Gentner.
You're Virtually There℠

GT1524 Single Channel Echo Canceller

The GT1524 provides the highest possible audio quality available in a single channel echo canceller.

The GT1524 performs a variety of complex, integrated audio functions using digital signal processors (DSPs). It features an integrated telephone interface that enables telephone participants of an audio or video conference to sound as if they are actually in the same room. Plus, it features simultaneous two-wire/four-wire operation so you can audio conference and video conference at the same time. And there's no white noise set-up—the GT1524 adapts automatically.

The GT1524 provides local room audio capabilities through the mic/line input, for connecting a microphone or microphone mixer; and a line output, for connecting an external power amplifier. A speaker can be connected to the speaker terminals.

The GT1524 handles video conferencing with a four-wire line-level input/output, which connects to a codec.

The aux input and output terminals allow connection of a VCR or other playback or recording device.

The mic/line and line-level inputs use automatic gain control to compensate for loud or soft talkers. The mic/line offers high-pass filtering to reduce unwanted low–frequency noise.

The integrated telephone interface provides the GT1524's audio conferencing capability and can be configured to suit your needs. The interface can be set to automatically answer a call and disconnect on loop drop

or call progress tones. And, as part of its self-contained audio conferencing design, the GT1524 includes a built-in five-watt power amp.

Activating telephone participants, level adjustments, and other functions can be made via front panel programming, activation through a closure on the rear panel, or via the RS-232 serial interface and a custom remote control system.
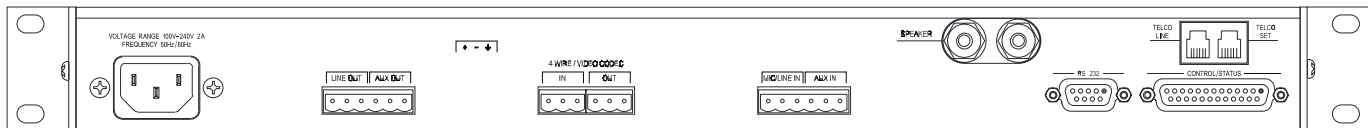

The GT1524 features an integrated telephone interface and built-in power amp.

Features and Benefits

- Cost-effective teleconferencing solution
- No white noise set-up
- Simultaneous two-wire/four-wire capability lets you bring phone calls into your video conference
- Integrated touch-tone dialing
- Gentner's Digital Signal Processing technology ensures crystal-clear audio with the deepest, most reliable hybrid null
- 8kHz sampling rate allows continual adaptation to telephone line conditions
- Selectable auto-answer and auto-disconnect
- Built-in phone hybrid with audible ring indication through speaker or line output
- Controlled and programmed via front panel or single RS-232 connection
- Lock out front-panel access for security
- Phoenix push-on blocks make pin-for-pin wiring easier
- Compliance for USA, Canada and Europe includes FCC, CSA and CE
- Mountable in one 19" rack space

Applications

- Audio conferencing or audio for video conferencing
- With a single microphones
- When circumstances dictate a low-cost single channel echo canceller

Specifications

Dimensions (LxDxH)
17.25″ x 10.25″ x 1.75″
43.8 x 26 x 4.5 cm

Weight
7 lb/3.18 kg dry
12 lb/5.4 kg shipping

Operating Temp
32–100° F/0–38° C

Humidity
15% to 80%, non-condensing

Power Input Range
Auto-adjusting
100–240VAC; 50/60Hz

Power Consumption
30W typical

RS-232
DB-9 female
9,600 (default)/19,200/38,400 baud
  rate
8 bits, 1 stop, no parity
Hardware flow control on (default)/off

Control/Status
DB25 female
Inputs: active low (pull to ground)
Outputs: open collector, 40VDC max,
  40mA each
+5V pins (2), 300mA each

Mic/Line Input
Push-on terminal block, balanced,
  bridging
Impedance: 5kΩ
Nominal Level: adjustable -55dBu,
  0dBu

Maximum Level: -33dBu, +20dBu
Echo Cancellation: 120ms tail time
  (works with 12dB of room gain)
Phantom Power: 24V, selectable

AUX In
Push-on terminal block, balanced,
  bridging
Impedance: 20kΩ
Nominal Level: 0dBu
Maximum Level: 19dBu

4-Wire/Video Codec In
Push-on terminal block, balanced,
  bridging
Impedance: 20kΩ
Nominal Level: 0dBu
Maximum Level: 19dBu

Line Output
Push-on terminal block, balanced,
  bridging
Impedance: 50Ω
Nominal Level: 0dBu
Maximum Level: 19dBu

AUX Output
Push-on terminal block, balanced,
  bridging
Impedance: 50Ω
Nominal Level: 0dBu
Maximum Level: 19dBu

4-Wire/Video Codec Out
Push-on terminal block, balanced,
  bridging
Impedance: 50Ω
Nominal Level: 0dBm
Maximum Level: 19dBu

Speaker Output
Binding Post 5W max into 4Ω

Telco Line
RJ-11 Connector
POTS (Plain old telephone service)
  line or analog extension from PBX

Telco Set
RJ-11 Connector
Connect analog telephone set
A-lead supervision provided

Audio Performance Conditions
Unless otherwise specified, all measure-
  ments are preformed with a 22Hz to
  22kHz BW limit (no weighting).
Frequency Response: 20Hz to 15kHz
  ± 2dB
Noise (EIN): -125dBu, 15kHz BW,
  max gain, Rs=150Ω
THD+N: <0.1%
SNR: 65dB re 0dBu
Dynamic Range: 85dB

Telco Audio Performance
Frequency Response: 250Hz to 3.3kHz
  ± 2dB (AGC disabled)
SNR: >60dB re -15dBm on/off the
  telephone line
THD+N: <0.2%, 250Hz to 3.3kHz
  (AGC disabled)
Pre-Emphasis: +4dB @ 2kHz
TEC tail time: 31ms
TEC null: 55dB nominal

Approvals
FCC, ASA, CE