HARMONY SINGER 2

Battery-Powered Vocal Effects Stompbox with Guitar-Controlled Harmony, Reverb and Tone

User Manual
**Important Safety Instructions**

- Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock.
- Use only high-quality professional speaker cables with ¼” TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.
- This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.
- This symbol, wherever it appears, alerts you to the presence of important operating and maintenance instructions in the accompanying literature. Please read the manual.
- **Caution**
  - To reduce the risk of electric shock, do not remove the top cover (or the rear section).
  - No user serviceable parts inside. Refer servicing to qualified personnel.
- **Caution**
  - To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- **Caution**
  - These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.
  1. Read these instructions.
  2. Keep these instructions.
  3. Heed all warnings.
  4. Follow all instructions.
  5. Do not use this apparatus near water.
  6. Clean only with dry cloth.
  7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
  8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades and one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  11. Use only attachments/accessories specified by the manufacturer.
  12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
  13. Unplug this apparatus during lightning storms or when unused for long periods of time.
  14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
  15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
  16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
  17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.
  18. Do not install in a confined space, such as a book case or similar unit.
  19. Do not place naked flame sources, such as lighted candles, on the apparatus.
  20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed of at a battery collection point.
  21. Use this apparatus in tropical and/or moderate climates.

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**LIMITED WARRANTY**

For the applicable warranty terms and conditions and additional information regarding MUSIC Group’s Limited Warranty, please see complete details online at music-group.com/warranty.
1. Controls

- **HARMONY** knob selects the harmonies that will be blended with your voice. See Chapter 2: Using the Harmony Knob for details.
- **LEVEL** knob adjusts the volume of the harmonies.
- **REVERB** knob selects the type and amount of reverb effect on your voice. The 3 types of reverb appear in order from the smallest space (Room) to the largest (Hall). Adjusting the knob within your preferred reverb space determines how pronounced the effect will be. Turning the knob fully counterclockwise turns the reverb off.
- **BATTERY LED** indicates the battery level, with green showing full life, yellow being partial life, and red to alert that the batteries should be changed.
- **TONE** button engages a preset combination of adaptive EQ, compression, de-essing, and noise gate. “Normal” and “Less Bright” settings can be toggled by holding the Tone button and pressing the footswitch.
- **ON/OFF LED** lights when the effect is engaged.
- **FOOTSWITCH** bypasses the harmony effect, but does not affect the reverb or Tone status.

- **USB** input accepts a micro USB cable for connection to a computer. Use the VoiceSupport application to install firmware updates, and for other features depending on your product. Download VoiceSupport from www.tc-helicon.com/products/voicesupport/
- **ON/OFF switch** powers the pedal on and off.
- **POWER** input accepts a 9V power cable (not included).
- **OUT** jack accepts a balanced XLR cable for connection to a mixer or active speaker.
- **MIC** input jack accepts a balanced XLR cable to connect your microphone.
2. Operation

Connection

- Micro USB cable
- OUT
- MIC
- Power cable
- MP-75 microphone
- Mixing board
- TC HELICON Harmony Singer 2
- Guitar
- Amplifier
- Control panel
- Effect knobs
- Power button

Microphone connection diagram:
- Microphone connected to the MIXING BOARD
- Microphone connected to the OUT jack
- Microphone connected to the MIC jack
- Microphone connected to the Power cable

Computer connection diagram:
- Computer connected to the MICRO USB cable

Guitar connected diagrams:
- Guitar connected to the TC HELICON Harmony Singer 2
- Guitar connected to the power source
- Guitar connected to the effect knobs

Amplifier connected diagrams:
- Amplifier connected to the TC HELICON Harmony Singer 2
- Amplifier connected to the effect knobs
- Amplifier connected to the power source

Effect pedal connected diagrams:
- Effect pedal inserted into the TC HELICON Harmony Singer 2
- Effect pedal connected to the effect knobs
- Effect pedal connected to the power source
• Connect a microphone to the MIC jack
• Connect the OUT jack to a mixer, interface or active speaker
• Connect a guitar to the Guitar Input jack on the right side of the pedal
• Connect the left Guitar Output jack to an amplifier or mixing console

