

Gibson G FORCE 2016 Owner's Manual
Gibson Brands
Revision 1.0



Contents

- 03** Basic Gibson G FORCE™ Functions: Start Here
- 04** Main Tuning Preset Bank Default Tunings
- 05** Low Tuning Preset Bank Default Tunings
- 06** Re-Stringing Guitars with Gibson G FORCE™
- 10** Changing the Gibson G FORCE Battery
- 11** Overview: How to Choose, Access, and Edit Advanced Functions

- 13** Tuning Functions (White Category)
 - 13** E String Up/Down
 - 13** A Custom Tuning
 - 13** A Custom Tuning with “Pitch Assist” Mode
 - 14** D Reference Tuning
 - 14** G Firmware Version
 - 15** B Battery Level
 - 15** e Temporary Global Tuning Offset

- 16** Reset Function (Red Category)
- 16** Master System Reset (Red Category)

- 17** Advanced Hardware Functions (Cyan Category)
 - 17** E Calibration Mode
 - 17** A Accuracy
 - 18** D Machine Head Delay
 - 18** G Machine Head Speed
 - 18** B Interference Filter

- 19** Advanced Software Functions (Yellow Category)
 - 19** E Gain
 - 19** A Guitar Type
 - 19** D Pitch Window
 - 20** G Activate Low Tunings and/or Additional User Tuning Preset Banks
 - 20** B Tuning Offset Mode (Permanent or Temporary)

- 21** Per-String Pitch Offset (Magenta Category)

- 22** Block/Unblock Banks for Custom Tunings (Blue Category)

- 23** Capo Mode
- 24** Combine/Morph Tunings
- 25** Appendix 1: What the String, BAT, and MENU LEDs Colors Indicate
- 26** Appendix 2: Minimum and Maximum String Frequencies for Alternate Tunings
- 27** Appendix 3: Custom/Alternate Tuning Tips and Shortcuts
- 29** Appendix 4: Charging the Gibson G FORCE™ Battery
- 31** Appendix 5: Gibson G FORCE™ Legal and Safety Information

Basic Gibson G FORCE™ Functions: Start Here

A) Multi-String Tuning

1. Press **On** button. Strum once. G FORCE tunes to the currently selected tuning.
2. When all LEDs are **green**, all six strings are tuned. Gibson G FORCE turns off automatically. (If any LEDs remain **red**, mute then pluck those strings one at a time until they turn **green**.)



B) For a Little More Precision (Single-String Tuning—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 strings are tuned to the currently selected tuning. Gibson G FORCE turns off.

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

1. Press the **On** button two times.
2. Press **Up/Down** to scroll through tuning preset banks (**red**, **green**, **blue**).
3. Press **Left/Right** to get to individual tunings.
4. 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.
2. 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 (currently selected tuning).

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 for important safety information about Gibson G FORCE.
- **Do** recalibrate the guitar (page 17) after changing string gauge or string type.
- **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 www.gibson.com/gforce for news about the Gibson G FORCE system.

Main Tuning Preset Bank Default Tunings

| Red Main Tuning Preset bank | | | | | | | |
|-------------------------------|---------------|-----------|-----------|-----------|------------|------------|-----------|
| | string | E | A | D | G | B | e |
| LED | | | | | | | |
| E | standard | E | A | D | G | B | E |
| A | DADGAD | D | A | D | G | A | D |
| D | whole step | D | G | C | F | A | D |
| G | drop D | D | A | D | G | B | E |
| B | E flat | E \flat | A \flat | D \flat | G \flat | B \flat | E \flat |
| e | double drop D | D | A | D | G | B | D |
| | | | | | | | |
| Green Main Tuning Preset Bank | | | | | | | |
| | string | E | A | D | G | B | e |
| LED | | | | | | | |
| E | open E | E | B | E | G \sharp | B | E |
| A | open A | E | A | E | A | C \sharp | E |
| D | open D | D | A | D | F \sharp | A | D |
| G | open G | D | G | D | G | B | D |
| B | dobro | G | B | D | G | B | D |
| e | all 4ths | E | A | D | G | C | F |
| | | | | | | | |
| Blue User Tuning Preset Bank | | | | | | | |
| | string | E | A | D | G | B | e |
| LED | | | | | | | |
| 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 | A | D | G | B | e |
| LED | | | | | | | |
| E | C tuning | C | F | A# | D# | G | C |
| A | low C | C | G | D | G | A | D |
| D | C sharp | C# | F# | B | E | G# | C# |
| G | B tuning | B | E | A | D | F# | B |
| B | dropped C | C | G | C | F | A | D |
| e | dropped B | B | F# | B | E | G# | C# |
| | | | | | | | |
| Yellow (Low Tuning Preset Banks) | | | | | | | |
| | string | E | A | D | G | B | e |
| LED | | | | | | | |
| E | open C | C | G | C | G | C | E |
| A | open C6 | C | A | C | G | C | E |
| D | open B | B | F# | B | F# | B | D# |
| G | double drop C# | C# | G# | C# | F# | A# | C# |
| B | double drop C | C | G | C | F | A | C |
| e | double drop B | B | F# | B | E | G# | B |
| | | | | | | | |
| Magenta User Tuning Preset Bank | | | | | | | |
| | string | E | A | D | G | B | e |
| LED | | | | | | | |
| E | | | | | | | |
| A | | | | | | | |
| D | | | | | | | |
| G | | | | | | | |
| B | | | | | | | |
| e | | | | | | | |

