



## FEATURES

- Designed specifically for Public Safety
- Rackmount design reduces clutter
- Easily interfaced to existing phones
- Uses familiar 'PC' style keyboard
- Automatic detection notifies operator when TDD tones are heard
- Manual query checks silent calls for potential TDD
- Supports both Baudot and ASCII modes, up to 1200 baud
- Automatically matches mode, rate, and parity of caller
- Supports HCO/VCO
- Serial port supports Computer Aided Dispatch because it also functions as a TDD modem
- Serial port supports printer for logging messages, time and date
- Call counter shows ratio of actual vs queried TDD calls
- Provisions for external time sync (Spectracom "once-per-second" RS-232 format or equivalent)
- Complies with NENA-04-01 when used with Printer, Display or CAD system

## INTRODUCTION

The Zetron Model 3030 PSAP TDD (TTY) is a Telecommunications Device for the Deaf (TDD) designed especially for Public Safety Answering Points (PSAP). Its function is to detect TDD calls made by hearing or speech impaired people, to notify the operator of such calls, to provide answering messages, to display the caller's message, and to allow the operator to converse with the caller.

### Americans with Disabilities Act Compliance

The federal Americans with Disabilities Act (ADA) states in Title II, Part IV, Paragraph 35.162: "Telephone emergency services, including 911 services, shall provide direct access to individuals who use TDDs and computer modems."

The Model 3030 PSAP TDD helps dispatch centers comply with the ADA's current and future requirements.

### Space Savings

The Model 3030 is designed to reduce the clutter at a telephone answering position. The unique modular design of the unit allows it to be mounted directly into Motorola CENTRACOM Series II console panels by replacing two unused modules in a channel control panel. The unit may also be mounted in Zetron's rack or desktop adapters.

### Operation

A TDD call is usually initiated in one of two ways:

- 1) Nothing is heard on the phone line because the TDD caller may be waiting for an answer before typing,
- 2) TDD tones are heard as a result of the caller typing on his or her TDD equipment.

The Model 3030 is designed to address both of these possibilities:

- 1) Nothing heard. In compliance to the ADA, silent calls must be treated as potential TDD calls. If the operator hears no activity, he/she may press one of the "Message" buttons on the front of the unit. This will initiate a query to see if a TDD is calling and, if so, what mode is being used. If a TDD is present, the message will be displayed on the caller's display.
- 2) TDD tones heard. If the TDD caller begins by typing, the Model 3030 will automatically detect the tones and notify the operator both audibly and visually.

Once a TDD session has begun, the display back-lighting will turn on and the Mode indicator will reflect the mode being used. As the caller types the message, the unit determines the caller's baud rate and parity and automatically configures itself to match. The display will scroll, showing the message being received (uppercase) and sent (lower case). Typically when a TDD session begins, the operator will obtain and plug in the keyboard so that he or she may converse with the caller. With a serial printer, the entire session may be logged and stamped with the date and time. Once the session has been completed, pressing the unit's "Reset" button will make the unit ready for the next TDD call.

### ASCII & Baudot Modes

The Model 3030 contains both the required Baudot mode and the non-required ASCII mode, allowing it to communicate with TDDs and most standard "Hayes" compatible computer modems. To date the Model 3030 is the only TDD that offers

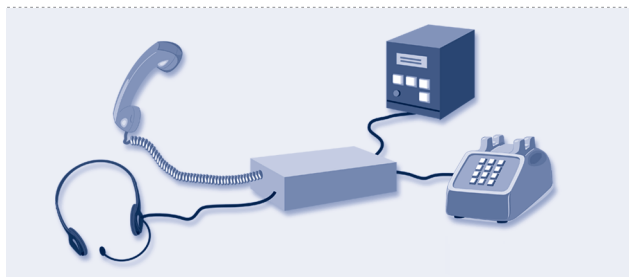
110, 300, and 1200 baud ASCII and is the only TDD that automatically detects and uses the baud rate used by the caller. In addition, the industry is developing a new ASCII TDD standard which will make ASCII completely compatible with telephone emergency services. When development is complete, the new ASCII TDD mode will be required. The Model 3030 may be upgraded to include the latest ASCII TDD standards.

### HCO/VCO Operation

In compliance with ADA requirements, the Model 3030 handles HCO (hearing carry over) and VCO (voice carry over) calls from callers who are either voice impaired or hearing impaired but not both. In HCO/VCO operation, the TDD conversation uses text in one direction and voice in the other direction. The Model 3030 supports this by having a simple method of quickly switching between voice and text models.

### Flexible Telephone Interfaces

The Model 3030 is typically interfaced to the call-taker's telephone instrument so that whatever line the call-taker is handling, the TDD is capable of servicing it. The unit may be directly interfaced to 1A2 style multi-line sets. Some newer phones, such as electronic/digital phones, may require the optional handset interface. Once a TDD session begins, the unit will disconnect the handset (or headset) to eliminate annoyance and to ensure reliable decoding.



### Computer Aided Dispatch (CAD) Interface

If the serial port is not used for a printer, it may be used as an interface to a CAD system. The Model 3030 then acts as a TDD answer modem with manual backup capability to the CAD system. Software for many CAD systems allows a "hot key" sequence to change the CAD screen and keyboard to view and send TDD messages.

### Master (Net) Clock Interface

If the serial port is used for a printer (rather than CAD) the Model 3030 may be interfaced to an external time source so that all printed time and date log stamps are synchronized to a master clock. The Model 3030 requires once-a-second RS-232 delivered time in a format compliant with NENA-04-002.

## SPECIFICATIONS

### PHYSICAL SPECIFICATIONS

Size:	4.25" W x 5.0" H x 10" D, Compatible with Motorola CENTRACOM II/II+
Display:	32 character, back-lit, wide-view LCD, 4.9 mm character height
Keyboard:	Uses standard PC-AT keyboard in AT mode
Options:	Keyboard, handset interface, mounting adapter, CAD adapter cable

### ELECTRICAL SPECIFICATIONS

Power:	12 VAC or 15 VDC, 0.5 A max
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### SIGNALING SPECIFICATIONS

Protocol:	Baudot code, standard tones at 45.5 or 50 baud, auto-adjusting ASCII code, Bell 103 tones at 110 or 300 baud, or Bell 212 at 1200 baud, auto-adjusting
Receive Sensitivity:	-35 dBm min
Transmit Level:	-9 dBm max
Compliance:	FCC Part 15, Part 68 NENA-04-001 Issue 1



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