off, press **On** three times. Press **Enter**.
- 2. Press the Left button five times to select the white e string LED. Press Enter.
- 3. All string LEDs flash **white**. (If an offset already exists, Gibson G FORCE displays the offset amount with lit **green** or **red** LEDs—see next.)
- 4. Each **Left** button raises pitch by 1 Hz press and lights a **green** LED. Each **Right** button press lowers pitch by 1 Hz and lights a **red** LED.
- 5. Press **Enter** to store the offset temporarily.

*Note:* Gibson G FORCE applies this offset when you tune using the current tuning preset. Loading a new tuning preset reverts to the 440 Hz standard. To retain the offset until you change it, see the Yellow category, **B Tuning Offset Mode (Permanent or Temporary)** on page 18.

## **Reset Function (Red Category)**

#### Restore factory default tuning presets for the selected tuning preset bank

- 1. With Gibson G FORCE off, press **On** three times.
- 2. Press the Left button five times (selects red e string LED).
- 3. Press **Enter**. Use the **Left/Right** buttons to select the string LED associated with the Function below. The remaining procedure is the same for each Function.
- E Reset Red Tuning preset bank
- A Reset Green Tuning preset bank
- **D** Reset **Blue** Tuning preset bank
- **G** Reset White Tuning preset bank
- **B** Reset Yellow Tuning preset bank
- e Reset Magenta Tuning preset bank
  - 4. *Press and hold* the **Enter** and **Up** buttons *simultaneously* by pushing in the space between them while holding your finger over both buttons.
  - 5. LEDs with the same color as the bank flash sequentially = reset confirmed.
  - 6. To reset additional banks, repeat steps 3-5.

## Master System Reset (Red Category)

# Restore Gibson G FORCE to original factory settings (also *highly* recommended when changing string gauges)

*Note:* This procedure erases *all* custom tunings.

- 1. With Gibson G FORCE off, press **On** three times.
- 2. Press the Left button five times to select the red e string LED. Press Enter.
- 3. Press the Left button six times. The E LED lights cyan.
- 4. *Press and hold* the **Enter** and **Up** buttons simultaneously by pushing in the space between them while holding your finger over both buttons.
- 5. Cyan LEDs light sequentially = reset confirmed.
- 6. After a reset, use Calibration mode to re-calibrate the guitar (see next section).

### Advanced Hardware Functions (Cyan Category)

Except for Calibration Mode, these Functions are for advanced users only. Gibson recommends the default settings.

#### **E** Calibration Mode

Note: You must recalibrate Gibson G FORCE if:

- You change your strings' gauge, type, or brand
- Perform a master system reset or firmware update
- Encounter issues like erratic machine head movements, strings not tuning properly, etc.

Before calibration, tune the guitar to standard pitch (red tuning bank, E Function).

- 1. With Gibson G FORCE off, press the **On** button.
- 2. Strum the open strings once.
- 3. When all LEDs are **green**, all six strings are tuned. Gibson G FORCE turns off automatically (if any LEDs aren't **green**, pluck those strings individually).

#### Calibration:

- 1. Press **On** three times. Press the **Left** button once (selects cyan A).
- 2. Press Enter twice. The string LEDs blink red.
- 3. Strum once. All lights should shine **green** briefly then turn off. If the LEDs continue to flash **red**, mute the strings and strum again.
- 4. Once the strings have turned off from being green, or show a combination of blue and red LEDs, mute the strings. Then all string LEDs blink red.
- 5. Repeat steps 3 and 4 until the LEDs light sequentially and one string LED is lit.

### A Accuracy

#### Balance tuning accuracy vs. speed

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button to select cyan A. Press **Enter**.
- 2. Again, press the **Left** button to select cyan A. Press **Enter**.
- 3. The **Left/Right** buttons select the accuracy. More lit LEDs = higher accuracy/tuning takes a little longer. Fewer lit LEDs = accuracy is a little lower/faster tuning speed.
- 4. Press **Enter** = accuracy setting stored.