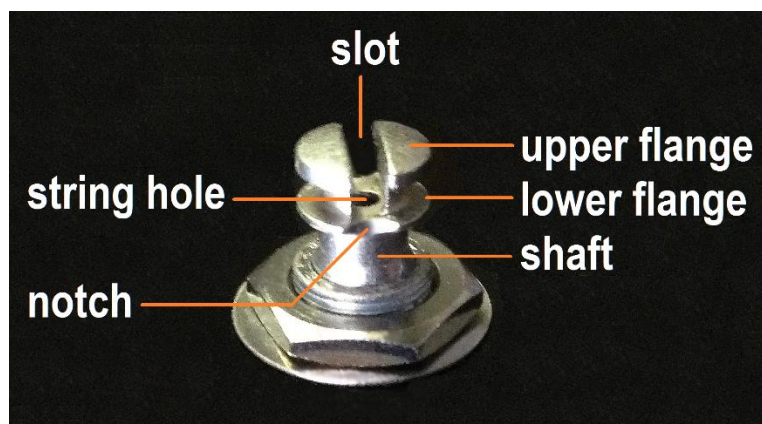
The **magenta** user tuning preset bank defaults to standard C tuning (C, F, A#, D#, G, C). Use the chart to write in custom tuning names and tunings.

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.

Gibson G FORCE Machine Head Terms

- Review the sections on **String Up** and **String Down** modes (page 13), as they make changing strings much easier and faster.
- The high and low E strings are the most difficult to replace. Gibson recommends starting with the D and G strings to get a feel for how the process works. After a couple string changes, the process will become second nature.
- Please familiarize yourself with the following terms before proceeding.



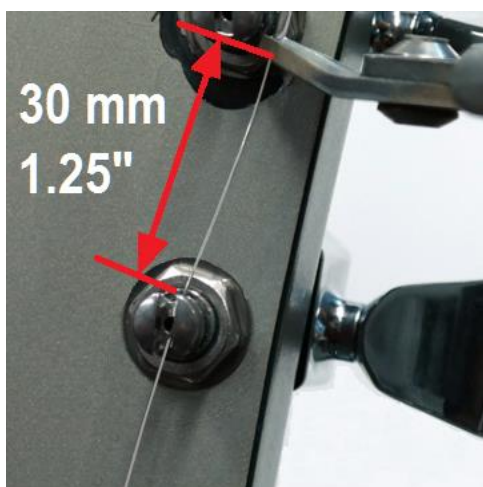
Treble Side Guitar Stringing for Gibson G FORCE

The following photos show a string being wound correctly around the tuner's shaft. The colored parts of the string relate to the instructions for a particular step. Note that the photos are taken from different angles to better show details of how the string wraps around the shaft.



1. With Gibson G FORCE turned off (and kept off until instructed otherwise), turn the shaft manually or using the String Up function (page 13) so that looking at the headstock from the top and with the treble strings toward the right, the left part of the slot is in the 11:00 o'clock position, and the right part of the slot in the 5:00 o'clock position.

2. Run the string through the tailpiece, over the bridge, over the zero-fret adjustable nut, and through the machine head slot.



3. Pull gently on the string end to take up any slack, then use a string cutter or diagonal wire cutters to cut the string at 1.25" (30 mm) past the end of the associated string's shaft.



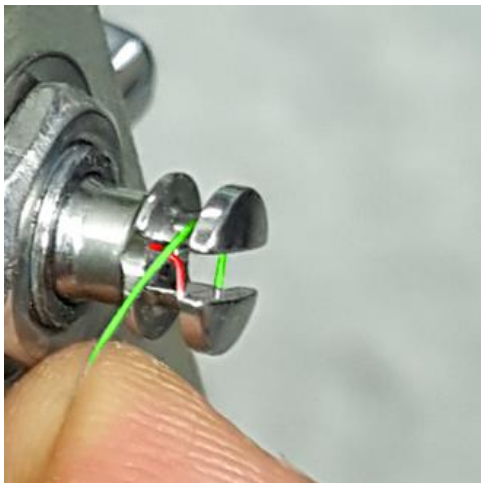
4. Insert the string end all the way down into the hole. This step color-codes the string red.



