ZETRON®

MODEL 232

Data/Voice Multiplexer

FEATURES

- **Allows use of a single line to connect Zetron's most popular desktop remotes to a distant control station:**
  - **Model 360 (LTR)**
  - **Model Z370 (iDEN)**
  - **Model 380 (MPT 1327)**
  - **Model 390 (TETRA)**
- **Also compatible with DDC-100 Remote (Orion desktop station)**
- **Leased Line Savings Typically Provide Payback in 1 – 2 Years**
- **Compatible with PSTN (dial-up telephone circuit), 2-Wire or 4-Wire leased line, ISDN, and microwave channels**
  - ***Demand-Dial* Mode Initiates Temporary Connection Based on Audio/Data Activity (PSTN or ISDN)**
  - **Automatic Reconnect on Loss of Carrier**
- **"Toll Quality" Audio**
- **Supports Local Programming With a PC or Remote Programming Using Telephone Connection**

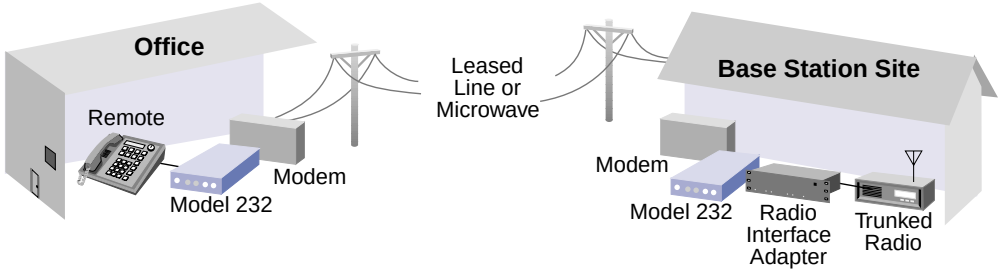
PRODUCT OVERVIEW

The Model 232 Data/Voice Multiplexer is an interface device that allows a person at a desk to have complete access to a radio network that is located in a distant city, or even in a different country. The person at the desk does not need to be situated within the network's coverage area. As long as they are equipped with an appropriate Zetron desktop controller, the operator can enjoy full privileges on the distant radio network. For applications that only require local network access, the Model 232, in conjunction with a Zetron remote, supports improved RF coverage and distribution of control stations for reliability and balanced site loading.

With a conventional tone controlled radio, remoting can easily be accomplished using a single leased line. With modern trunked radios such as those used on iDEN®, TETRA, MPT 1327, and EDACS® networks, the task of remoting is more complex. In addition to the receive and transmit audio lines, these radios utilize serial control links for commands and status. As a result, under normal circumstances, two sets of leased lines are required; one for audio and one for control. Over a period of time, the lease costs for the additional line can become quite significant.

The Model 232 provides an easy and economical means of connecting a distant radio to a M360, Z370, M380, M390, or DDC-100 desktop remote using a single line. This is accomplished by digitizing the audio to and from the radio, and combining it with control/status data for transmission over a single circuit using a modem or ISDN terminal adapter. Suitable circuit media include dial-up telephone lines, 2 or 4 wire leased lines, ISDN, or microwave.

Essential control point equipment in a basic system includes the appropriate Zetron radio remote, a Model 232 Data/Voice Multiplexer, and a modem that supports at least 28.8K Baud operation (or ISDN terminal adapter). The Model 232 is capable of directly controlling the modem using the "AT" command set. In the event that a dial-up PSTN or ISDN connection is used, the Model 232 can be programmed to initiate a connection only when activity is detected at the radio or remote. At the distant end, required equipment includes a second modem and Model 232, an appropriate Radio Interface Adapter, and the trunked radio.