### **D** Machine Head Delay

#### Set a delay before the machine heads start turning after initiating a Function

- With Gibson G FORCE off, press On three times. Press the Left button once to select cyan A. Press Enter.
- 2. Press the Left button twice to select the cyan D string LED. Press Enter.
- 3. The Left/Right buttons select the delay. Each unlit LED increases delay by 0.5 seconds.
- 4. Press **Enter** = delay setting stored.

### **G** Machine Head Speed

# Slow the machine head speed to accommodate guitars whose neck relief or neck stability degrades tuning accuracy

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button once to select cyan A. Press **Enter**.
- 2. Press the Left button three times to select the cyan G string LED. Press Enter.
- 3. Use the Left/Right buttons to select the speed. Each unlit LED decreases the speed.
- 4. Press **Enter** = speed setting stored.

### **B** Interference Filter

# Reduce interference among strings if a machine head turns for a string other than the one you're plucking.

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button once to select cyan A. Press **Enter**.
- 2. Press the Left button four times to select the cyan B string LED. Press Enter.
- 3. Use the **Left/Right** buttons to select the filtering amount. Each **unlit** LED increases the filtering amount to reduce interference.
- 4. Press **Enter** = interference filter setting stored.

*Note:* Raising this setting to six lit LEDs may increase performance but make the e and B strings more susceptible to incorrect tuning, even if G FORCE indicates they are in tune. If this occurs, lower the Interference Filter setting to three or four lit LEDs.

## Advanced Software Functions (Yellow Category)

#### E Gain

# Increase gain if string LEDs don't turn yellow when first plucked; decrease gain in environments with high ambient noise. The default is recommended.

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button twice to select **yellow D**.
- 2. Press **Enter** twice. The **Left/Right** buttons select the gain amount. More lit LEDs = higher gain/greater system sensitivity.
- 3. Press **Enter** = gain setting stored.

*Note:* The Calibration process (page 15) optimizes gain. Gibson strongly recommends keeping the default Gain setting. However when tuning in loud environments, decreasing gain *temporarily* and tuning in Single-String Tuning mode can improve performance.

## A Guitar Type Optimize Gibson G FORCE for electric or acoustic guitar

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button twice to select **yellow D**.
- 2. Press Enter. Press the Left button once to select the yellow A string LED. Press Enter.
- 3. The Left/Right buttons select E for electric, A E for acoustic, or D A E for short scale guitars.
- 4. Press **Enter** = guitar type setting stored.

### **D** Pitch Window

If you try to use Multi-String tuning mode but a string is considerably out of tune, Gibson G FORCE switches automatically to Single-String Tuning mode. This Function sets how far off pitch a string must be before Gibson G FORCE switches to Single-String Tuning mode.

- With Gibson G FORCE off, press On three times. Press the Left button twice to select yellow D. Press Enter.
- 2. Press the Left button twice to select yellow D. Press Enter.
- 3. The Left/Right buttons select the pitch window. 1 lit LED = 150 cents, 2 lit LEDs = 100 cents, 3 lit LEDs = 75 cents, 4 lit LEDs = 50 cents, 5 lit LEDs = 35 cents, all LEDs lit = 25 cents.
- 4. Press **Enter** = pitch window setting stored.

## G Activate Low Tunings and/or Additional User Tuning Preset Banks Opens three additional tuning preset banks (White, Yellow, and Magenta).

This Function activates three additional tuning preset banks. The **White** and **Yellow** banks default to write-protected presets for music with low tunings (heavier gauge strings, up to 0.013 high e to 0.056 low E, are necessary for low tunings). The **Magenta** bank, like the **Blue** bank, defaults to being write-enabled for storing user tuning presets.

However, you can also convert *any* of these banks to user tuning preset banks and store presets in them. See **Block/Unblock Banks for Custom Tunings (Blue Category)** on page 20 for details.

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button twice to select **yellow D**.
- 2. Press Enter. Press the Left button three times to select the yellow G string LED. Press Enter.
- The Left button activates low tunings and additional preset banks (e B G LEDs flash green). The Right button de-activates low tunings and additional preset banks (D A E LEDs flash red).
- 4. Press **Enter** = low tuning/additional banks setting stored.

