

## AM3-4B Technical Specifications

### TRANSMITTER

**Sensitivity:** 0 to -26dBm or -20 to -46dBm, strap selectable

**Frequency Tolerance:**  $\pm 2\%$

**Twist:** 12dB Maximum

### COMMAND SEQUENCE

#abcN (abc equals preset three digit numeric responder address. N equals Command)

### V.F. COMMANDS

**Amputate (Command A):** 600 ohm termination (no timeout)

**Loopback (Command 1):** +16dB gain loopback.(Adj. 0 to +16DB)

**Quiet Termination (Command 2):** 600 ohm Termination

**Milliwatt (Command 3):** Send 1004Hz @ 0dBm (Adj. 0 to -16dB)

**Reset (Command 4):** Return V.F. facility to transparent condition

### MISCELLANEOUS

**Frequency Accuracy:**  $\pm .1\%$

**Bridging Loss:** .3dB Max.

**Address:** Any number 000-255 switch selectable

**Power:** 18VAC C.T. (Wall Transformer, furnished)

**Dimensions:** 5.3"L x 4.6"W x 1.5"D

**Weight:** 9.5 oz

**Connections:** Screw term strip

**4 Tone:** Send composite 857Hz, 863Hz, 1372Hz, 1388Hz @ 0dBm

**2 Tone:** Send composite 1372Hz, 1388Hz, @ 0dBm

**Slope Tones:** Send 404Hz, 1004Hz, 2804Hz @ 0dBm for ten seconds each, one second between tones

**Reset:** Return V.F. facility to transparent (through data) condition

**Amputate:** 600 ohm Termination (no timeout)

NOTE: All commands except "Reset" and "Amputate" reset automatically after 16 minutes

### MISCELLANEOUS

**Frequency Accuracy:**  $\pm .1\%$

**Level Accuracy:**  $\pm .1$ dB

**Bridging Loss:** .3dB

**Address:** Any number 000-999

**Power:** 18VAC C.T. (Wall Transformer)

**Dimensions:** Single Unit: 5.1"W x 1.3H x 8.9"L

Card File: 5.25"W x 10"H x 19"L

**Connections:** Power: Screw Terminal Strip

In (Line): RJ11 Modular

Telephone Jack

Out (Drop): RJ11 Modular

Telephone Jack

**Power/Control:** Derived from basic Responder

**Mounting:** Housed within basic Responder

## AM3-4A Technical Specifications

### DTMF RECEIVER

**Sensitivity:** 0 to -30dBm or -16 to -46dBm, switch selectable

**Frequency Tolerance:**  $\pm 2\%$

**Twist:** 12dB maximum

### COMMAND SEQUENCE

**V.F. Commands:** #abcN

### V.F. COMMANDS

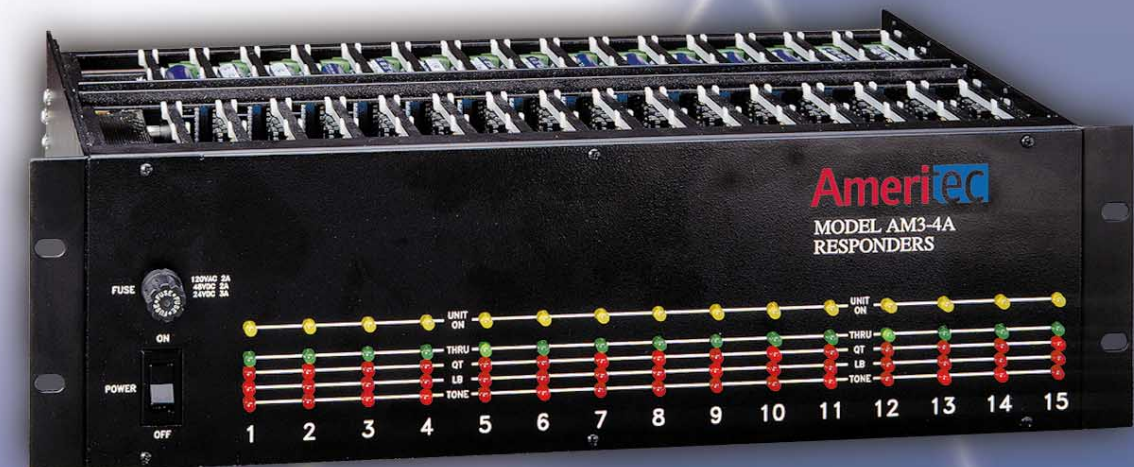
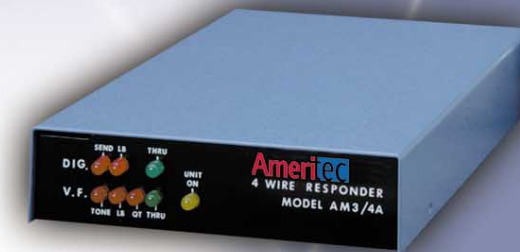
**Loopback:** Loopback gain switch selectable to 0dB, +16dB or variable (0 to -20dB)

**Quiet Termination:** 600 ohm Termination

**Milliwatt:** Send 1004Hz @ 0dBm

# Ameritec

Model AM3



All specifications are subject to change without notice.

## 4-Wire Responder

Centralized, Low Cost Responders for Voice and Data Transmission Line Testing

# Ameritec

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## General Description

The Ameritec Model AM3 Series Responders provide users the capability of centrally testing their voice and modem data lines without need for dispatch of a technician to the remote end of the line.

Depending on the Responder, control can be accomplished by simply sending DTMF digits from the central location, over the line under test, to the Responder. The Responder will then respond to the command by sending a known signal or sequence of test tones, quiet terminating the line, or measuring the level of an incoming signal.

