SONUUS®

G2M™ (Version 2)
Universal Guitar-to-MIDI Converter

Owner's Manual

Congratulations on your purchase of the **G2M™**. Please take the time to read through this manual to ensure you get the best from your **G2M™**.

What is the G2M™?

The **G2M™** is a simple to use, but highly effective, Guitar-to-MIDI converter. It is "Universal" because it doesn't need a special pick-up mounted on your guitar, but instead simply connects to your guitar like any other effects pedal or tuner. However, this does mean that it can only work "monophonically", so chords are not supported.

Designed to give accurate triggering, with very low latency, it is a true plug-and-play solution for monophonic MIDI guitar. It can be used to sequence bass lines and guitar solos, add an edge to your live performances and to open up many creative possibilities.

Power

Your **G2M™** is powered by a single 9V PP3 battery (supplied). Simply connect the battery observing the correct polarity. If you connect it the wrong way round it won't cause any damage, but the unit won't operate until this is connected correctly.

Because of its low power consumption, the unit will run for many hours (typically for more than 50) on a single battery. When the battery is close to needing to be replaced, the **LOW BATTERY** LED will light. It is not necessary to replace the battery immediately since the **G2M™** will continue to function normally. When the battery is nearly exhausted, the **LOW BATTERY** LED will flash and the battery must be replaced. If you need the **G2M™** to work reliably for several hours (*e.g.,* a recording session, or when playing live) the battery should be replaced if the **LOW BATTERY** LED is lit.

The **G2M™** is switched on when a lead is plugged into the **GUITAR** jack. So, to maximise battery life, this jack must be disconnected when you are not using the unit.

After 30 minutes of inactivity the **G2M™** will enter a low-power (but not fully off) state to preserve the battery. To restart the unit, simply unplug and re-insert the lead into the **GUITAR** jack.

Operation

Using your **G2M™** couldn't be simpler:

- Plug your instrument (electric guitar) into the **GUITAR** jack socket. The **POWER** LED will light.
- Connect your MIDI device (or computer, *etc.*) to the **MIDI OUT** socket.
- Adjust your guitar's volume control so that the **CLIP** LED lights only occasionally while playing normally.
- Optionally, check your guitar is in tune using the built-in tuner (if you want to tune to the standard EADGBE tuning).
- Play your guitar to send MIDI to your MIDI device (or sequencer, *etc.*).

Chromatic Mode

The **G2M™** accurately tracks the pitch of notes and outputs pitch-bend MIDI messages but sometimes it is preferable to send notes without pitch-bend information (*e.g.,* when playing piano sounds). This can be done by enabling the **CHROMATIC** switch next to the **GUITAR** jack socket.

Tuner

For your convenience, the **G2M™** includes a built-in tuner. This uses our **PULSAR™** tuning technology where the **POWER** LED doubles as a tuning indicator. This innovative tuner gives you a fast and accurate way to tune your guitar.

If there is no input signal, the LED will remain lit and indicates that the unit is powered. When there is an input signal, the LED will pulse smoothly to indicate tuning.

When the note is out of tune, the LED will pulse quickly. As you get closer to the correct pitch, this pulsing will slow. Eventually when you are perfectly in tune, the pulsing will stop. Normally, as long as the LED pulses slower than once

per second, the tuning is close enough for most purposes.

It is always best to start at a lower pitch and tune upwards to the correct pitch. As you get closer to the correct pitch and the pulsing slows down, turn your tuning head more slowly to avoid overshooting the correct pitch. Because the tuner is very accurate you will find that very small movements may be all that is required to move from slightly out-of-tune to in-tune (or indeed, to go from in-tune to slightly out-of-tune). With only a little practice you will find you can tune very quickly and accurately using the **PULSAR™** tuner.

Instrument Thru

If you want to connect your instrument to another device, or to your guitar amplifier, simply connect a lead to the **THRU** jack. The **G2M™** has a high-impedance input and it will not affect the sound of your instrument while it is connected.

MIDI

To make connecting to MIDI equipment as simple as possible, the **G2M™** has a standard 5-pin MIDI connector (*i.e.,* no adapter cables are required). It also provides standard 5V power and is able to power self-powered MIDI devices such as MIDI mergers and message filters.