### **B** Tuning Offset Mode (Permanent or Temporary)

The Global Tuning Offset (white category) is temporary and applies only until loading a new tuning preset. This Function retains offset when changing tuning presets.

- 1. With Gibson G FORCE off, press **On** three times. Press the **Left** button twice to select **yellow D**.
- 2. Press Enter. Press the Left button four times to select the yellow B string LED. Press Enter.
- 3. The Left button selects permanent tuning offset (e B G LEDs flash green). The Right button selects temporary tuning offset (D A E LEDs flash red).
- 4. Press **Enter** = tuning offset mode setting stored.

## Per-String Pitch Offset (Magenta Category)

# Offset any string's individual pitch up to ±12 cents (a cent is 1/100<sup>th</sup> of a semitone)

*Note:* Pitch Offset applies to the last completed tuning. Please choose, select, and tune to a tuning preset before applying per-string pitch offset. Pitch offset will remain applied to this tuning until you change its pitch offset, reset the bank, or reset the system.

- 1. With Gibson G FORCE off, press **On** three times. Press the Left button three times to select **magenta G**. Press **Enter**.
- 2. The Left/Right buttons choose the magenta string LED for the string you want to offset. Press Enter.
- 3. Press the Left/Right buttons to enter the string's pitch offset:
- If no previous offset exists, all string LEDs flash white. Each Left button press lights a green LED and offsets pitch by +1 cent (up to +6 cents). Continuing to press the Left button lights yellow LEDs. Each lit yellow LED offsets the pitch by another +1 cent (+12 cents maximum).
- Each **Right** button press lights a red LED and offsets pitch by -1 cent (up to -6 cents). Continuing to press the **Right** button lights magenta LEDs. Each lit magenta LED offsets the pitch by another -1 cent (-12 cents maximum).
- If an offset already exists, Gibson G FORCE displays the offset amount as described above. In this case, Right or Left button presses continue on from the existing offset. Example: If 12 magenta LEDs are lit to indicate -12 cents of offset, pressing the Left button will turn off successive magenta LEDs, then turn off successive red LEDs, then start lighting green LEDs
- 4. Press Enter. To offset additional strings, repeat steps 2- 4. Otherwise, *press and hold* the **On/Back/Off** button to turn off Gibson G FORCE.

## Block/Unblock Banks for Custom Tunings (Blue Category) Turn write protection on or off for any tuning preset bank

The **blue** bank defaults to a user tuning preset bank for custom tuning presets. For low tunings, the **magenta** bank (see **G Activate Low Tunings and/or Additional User Tuning Preset Banks** on page 18) defaults to a user tuning preset bank for custom tunings (low tunings or otherwise). The remaining banks contain factory tuning presets and are write-protected. However, any of the six banks can have write protection turned off to store custom tunings, or turned on to prevent overwriting custom tunings.

- With Gibson G FORCE off, press **On** three times. Press the **Left** button four times to select **blue** B.
- 2. Press Enter. The Left/Right buttons select the color of the bank to write-enable or write-protect.
- Press Enter. The Left button enables writing to the selected bank (e B G LEDs flash green). The Right button write-protects the selected bank (D A E LEDs flash red).
- 4. Press Enter. Green or red LEDs light sequentially to confirm your choice.
- 5. You can now save a custom tuning to any write-enabled bank.

**Note:** If a bank is blocked, you will not be able to access it with the **Up/Down** buttons when saving a custom tuning (see page 11). However, the **blue** bank is a special case. When you create a custom tuning you are first given a chance to save to the **blue** bank, regardless of whether it's blocked, so that even if all the other banks are blocked you can still save your tuning. However, as soon as you use the **Up/Down** buttons to select a different bank to save a custom tuning, the **blue** bank will no longer be available if it's blocked.

### Capo Mode

Adding a capo often requires retuning a guitar. Gibson G FORCE can detect a capo in the range of the 1<sup>st</sup> to 6<sup>th</sup> frets, then tune while taking the capo position into account. Yes, this is amazing.