Optional:
• Connect a micro USB cable to a computer
• Connect power cable

• Using the Harmony Knob
The Harmony knob selects a single harmony voice or combination of voices higher or lower in pitch than your voice. The chart below shows name and pitch intervals for each position on the Harmony knob.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Name</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>3rd above</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td>5th above</td>
</tr>
<tr>
<td></td>
<td>High and Higher</td>
<td>3rd above 5th above</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>4th below</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>6th below</td>
</tr>
<tr>
<td></td>
<td>Low and Lower</td>
<td>4th below 6th below</td>
</tr>
<tr>
<td></td>
<td>Higher and Lower</td>
<td>5th above 6th below</td>
</tr>
<tr>
<td></td>
<td>High and Low</td>
<td>3rd above 4th below</td>
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Guitar Input
Connect any guitar pedals between Harmony Singer’s Guitar Output jack and the input of your amp. Connecting and activating some guitar pedals before the Guitar Input jack may adversely affect vocal harmony production.

Tips:
• Strumming chords works better than single note playing for harmony control
• When changing chords, ensure that the root and 3rd of each new chord are played clearly
• To harmonize correctly from the first chord of a song, briefly play the first chord before singing

Momentary Mode

The standard function of the footswitch is a latching style, meaning that each press of the footswitch turns the harmony on and off. Alternatively, the pedal can operate in momentary mode, meaning that the harmony is only active while the footswitch is held down. As soon as you release the footswitch, the harmony is bypassed.

To switch the unit to momentary mode, hold the Tone button down while powering the unit on. Repeat the process to return to latching mode.

Changing the Batteries
Harmony Singer 2 can operate on 4 AA batteries. Remove the single screw on the bottom of the pedal to open the battery door. Make sure to observe correct polarity when inserting the batteries.

Auto Gain
Harmony Singer 2 will automatically adjust the gain setting for your microphone, eliminating the need for manual adjustments and ensuring that a good signal is passed to the mixer without any unwanted distortion.

24 V Phantom Power
Phantom power is always active on the Harmony Singer 2. This will power condenser microphones, but will not affect dynamic mics either.

Mic Control
Mic Control allows you to control the effect’s on/off status via an MP-75 microphone. Press and hold the footswitch while powering up the unit to toggle Mic Control.

Note that when using a condenser microphone, Mic Control should be disabled to prevent unwanted on/off switching.
3. Specifications

### Input

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mic Input Impedance, Balanced</td>
<td>2.68 kOhm</td>
</tr>
<tr>
<td>Mic Input Level @ 0 dBFS</td>
<td>-42 dBu to +1 dBu</td>
</tr>
<tr>
<td>EIN @ Max Mic Gain Rg = 150 Ohm</td>
<td>-126 dBu</td>
</tr>
<tr>
<td>Mic input SNR</td>
<td>&gt;104 dB</td>
</tr>
<tr>
<td>Guitar Input impedance</td>
<td>1 MOhm</td>
</tr>
<tr>
<td>Guitar Input Level @ 0 dBFS</td>
<td>-7 dBu to 17 dBu</td>
</tr>
<tr>
<td>Guitar Input SNR</td>
<td>&gt;115 dB</td>
</tr>
</tbody>
</table>

### Output

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Impedance, Bal./Unbal.</td>
<td>200/100 Ohm</td>
</tr>
<tr>
<td>Output Full Scale</td>
<td>+1 dBu</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>&gt;104 dB, 20 Hz to 20 kHz</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>+0/-0.3 dB, 20 Hz to 20 kHz</td>
</tr>
</tbody>
</table>

### Power

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Power Supply (Optional)</td>
<td>9 V / 670 mA</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>6 W</td>
</tr>
</tbody>
</table>

### Requirements

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>32° F to 122° F (0° C to 50° C)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-22° F to 167° F (-30° C to 70° C)</td>
</tr>
<tr>
<td>Humidity Max.</td>
<td>90 % non-condensing</td>
</tr>
</tbody>
</table>

### Size & Weight

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>5.4” x 3.5” x 2.3” (140 x 90 x 60 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.92 lb. (420 g)</td>
</tr>
</tbody>
</table>

### Warranty

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