SONUUS®

G2M™
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 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 70) on a single battery. When the battery is close to needing 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 exhausted, the **G2M™** will stop functioning and the battery must be replaced. If you need the **G2M™** to work reliably (*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.

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.*).

Boost

If your guitar has a low output level, and you never see the **CLIP** LED light up in normal use, enable the **BOOST** switch next to the **GUITAR** jack socket. This will boost your guitar's signal and make your **G2M™** work better with your guitar.

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; wear it round your neck so it's always nearby.

Usage Tips

Ensure your guitar's level is optimally matched to the **G2M™** by adjusting its volume control to give a signal which only occasionally causes the **CLIP** LED to light. Occasional clipping will not cause any performance problems and a high signal level ensures that sounding notes will sustain for as long as possible. However, you should avoid having the **CLIP** LED flashing most of the time. Enable the **BOOST** switch if required.

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 faster 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:

- 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 or 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

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

Specifications

Power	<10mA using 9V PP3 battery.
Tuner notes	E2, A2, D3, G3, B3, E4
Tuner accuracy	<1cent when pulsing at <1Hz.
Note detection range	E2 to E6 *(Notes outside this range will be detected, but performance is not guaranteed.)*
MIDI latency	16ms to 30ms depending on note and characteristics of input signal.
MIDI power	5V (via 200Ω resistor as per the MIDI specification).
Size	83mm × 58mm × 34mm
Weight	80g (without battery)
Inputs	6·35mm mono jack (switches unit on when jack is inserted).
Outputs	6·35mm mono jack connected directly to input jack. Standard 5-pin MIDI DIN socket.

The above specifications are subject to change without notice.

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