#### Enter Capo Mode

- 1. Capo Mode applies to the last completed tuning. Select and tune to a tuning preset prior to entering Capo Mode.
- 2. Once Gibson G FORCE has turned off, attach your capo on the 1<sup>st</sup> to 6<sup>th</sup> frets.
- 3. Press **On** twice. *Press and hold* the **Left** button. **Green** LEDs light sequentially = capo mode is active.
- 4. Press Enter and strum to tune your guitar. Gibson G FORCE briefly indicates capo detection; the number of lit yellow LEDs indicates the capo's location. *Example:* Two lit yellow LEDs = capo at second fret. Then tuning proceeds as usual. *Note:* Whenever you tune in capo mode, Gibson G FORCE first indicates capo location by the number of lit yellow LEDs.
- 5. If any string LEDs aren't green, pluck those strings. Gibson G FORCE turns off automatically once tuning is complete.

#### Exit Capo Mode: Two Options

- Remove the capo. Next time you tune, as soon as you strum Gibson G FORCE will detect there is no capo, red LEDs will flash sequentially to turn off Capo Mode, and Gibson G FORCE will confirm there is no capo by briefly shining all blue LEDs. Continue with tuning.
- If you don't want to retune after removing the capo, starting with Gibson G FORCE off, follow steps 3 and 4 above. **Red** LEDs will light sequentially instead of **green** ones to indicate exiting from Capo Mode. *Press and hold* **On** to power down Gibson G FORCE. Remove the capo.

## **Combine/Morph Tunings**

Apply selected string tunings from one tuning to a different tuning.

- 1. Tune to a "base" tuning preset to which you will add string tunings from a second tuning preset.
- 2. Press **On** twice, then select the second tuning preset: **Up/Down** buttons select the tuning preset bank, **Left/Right** buttons select the tuning preset.
- Please read this entire step before doing any of its instructions. Press and hold the Right button. The Menu LED will flash white rapidly. While it's flashing, press Enter. Gibson G FORCE enters Single-String Tuning mode.
- Use the Left/Right buttons to select a string whose tuning you want to add to the base tuning. The string LED will be red. Pluck it.
- 5. When the string LED turns green, select another string (see step 4) you want to add to the tuning. If you're done, turn off the system by pressing and holding the **On** button.
- 6. You can now turn the system back on and save this as a custom tuning (see A **Custom Tuning** and A **Custom Tuning with "Pitch Assist" Mode** on page 11). Gibson recommends using "Pitch Assist" mode when saving the morphed tuning as a custom tuning.

## Appendix 1 What the String, BAT, and MENU LEDs Colors Indicate

- While a string is tuning, the string LED color shows the string's status.
- The **BAT** LED displays three levels of battery strength.
- The Menu LED indicates the currently selected Function.

String LEDs (E – e) While Tuning				
•	String in tune			
•	String not in tune (pluck string)			
•	Frequency out of measurement range			
•	Associated machine head is turning			
•	Frequency measurement in progress			
0	Interference between higher and lower strings			
Battery LED				
•	Battery fully charged			
•	Battery is low			
•	Recharge battery			
Menu LED				
•	Tuning is active			
0	Tuning Functions category			
•	[flashing] Reset menu			
•	Advanced hardware Functions category			
0	Advanced software Functions category			
•	String pitch offset category			
•	Block/unblock banks category			
0	[flashing] Capo mode			

## Appendix 2 Minimum and Maximum String Frequencies for Alternate Tunings

Please note these are guidelines that will vary depending on the string gauges you use.

The maximum recommended string gauge is 0.013 for high e to 0.056 for low E.

