



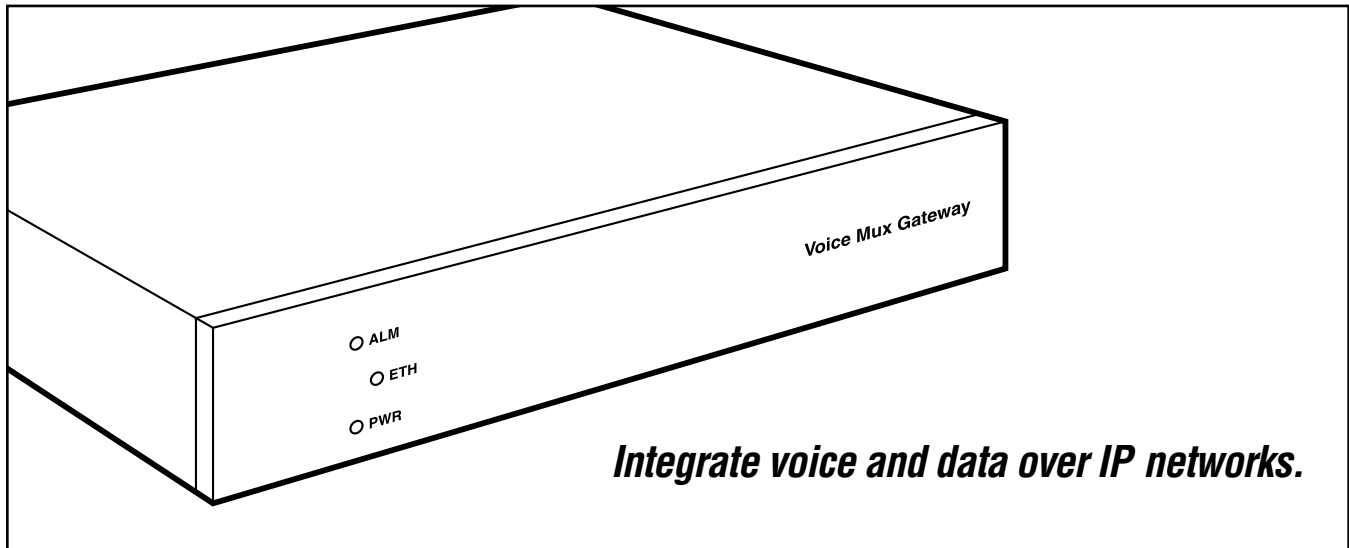
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Black Box Corporation.

BLACK BOX[®]

NETWORK SERVICES

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VOICE MUX GATEWAYS



Key Features

- ▶ **Reduce telephone costs across your organization.**
- ▶ **Use existing PBX and phones; no need for special IP phones.**
- ▶ **Easy connections with a variety of network systems.**
- ▶ **TDMoIP technology provides excellent voice quality.**
- ▶ **Easily configured via a software interface.**

Time-Division Multiplexing over Internet Protocol (TDMoIP) is a transport technology that enables you to send voice, data, and video transparently over existing IP or Ethernet networks.

In contrast with the somewhat inefficient public switched telephone network (PSTN), the Internet Protocol (IP) is far more efficient for sending voice and other data because IP networks make full use of available bandwidth.

As a result, technologies such as VoIP and TDMoIP are enabling companies to greatly reduce their overall telephone costs.

Both technologies provide excellent voice quality over the Internet. But unlike VoIP (which revolves around new and evolving protocols), TDMoIP relies on established technologies (such as T1 and IP). This enables users to

integrate their existing PBXs and phones without the need for special IP phones and equipment.

The Voice Mux Gateway minimizes telephone costs by turning your existing data network into a communication link for all your offices—wherever they are located—over an intranet or the Internet.

Voice Mux Gateways connect easily to a variety of existing network systems in common office settings, including 10BASE-T/100BASE-TX Ethernet and T1, using standard G.711, G.723.1, and G.729A voice compression technologies to make FXS and other voice connections.

Each Voice Mux Gateway unit has two 10BASE-T/100BASE-TX Ethernet ports (one for the IP network and a second to link to an Ethernet LAN). Each unit has either a single T1 voice port

(available in 6- or 24-channel configurations) or four FXS (RJ-11) analog voice ports.

The units can be configured and monitored via a local ASCII terminal, Telnet, or via a special network management system. An RJ-45 control port is provided for local terminal connection for monitoring and control.

TDMoIP technology gives you high voice quality—your users won't notice any difference between calls through it and standard phone lines. Furthermore, TDMoIP uses less bandwidth and is more tolerant of packet loss, latency, and jitter. It's also ideal for applications where bandwidth is constrained, such as 802.11b wireless and xDSL environments.

These systems maximize efficiency on the network because features such as Voice

Activity Detection (VAD) and silence suppression enable the gateways to dynamically allocate bandwidth for voice traffic. By preventing packets from being sent when no voice activity is detected, the VAD mechanism conserves bandwidth. This feature results in optimized bandwidth usage, leaving more bandwidth for data transport.

All operating parameters are configured using simple menu-based software. Upgrades or backup copies of the software can be downloaded via TFTP.

Voice Mux Gateways support all existing PBX and phone features and services without the need for costly upgrades. Business processes aren't affected, and there's no need to retrain your users.

The Voice Mux Gateways are only 1U high and can be mounted in a 19" rack.

Specifications

Network

Data Rate: 10 or 100 Mbps, half- or full-duplex, autonegotiating

Standards: IEEE 802.3, 802.3u, Ethernet, 802.1p&q

Interface: Ethernet: UTP CAT5; Serial: Selectable for RS-530 or V.35

Connectors: Ethernet: (1) RJ-45; Serial: (1) DB25 F (adapter cable is required for V.35)

General

Indicators: (3) LEDs: PWR (power on/off), ETH (Ethernet line OK), ALM (alarm present in system)

Power: AC models: 100–240 VAC, 50–60 Hz, autosensing; DC models: -36 to -72 VDC

Size: 1.7"H x 8.5"W x 9.3"D (4.3 x 21.6 x 23.6 cm)

Weight: 4.4 lb. (2 kg)

MT1201A

Compression Algorithms: G.723.1 (5.3 or 6.4 kbps), G.729 A (8 kbps), G.711 (a-law or μ -law)

Fax Relay: Group III: 4.8, 9.6, 14.4 kbps

Connectors: (4) RJ-11 analog ports

MT1200A, MT1207A

Framing: SF, ESF

Line Code: AMI

Zero Suppression: B8ZS

Connectors: (1) RJ-48 with each time slot carrying a single voice channel

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely

important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Ordering Information

ITEM	CODE
<i>First, order the Voice Mux Gateways you need...</i>	
T1 6-Channel AC.....	MT1200A
DC.....	MT1200A-DC
24-Channel AC.....	MT1207A
DC.....	MT1207A-DC
FXS 4-Port AC.....	MT1201A
DC.....	MT1201A-DC
<i>To mount a Voice Mux Gateway in a rack, order a...</i>	
Voice Mux Gateway Rackmount Kit.....	MT1202
<i>Order the correct cable for your application...</i>	
V.35 DCE Cable.....	MT1203
V.35 DTE Cable.....	MT1204
RS-530 DCE Cable.....	MT1205
RS-530 DTE Cable.....	MT1206



Black Box offers the best warranty program in the industry—Fido Protection®. For more information, request **FaxBack 22512**.