## Applications

A bank introduces automated teller machines, an insurance company adds a major branch office to its data network, a utility centralizes its record keeping system, a fast-food chain networks its point of sale terminals. These are but a few of the business applications involving the use of telecommunications networks to move data or allow machines to communicate with each other. Ameritec Responders are designed for use in these environments to assure quick trouble shooting and isolation of problems without the need for dispatch of a technician.

## General Responder Information

- 4-Wire Responders allow for testing telecom transmission lines without the need of dispatching a person and expensive test equipment to the other end of the line.
- Responders may be either temporarily or permanently placed in a network.
- Responders are used to quickly identify whether the problem lies with the line between two points, or with the terminal equipment at the other end of the line.
- Responders are used to disconnect a streaming modem or terminal on multi-drop circuits without dispatch of a repair technician.

- Responders are used in unmanned or inaccessible locations such as remote switching offices and mountain-top microwave towers.

A transmission test set, such as the Ameritec Model AM4x or AM5x Series, is used at the central location to command the Responders and to perform the measurements sent from the Responder.

## 4-Wire Responders

The AM3-4 series of Responders are designed for use in 4-Wire, dedicated, environments.

### AM3-4B

This is the most basic and inexpensive 4-Wire responder available. The AM3-4B is also addressable and DTMF commandable. It is limited to the following states:

1. Send 1004Hz
2. Loopback
3. Quiet Termination
4. Amputate (quiet termination without timeout reset)
5. Reset

The Responder will automatically disconnect (return on hook) two minutes after completion of any commanded state unless a new command is issued.

### AM3-4A

The AM3-4A Responder is a DTMF commandable, addressable, 4-Wire Responder. It connects in series with a dedicated 4-Wire data line, normally on the line side of the modem. However, it can be placed anywhere in the line, including at bridges. It is transparent to data passing through it until it receives a specific sequence of five DTMF digits. These five digits include the preset address of the Responder and a command instruction.

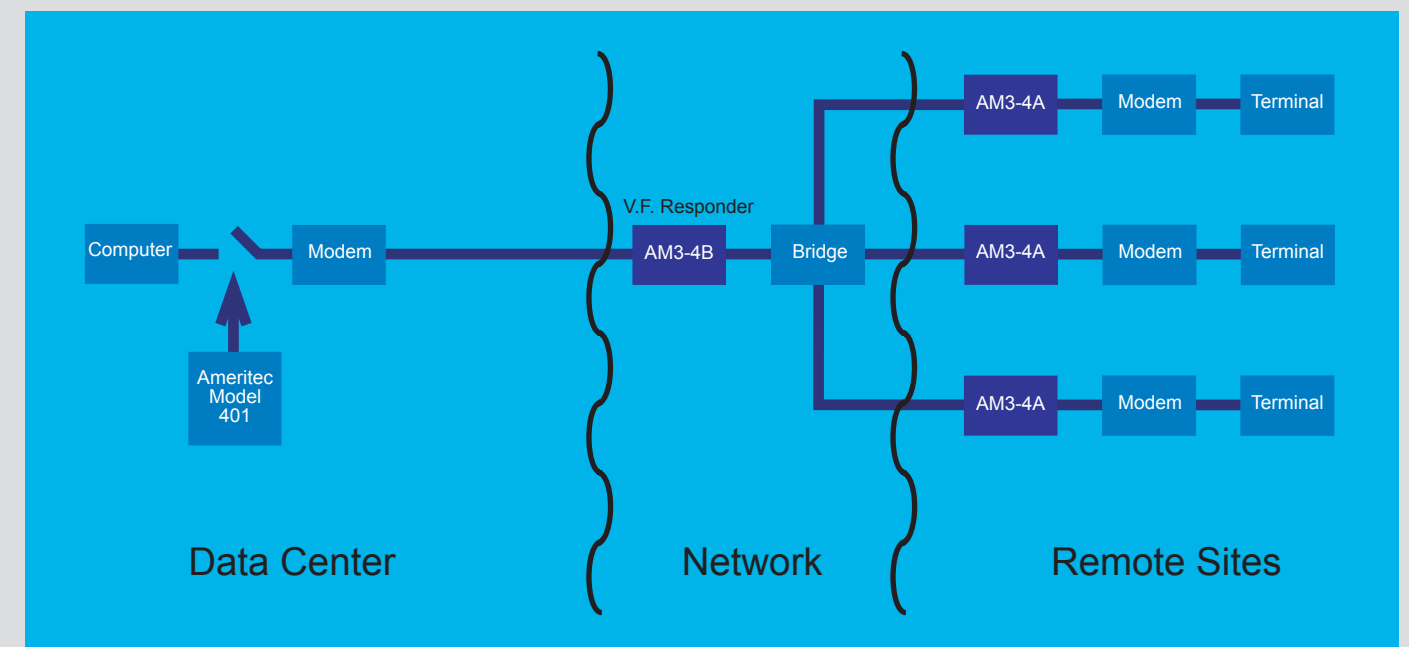
The AM3-4A can be commanded into the following states:

1. Loopback
2. Quiet Termination
3. Send 1004Hz @ 0dBm
4. Send Non-Linear Distortion 4-Tone signal
5. Send Non-Linear Distortion 2-Tone signal
6. Send Slope Tones (404Hz, 1004Hz, 2804Hz)
7. Reset
8. Amputate (quiet termination without timeout reset)

The Responder will automatically disconnect (return on hook) two minutes after completion of any commanded state unless a new command is issued.

## Model 86-0003 Card File

All AM3-4A Responders, can be purchased in a single PC card version for use in mounting them in the AM3 Model 86-0003 Card File. This is desirable when multiple circuits are in the same location, as it minimizes the amount of space and power outlets required.



Typical 4-Wire Responder Application