<b>Minimum Frequencies</b>		Lowest Corresponding Note for		
		Low Tunings		
Normal Tunings	Low Tunings			
E 60Hz	47 Hz	G1 (49 Hz)		
A 80 Hz	63 Hz	C2 (65.41 Hz)		
D 112 Hz	89 Hz	F#2 (92.50 Hz)		
G 150 Hz	119 Hz	B2 (123.47 Hz)		
B 190 Hz	150 Hz	Eb3 (155.56 Hz)		
E 250 Hz	198 Hz	Ab3 (207.65 Hz)		

Maximum Frequencies	Highest Corresponding Note for		
	Normal and Low Tunings		
Normal and Low Tunings			
E 102 Hz	G2 (98 Hz)		
A 135 Hz	C3 (130.81 Hz)		
D 180 Hz	F3 (174.61 Hz)		
G 240 Hz	A#3 (233.08 Hz)		
B 310 Hz	D3 (293.66 Hz)		
E 400 Hz	G3 (392 Hz)		

#### **Appendix 3**

## **Custom Tuning Shortcut for Tunings with Lower-Pitched Strings**

If your custom tuning consists of strings that are lower-pitched than standard tuning, there's a quick way to create a custom tuning. You can then save this as you would any custom tuning.

- 1. With Gibson G FORCE off, press and hold the **On** button until the **red E** LED lights.
- Pluck the string with the red LED but if you want it tuned lower than standard, fret at the fret that equals the number of semitones you want to tune down. *Example:* To tune the low E string down to D (*two* semitones lower than E), fret F# on the low E string (*two* semitones higher than E). When its LED is green, pluck the next string with a red LED.
- 3. If you don't want to change a string's tuning, simply pluck it. If you want to tune it lower, follow the procedure in step 2.
- 4. After plucking each string individually until its LED is green, all six strings are tuned to a custom tuning. Gibson G FORCE turns off.

Now save this custom tuning using "pitch assist" so G FORCE compensates for any errors introduced by fretting the string.

- 1. Press **On** three times. Press **Enter**.
- 2. Press the **Left** button once to select the **white A** string LED, then *press and hold* **Enter** for more than 3 seconds to engage Pitch Assist.
- 3. When a string flashes **red**, pluck it. Continue until all six strings are **green**, at which point they'll flash and turn off. (**Tip:** Mute a string after its string LED turns **green** to speed up the process.)
- 4. When a string LED flashes blue, use the Left/Right buttons to select a blue bank preset. Press Enter = stores pitch-corrected tuning in the selected preset. When you tune using this tuning, G FORCE will apply the stored pitch correction.

#### **Appendix 4**

## **Custom Tuning Shortcut for Tunings with Higher-Pitched Strings**

If your custom tuning consists of strings that are higher-pitched than standard tuning, there's a quick way to create a custom tuning. You can then save this as you would any custom tuning.

- 1. With Gibson G FORCE off, press **On** three times. Press **Enter**.
- 2. Press the **Left** button once to select the **white A** string LED, then *press and hold* **Enter** for more than 3 seconds to engage Pitch Assist.
- 3. When a string LED flashes **red**, if needed fret at the desired note for the custom tuning, then pluck the associated string. After measuring the frequency the string LED will turn **green**. Wait for another string LED to flash **red** (this can take several seconds) then again if needed, fret at the desired note for the custom tuning and pluck the associated string. Continue until all six strings are **green**, after which they'll flash and turn off. (**Tip:** Mute a string after its string LED turns **green** to speed up the process.)
- 4. When a string LED flashes blue, use the Left/Right buttons to select a blue bank preset. Press Enter = stores pitch-corrected tuning in the selected preset. Do not turn off Gibson G FORCE yet; it needs to "learn" how to tune to this tuning.
- Press the **On** button twice to return to Tuning Bank selection. Use the **Up** and **Down** buttons to select the **blue** bank (if needed), and the **Left** and **Right** buttons to select the preset you stored In step 4 above.
- 6. *Press and hold* the **Enter** button for Single-String Tuning mode.
- 7. Pluck the string with the flashing **red** LED. After its LED turns **green**, wait for another string LED to flash **red** then pluck the associated string. (**Tip:** Mute a string after its string LED turns **green** to speed up the process.)
- 8. When all six LEDs are **green**, all six strings are tuned. Gibson G FORCE turns off. When you tune using this tuning, G FORCE will apply the stored pitch correction.

*Note:* Alternate tunings can change the neck tension. After the single-string tuning, "refreshing" the tuning in Multi-String mode can compensate for this.