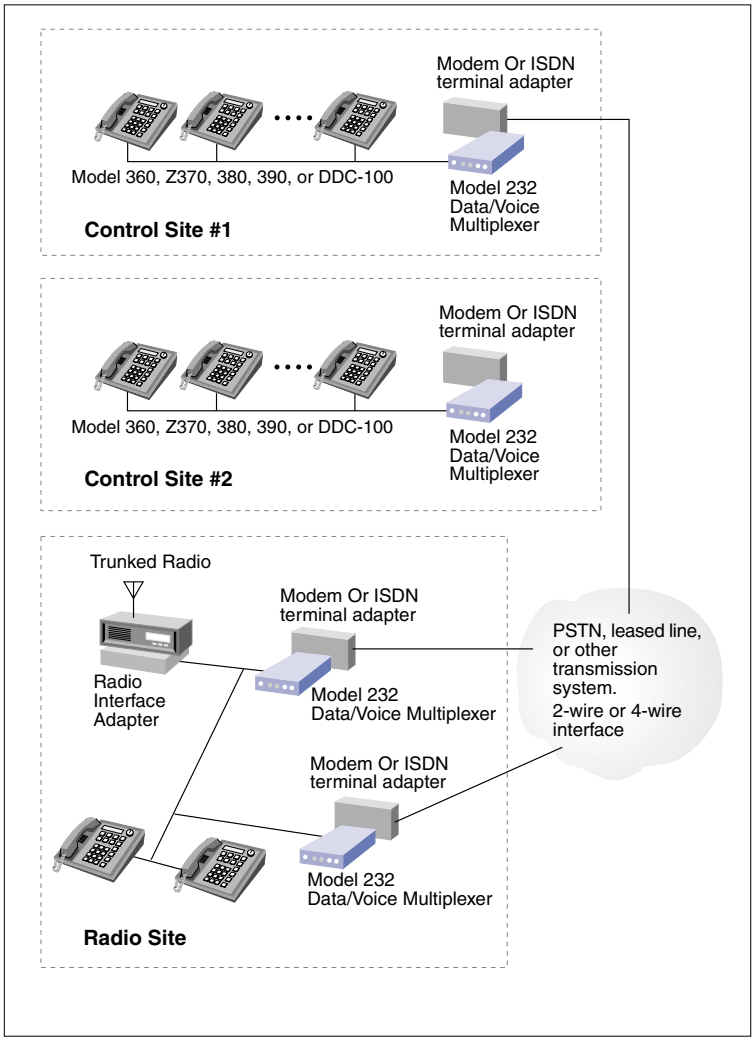


Basic System

While a basic system may be comprised of a single desktop remote connected to a single control station, the Model 232 also provides the capability for multiple remotes to access a distant radio.

The presence of the Model 232 and modem is essentially transparent to the user. Audio quality is similar to that of a good telephone connection and users are able to hear all progress tones from the radio. The Model 232 introduces about 200 ms of audio delay in each direction – about the same as many long distance telephone calls.

Installation and set-up is straightforward even for non-technical personnel. The modem connection is made with a standard RS-232 cable. The connections to the desktop remote and radio interface adapter both use a Zetron supplied 6-wire cable with RJ-11 connectors. Programming of the Model 232's operating parameters is easily accomplished using a PC with a VT-100 terminal emulation program.



SPECIFICATIONS

Modem Port	RS-232 compatible DTE interface, male DB-9 connector. For connection to an external modem or RS-232 data circuit.
Desktop Remote Port	6-wire RJ-11 connector compatible with the Zetron models 360, Z370, 380, 390 and DDC100 remotes. Connected to either the remote(s) or the radio interface panel.
Console Port	8-wire interface compatible with Zetron Series 4000 Console Common Control. Optionally, internal jumpers configure the port for use with RS-485, RS-232, or TTL-level signaling.
Power	12 volt AC or 13.8 volt DC, 1 Amp unregulated supply via 2.5mm barrel connector
Operating modes	Direct RS-232, leased line modem, dial-up modem, dial-on-demand modem, program mode
Installation set-up	Via RS-232 terminal (null-modem) connected to the "Modem" port.

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See Zetron price list for option pricing. Specifications subject to change without notice. 005-1235C July 2002