

Interfaces to Mobile Phones
and Devices with Bluetooth®

Interfaces POTS, VoIP,
Digital, Wireless Phones

Interfaces to any Telephone
Subscriber Instruments

Automatic Control of Push-
to-talk Phones / Radios -
Key/Unkey Radios

Send / Record Audio for
Voice Quality Testing

Network Round Trip Delay
(RTD) & One-Way Delay
(OWD) Measurements

Echo Identification and
Analysis

Testing Acoustic Echo
Cancellers

Test End Points of Single or
Separate Networks

Dual Universal Telephony Adapter (UTA)



Overview

GL's Dual Universal Telephony Adapter (Dual UTA) is a versatile hardware/software device designed to universally adapt to any telephony instrumentation including 2-wire Analog Phones, Mobile Phones, Bluetooth™ Phones/Devices, Military Radios, VoIP phones, and 4-wire handsets.

As the name implies the Dual UTA contains a Side 1 and a Side 2. These sides are completely independent of each other so interfacing with endpoints of a single network or interfacing with two completely separate networks are practical scenarios.

Used in conjunction with GL's VQuad™ software, the Dual UTA simplifies end to end testing of voice quality, echo, noise, and other impairments of TDM, VoIP, and Wireless networks. A GPS sync port permits precise synchronization of sending and receiving audio functions, one-way delay (OWD), and round trip delay (RTD).

Hardware Interfaces

- Mobile Phones
 - Bluetooth™ - Works with all Bluetooth™ phones for both call control and send/record audio functions
 - Audio Headset Jack - 2.5mm (typical)
- Mobile Radios with Push-to-Talk functionality: Provides radio keying and sends/records audio
- RJ-11 POTS lines: Detect dial tone, go off hook, CallerID detection, send digits (two stage dialing), answer calls, detect a variety of Special Information Tones (SIT), and much more as well as send/record audio for Voice Quality measurement
- Handset Phones (POTS, Digital, VoIP): Replaces handset of any telephone (POTS, Digital, VoIP) that contains a coiled cord and handset
- Balanced I/O for connecting to a VoIP Softphone, Head and Torso Simulator (HATS), or any device supporting audio.

For more details , visit www.gl.com/dual-uta.html



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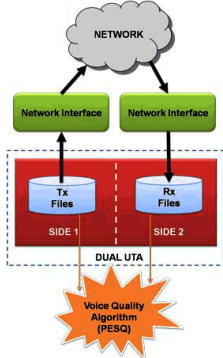
Web Page Address: <http://www.gl.com/> • E-Mail Address: gl-info@gl.com

Applications

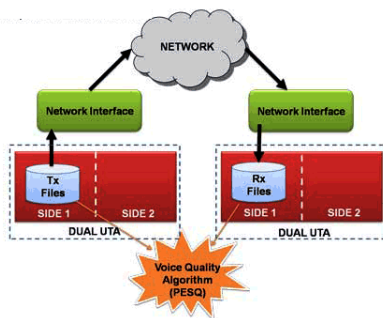
Voice Quality Testing

Send/Record audio for Voice Quality Testing on all telecom networks including WideBand 16k Samples/sec.

Scenario 1: End points at same location



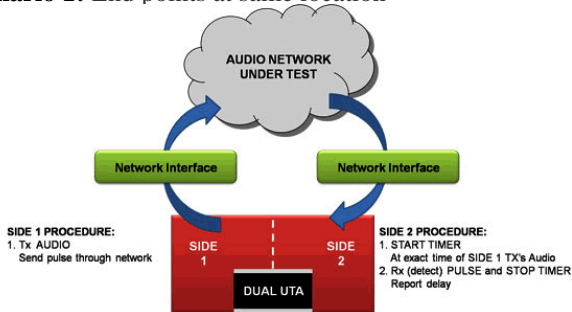
Scenario 2: End points at different location



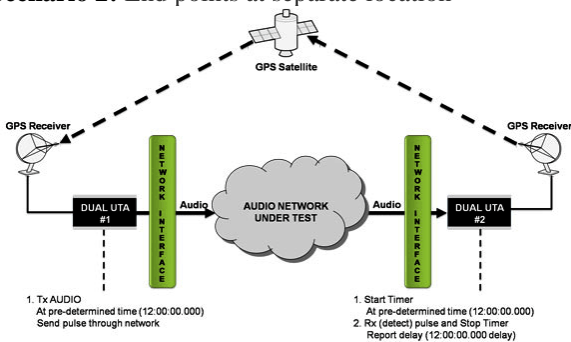
Network Delay Measurement – One Way Delay (OWD)

Perform One-way delay (OWD) measurements at collocated or geographically separated locations.

Scenario 1: End points at same location



Scenario 2: End points at separate location



Buyers Guide:

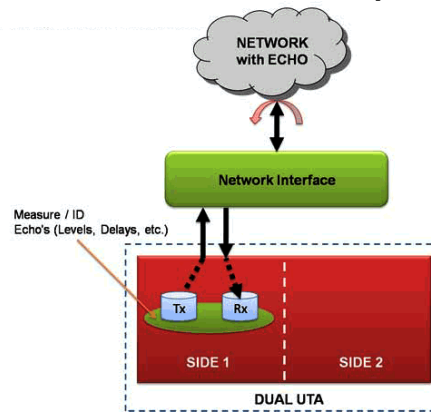
[VQT241](#) – Dual Universal Telephony Adapter (UTA) with RTD & OWD

[VQT010](#) - VQuad™ Software (Stand Alone)

For complete buyer's list, visit www.gl.com/dual-uta.html

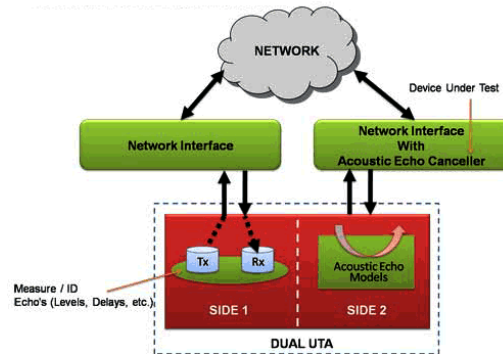
Echo Identification

Perform echo identification and analysis.



Acoustic Echo Canceller Testing

Test Acoustic Echo Cancellers across various network interfaces.



Specifications

Dual UTA: CE, FCC, TBR21 compliant.

Frequency Range Compliance:

FXO PCI card - 300-3400Hz

Dual UTA FXO interface - 30-4000Hz

Dual UTA Balanced, Mobile, PTT, Handset interfaces - 300-3500Hz

Dual UTA Bluetooth interface - 200-4000Hz

VQuad™ software:

Tone Generation 200-4000Hz

Tone Detection 0-4000Hz.

Power requirements:

Input Voltage: +5VDC (derived from USB bus)

Current load: 200mA

External Connections:

USB 2.0: Type B USB Jack (Communication with PC and Power)

3.5mm In/Out Jacks (Balanced Audio - Side 1&2)

- Input Impedance – 600ohms, 1000 ohms and User-Definable
- Output Impedance - 600ohms, 1000 ohms and User-Definable

RJ-11 Jacks (FXO - Side 1&2)

RJ-22 Jacks (Handset/Handset Base - Side 1&2)

3.5mm (Monitor)

Dual RJ-45 Stacked Jacks (GPS In/Out and PTT - Side 1&2)

- PTT - Side 1&2 Input Impedance - 600ohms, 1000 ohms and User-Definable
- PTT - Side 1&2 Output Impedance - 600ohms, 1000 ohms and User-Definable

Bluetooth Antennas - Side 1&2



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