5. Start bringing the string counter-clockwise around the shaft, between the upper and lower flange.



6. Continue bringing the string (colored green in this step) around the shaft in a counter-clockwise direction and toward the notch.



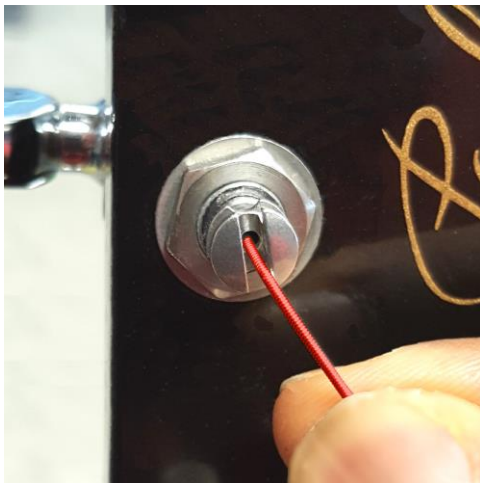
7. Continue bringing the string around the shaft in a counter-clockwise direction until it's above the notch.



8. Direct the string (colored blue for this step) down and through the notch. If necessary, turn the RoboHead key to make sure the string can pass through the notch.

9. Start the **String Up** procedure (page 13) for the string being replaced. If the string is too loose around the string shaft so that it doesn't stay in the notch, press the string against the post and into the notch with one finger while initiating the tuning process. You can also turn the key manually, but String Up is much faster.

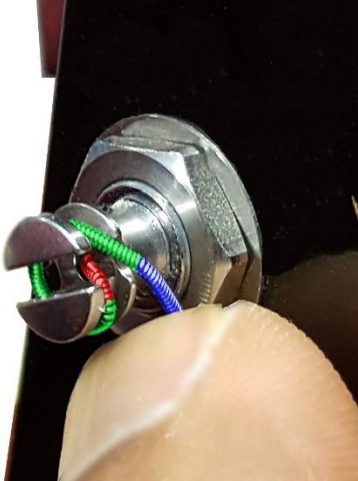
Bass Side Guitar Stringing for Gibson G FORCE



1. Repeat steps 1-3 as shown for re-stringing the treble side strings, then insert the string end all the way down into the hole. This step color-codes the string red.



2. Wind the string (colored green for this step) clockwise around the shaft so that it passes between the upper and lower flange.



3. Continue bringing the string around the post so that it sits in the notch on the same side of the slot where the string exited from the hole, and then continue under the lower flange (this part of the string is colored blue).

4. Start the **String Up** procedure (page 13) for the string being replaced. If the string is too loose around the string shaft so that it doesn't stay in the notch, press the string against the post and into the notch with one finger while initiating the tuning process. You can also turn the key manually, but String Up is much faster.

Please note: Avoid doing two or more windings around the shaft; there should only be a single winding when the string is tuned. Additional windings cause higher friction and increase the amount of torque required to tune a string to higher pitch. The worst-case situation would be two or more windings, one above the other, as this reduces the effective amount of torque and can also lead to erratic tuning. This would also cause friction between the string windings while tuning up, which would wear the string faster and possibly lead to string breakage

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 31) for information about proper battery care and charging.**

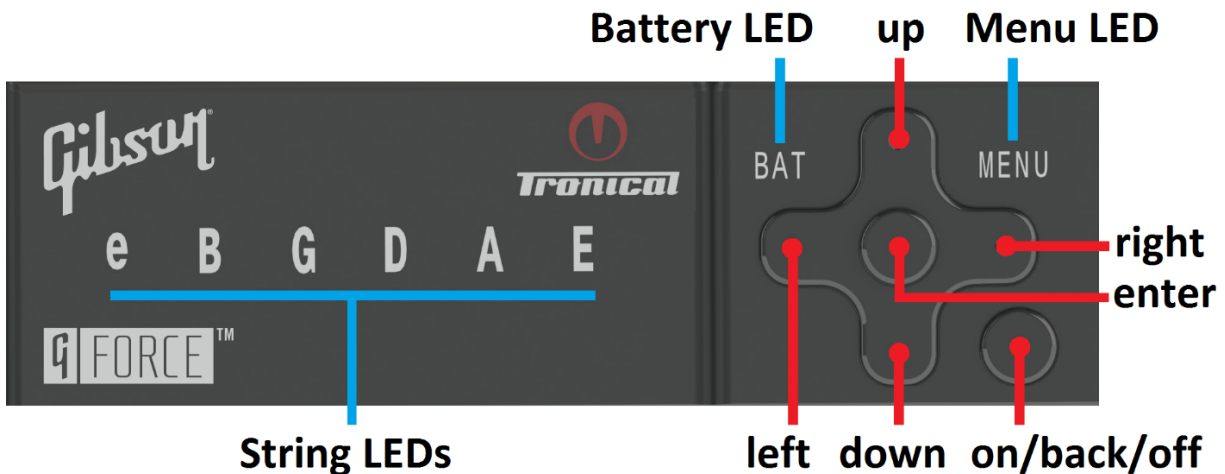
To remove the battery: The battery compartment is located in the Gibson G FORCE controller on the back of the headstock. Push down on the rectangle that's visible at the top of the controller (between the machine heads for the 3rd and 4th strings). The battery will pop up slightly. Note the groove facing 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™ 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 6th, lowest-pitched string to “e” for the 1st, 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: Before using Gibson G FORCE, please read the important legal and safety information in Appendix 5 (page 31).

