



G25U Esoteric master clock generator and PCM digital audio up-converter

“If you own a digital source that can output PCM digital audio signals, the G25U can provide an instant upgrade for your entire CD/DVD collection, through master clock re-timing and/or through digital audio PCM up-conversion, both at a very affordable price!”

G-25U functional descriptions:

The G-25U contains a highly accurate, internal crystal oscillator known as a **“Master clock.”** This “clock” reduces system noise and digital artifacts (digital jitter), dropping the noise level between a DAC and a digital transport to less than 1/100th of non-synchronized devices. The master clock also re-times the synchronization between the DAC and transport, providing highly accurate digital audio signals for improved analog decoding. A more accurate master clock results in higher accuracy in reading and decoding digital data. This adds extraordinary ambience, imaging and clarity to a digital audio signal by removing inter-component jitter.

To utilize the Master clock function, you will need a separate DAC and transport with “Word sync” or “word clock” input on the DAC. For a combined DAC and transport, a connector for “Word sync” or “word clock” input is required.

The G25U “clock,” allows precise digital playback and enhances existing systems. This is realized by linking all digital playback components that allow external time management together under the control of just one master clock. Literally, all digital devices are operating to a single heartbeat, maximizing the merits of digital audio.

Even if your connected component has no “Word sync” or “word clock” input, the G-25U improves accuracy by re-timing a PCM data stream. This is done by using a digital audio input on the G25U, and connecting it between *any audio/video device equipped with a digital PCM audio output* (CD/DVD players, digital tuners, satellite receivers, high definition cable boxes, etc) and the digital input of your receiver/preamp/processor. If your digital players allow the user to select the digital output format between “Stream” and “PCM” for Dolby Digital, DTS or other formats, then the G-25U can be inserted in the digital stream to re-clock, re-time and “clean-up” this PCM digital transmission.

Note: Your receiving device (processor, pre-amp, receiver, et cetera) must be able to accept and decode Dolby Digital or DTS PCM data.

An example of use would be a pre-amp processor or separate components with coax or optical digital input, and an inexpensive CD or DVD player with coax or optical digital PCM output. In this situation, you can use the G25U to re-time the data stream by connecting the CD/DVD player digital audio output to the G25U input, then connecting the G25U digital audio output to your pre-amp processor. This often results in a smoother, more transparent signal.

The G25U also includes **digital audio up conversion**, allowing you to output a digital audio signal path at selectable levels up to 192 kHz. Re-sampling the digital data stream (up to 32 times), allows for red book CDs and DVDs to sound better. Ambience, depth of field, imaging and clarity are all dramatically improved.

Note: This unit up-converts linear PCM signals only. Dolby Digital, DTS or other format signals cannot be up-converted.

Up-conversion “upgrades,” the investment you have already made in DVDs and CDs. Your collection may astonish you once you begin to hear what you have been missing!

In addition to user selectable up conversion, the G25U includes *proprietary Esoteric digital filtering*. This effectively reduces noise artifacts and allows the digital signal to actually sound more “analog.”

The G25U has a rigid body construction combined with elegant styling. 2mm thick steel chassis and 15mm aluminum faceplates are used. Three pinpoint isolation feet support the chassis. These feet maximize the stability of the crystal clock by allowing the unit to be mechanically isolated from internal and external vibrations that can affect the accuracy of the clock. The front panel design is highly elegant with a brushed aluminum finish. The front panel displays all the current settings at all times.

Conclusion:

The G-25U is a hybrid “PCM digital audio up converter” and a ‘master clock generator’. As a D/D converter, it can convert digital audio frequencies from red book CD standards all the way up to 192 kHz, improving sound quality by over sampling and re-timing a PCM digital audio data stream. As a master clock generator, it can process word clock signals by its internal, high precision crystal oscillator. This master clock is accurate to +/- 1ppm. (Measured as 1 part per million. Most CD/DVD devices are accurate to +/- 10-50 ppm).

MAIN SPECIFICATIONS

Output Frequency Accuracy: ± 1 ppm (Factory default)

Digital Input and Output Terminals for PCM Audio Up Conversion or digital re-clocking/re-timing:

Output Terminals: x4 (XLR1, XLR2, RCA, OPTICAL)

XLR1 and XLR2 can be used in dual mode.

Output Signals: S/PDIF, AES3 DUAL

Input Terminals: x3 (RCA1, RCA2, OPTICAL)

Input Signals: S/PDIF

WORD CLOCK terminals

Output Terminals: x3 (BNC: A/B/C)

Output Signals: TTL level/75 Ω

External Synchronization Input Terminal: x1 (BNC)

Input Signal: 1.4 5Vp-p/75 Ω (44.1/48/88.2/96/176.4/192kHz/10MHz)

AC Power: 100V/120V/230V AC, 50-60Hz

Power Consumption: 9W

Dimensions (W x H x D): 442mm x 96mm x 359mm (17.5” x 3.77” x 14.1”)

Weight: 7.9kg (17.5 pounds)