## Appendix 5 Changing/Charging the Gibson G FORCE™ Battery

A new or infrequently used battery could have a reduced capacity, and need recharging several times to restore full capacity. When the battery level is low, the Gibson G FORCE BAT LED located on the controller flashes red.

#### Caution!

- Do not connect improperly.
- Do not dispose of in fire or expose to excess heat.
- Do not crush, puncture, incinerate or short circuit the external contacts.
- Do not put the battery in a pocket with metal objects (keys, coins, etc.).
- Never force the battery into the guitar's battery slot. It should slide in easily (see page 9).



• Use *only* the charger supplied with your guitar. Other chargers could damage the battery, the charger, or both.

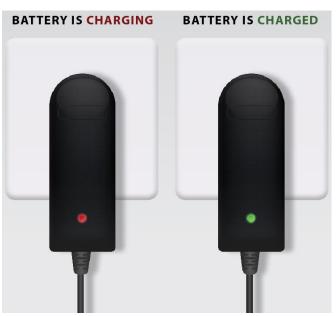
CE 🛛 🕱 HC 🕸 🛄

- The charger's LED shines red when charging, and green when the battery is charged.
- Charge the battery when the BAT LED on the controller shines **red**, or when **yellow** to maintain a full charge.

Battery Pack 3.7V 340mAh 1258mWh Li-Polymer

**Li-Polymer Charger** Input 100-240V AC 50/60HZ Output 4.2V – 300mA Charger tip polarity:





## Appendix 6 Gibson G FORCE™ Legal and Safety Information

#### Please read this information before using Gibson G FORCE.

#### PRODUCT CARE

- Do not expose your product to liquids, moisture, or humidity.
- Do not expose your product to extreme high or low temperatures.
- Do not expose your product to lit candles, cigarettes, or cigars, open flames, or other heat sources.
- Do not drop, throw, or try to bend the product. Rough treatment could damage it.
- Do not attempt to disassemble your product. It does not contain consumer serviceable or replaceable components. Only Tronical GmbH or a Gibson Brands service facility should perform servicing.
- If you will not be using the product for a while, store it in a place that is dry and free from moisture, dust, and extreme temperatures.

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#### DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

This symbol on the product indicates that it must not be treated as household waste, but handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential

negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

#### POWER SUPPLY CAUTIONS

- Connect the AC power adapter only to power sources as designated on the product.
- To reduce risk of damage to the electric cord, remove the AC adapter from the outlet by holding onto the AC adapter rather than pulling on the cord. Position the cord so it cannot be stepped on, tripped over, or otherwise subjected to damage or stress.
- To reduce risk of electric shock, unplug the unit from any power source before attempting to clean it.
- The AC power adapter must not be used outdoors or in damp areas.
- DANGER Never alter the AC cord or plug. If the plug will not fit into the outlet, have a proper outlet installed by a qualified electrician. Improper connection can result in risk of electric shock.

#### NOT SUITABLE FOR CHILDREN

Do not allow children to play with G FORCE, because it contains small parts that could become detached and create a choking hazard.

#### **BATTERY INFORMATION**

- A rechargeable battery has long service life if treated properly. A new battery or one that has not been used for a long period of time could have reduced capacity the first few times it is used.
- Do not expose the battery to extreme temperatures, and never above +55°C (+131°F).
- For maximum battery capacity, use the battery at room temperature. Lower temperatures reduce battery capacity.
- Charge the battery only at temperatures between +10°C (+50°F) and +45°C (+113°F).

#### **BATTERY STORAGE**

- If the battery will not be used for a while, store it at about half its charge (BAT LED yellow).
- For maximum life, store in a refrigerator (not freezer) in a sealed plastic bag. After removing from the refrigerator, keep it in the bag until it reaches room temperature to prevent atmospheric condensation around the battery.

#### **BATTERY CAUTIONS**

- Do not connect improperly.
- Do not dispose of in fire or expose to excess heat.
- Do not crush, puncture, incinerate or short circuit external contacts.
- Do not put the battery in a pocket with metal objects (keys, coins, etc.)

#### **BATTERY RECYCLING**

Your G FORCE battery must be disposed of properly and never placed in municipal waste.