For pitch-bend, the commonest setting for most MIDI devices is for full-scale pitch-bend to represent ±2 semitones, and the **G2M™** is also set to this range. To ensure your MIDI sounds are correctly in tune with your guitar, ensure the MIDI patch you use is also set to a pitch-bend range of ±2 semitones.

Of course, you may want to experiment with other pitch-bend ranges for special effects.

Carry strap

Next to the GUITAR jack socket is a hole to attach a carrying strap. You can use this to make carrying the G2M™ much easier: wear it on your wrist to free up your hands or use it to secure the G2M™ to your guitar strap.

Usage Tips

Ensure your guitar's level is optimally matched to the G2M™ by turning down its volume control to avoid having the CLIP LED flashing most of the time. Occasional (or no) clipping will not cause any performance problems and a high signal level ensures that sounding notes will sustain for as long as possible.

Slightly mute strings with your picking hand. This helps prevent spurious MIDI notes when the wrong string is touched lightly during playing. It also improves the detection of rapidly picked notes because notes can decay slightly faster to give greater contrast between the new note and the last note.

The G2M™ is great for sequencing natural-sounding bass lines but if you try to perform very fast notes on the lowest strings, you may have some tracking issues. To avoid this, play the notes on higher octaves where tracking is fastest and latency is the lowest. Then transpose the recorded notes in your sequencer to use as a bass line.

If your songs require very fast lead lines but you are struggling to play them accurately, record the section at a lower tempo using the G2M™ then play it back at full tempo. Because the lead line has been converted to MIDI, its timbre won't be affected by changing the tempo, unlike the original guitar sound.

If you find that the wrong note (or octave) is briefly detected when you pluck a note, try the following tips for your guitar:

- Use new strings.
- Ensure there are no fret buzzes, and don't play any percussive sounds such as "slaps".
- Try using the neck pick-up.
- Turn down the tone control to see if this makes a difference.
- Slightly adjust your playing style or playing position. Often moving where you strike the string by a small amount can give good results.

Remember the G2M™ accurately converts the pitch of your instrument to MIDI messages. If your instrument is not in tune, the MIDI won't be in tune either!

Recommendations

Always disconnect the lead from the GUITAR jack when you are not actively using it. This will prolong the life of the battery.

It is a good idea to use rechargeable batteries if you use the G2M™ often as this is better for the environment.

When storing your G2M™ for an extended period, we recommend that you remove the battery. Batteries can leak corrosive materials which could damage your unit.

Do not expose to G2M™ to rain or moisture. If this occurs, disconnect the battery and allow the unit to dry out completely before using it again.

Warranty

The G2M™ is supported by a limited warranty for a period of one year from the date of purchase. During this period, any faults due to defective materials or workmanship will be rectified (by repair or replacement[*]) free of charge. The warranty excludes damage caused by deliberate or accidental misuse, modification, or operation with an external power supply or an incorrect battery. It is the user's responsibility to ensure fitness for purpose in any particular application. The warranty is limited to the original purchase price of the equipment, is limited to the original purchaser, and excludes any consequential damage or loss.

Proof of purchase date is required for any claim under this warranty.

Warranty claims must be made through the retailer from whom the original purchase was made.

Community

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www.sonuus.com

To share your experiences, tips and tricks with other G2M™ users, register on our user forum:

www.sonuus.com/forum

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[*]. A unit replaced under warranty may be replaced with a reconditioned unit.

Specifications

Power	12 mA using 9 V PP3 battery
Auto Sleep	(0·1 mA) After 30 mins of inactivity
Tuner notes	E2, A2, D3, G3, B3, E4
Tuner accuracy	<1 cent when pulsing at <1 Hz
Note range	A1 to B♭6
MIDI latency	5 ms (E6) 19 ms (E2)
Pitch bend	<1 cent accuracy ±2 semitones range / None if CHROMATIC mode on
MIDI power	5 V (via 200 Ω resistor as per the MIDI specification)
Size	83 mm × 58 mm × 34 mm
Weight	80 g (without battery)
Inputs	6·35 mm mono jack (switches unit on when jack is inserted)
Outputs	6·35 mm mono jack connected directly to input jack (THRU) Standard 5-pin MIDI DIN socket.

The above specifications are subject to change without notice.

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