Advanced Functions

Tuning Functions (White Category)

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. **CAUTION!** When winding up, do not wind higher than the target pitch because the string might snap.*

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.)

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.)
5. 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.

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.)
5. 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**.
3. 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**.
2. 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 @** 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 20.

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
- 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

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 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 17) 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.

1. 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 22 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**.
3. 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 $1/100^{\text{th}}$ 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 20) 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.

1. 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.
3. 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 13). 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 1st to 6th 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 1st to 6th 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.
3. *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.
4. 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 **Custom Tuning** and **Custom Tuning with “Pitch Assist” Mode** on page 13). 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 |
| ○ | Interference between higher and lower strings |
| Battery LED | |
| ● | Battery fully charged |
| ● | Battery is low |
| ● | Recharge battery |
| Menu LED | |
| ● | Tuning is active |
| ○ | Tuning Functions category |
| ● | [flashing] Reset menu |
| ● | Advanced hardware Functions category |
| ● | Advanced software Functions category |
| ● | String pitch offset category |
| ● | Block/unblock banks category |
| ○ | [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 absolute maximum heaviest string gauge is 0.013 for high e to 0.056 for low E, however heavy gauges may not allow tuning a string up in pitch more than two semitones.

| Minimum Frequencies | | 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/Alternate Tuning Tips and Shortcuts

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.
2. 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.

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.
5. 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.

Quick Single-String Tuning Mode for Alternate Tunings

As described in the Quick Start, you can use Multi-String tuning with alternate tunings. However, you can also go immediately into Single-String tuning mode.

1. Press the **On** button two times.
2. Press **Up/Down** to scroll through tuning preset banks (**red**, **green**, **blue** or additional ones that are unblocked—see page 22).
3. Press **Left/Right** to choose individual tunings.
4. Press and hold **Enter** for 2 seconds or until the lights flash **green**. The machine heads turn to come close to the tuning, and automatically selects single-string mode.
5. 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.
6. When all LEDs are **green**, all strings are tuned to the currently selected tuning. Gibson G FORCE turns off.

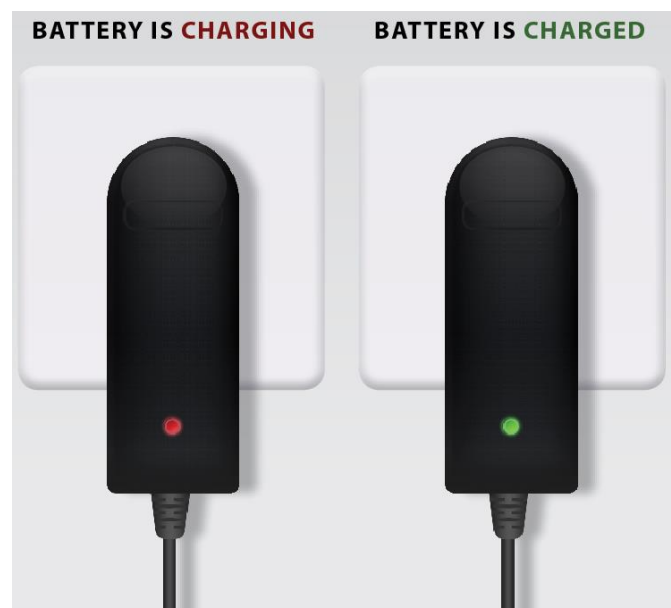
Changing/Charging the Gibson G FORCE™ Battery

If the battery is not being used, it should be charged once every 3-4 months. A charge cycle takes no longer than about 45-60 minutes, and there's nothing to be gained by charging it for longer than is necessary.

- 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 10).**



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



SPECIFICATIONS

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 5

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.



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.