



# Introduction

Ameritec's AM5 series of Wideband Transmission Test Sets are engineered for peak performance in the field and the lab. They offer a full range of transmission impairment measurements, a highly versatile signal generator and basic telephone signaling in a single compact, portable unit.

The AM5's perform most standard tests, worldwide. The AM5XT-200 meets all North American IEEE 743-1984 standards.

To receive a calibration and/or repair quote-RMA from R.A.E. Services Inc. Click here>> www.raeservices.com/services/quote.htm The AM5eXT-200 meets international ITU standards and is CE approved for use in the European Community. The AM5XT-200 and AM5eXT-200 operate with a bandwidth of 20Hz to 200kHz. The units can perform qualification tests on circuits carrying voice band telephone, high quality audio, DDS to 64KBPS, Basic Rate HDSL, or other service using up to 200kH bandwidth.



Bandwidth
(shown with optional Siemens connectors)



Model AM5XT-200 / IEEE 743-1984 Standard / 200kHz Bandwidth

# **Built-In Signaling**

The AM5 series units are unique among most transmission test sets in that they provide basic loop start line signaling. They include separate On Hook/Off Hook DC Hold Circuits for Send and Receive Line and the ability to signal using Dial Pulse, DTMF or MF(R1).

This feature is useful in testing dial-up circuits or in commanding responder devices (such as the Ameritec AM3 Series) on 4 wire dedicated circuits.

### Remote Control

All front panel functions may be remote controlled by simple ASCII character strings to the optional RS232 port.

There is even an "Auxiliary" port which can be used to chain the AM5XT to a second device (for example, a co-located test access switch such as the Ameritec AM6), achieving dual control from a single terminal or computer.

When AM5XT units are used at each end of a line under test, the distant AM5XT signal generator can be commanded to recall test set-ups by sending DTMF commands from the local unit.

Use two sets for a complete end-to-end test of 4 wire data lines.

Use a single unit with an Ameritec AM3 Series 4 Wire Responder for centralized loopback testing.

Use the AM5XT/eXT built-in dial capability on dial-up networks to access a distant Ameritec AM3 Series 2 Wire Responder or a second AM5XT/eXT for centralized 2 wire testing.

2W RESPONDER

AM5XT/eXT

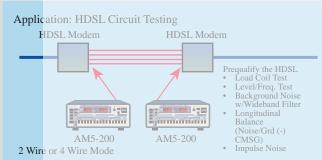
(AM3-2)



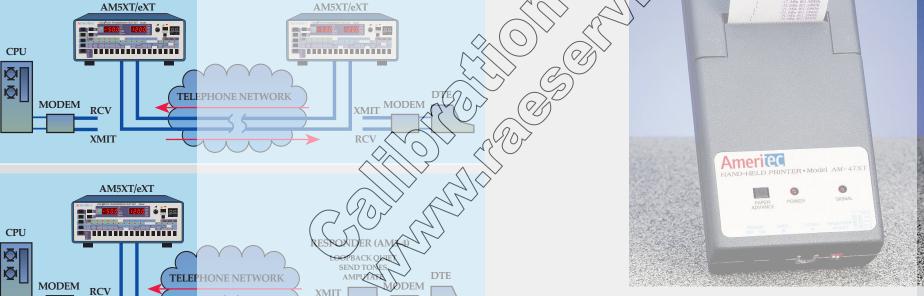
AM5eXT rear panel

TELEPHONE NETWORK

AM5XT/eXT



AM5XT/eXT



**2W RESPONDER** 

AM-47XT accessory printer.

With 200kHz bandwidth, the AM5XT-200 performs full HDSL (High-bit-rate Digital Subscribers Line) testing. HDSL provides DS1 (1.544Mbps) compatibility over two copper twisted pairs with each pair carrying a 2B1Q full duplex data stream. These pairs are tested configuring an AM5XT-200 to generate a sine wave of 196kHz and then making the appropriate level, noise and frequency measurements.

Model 30-0033XT Signaling Adaptor

The Model 30-0033XT is a Signaling Adaptor packaged within the cover (lid) of an AM5 Series Transmission Test Set or can be used as a stand alone unit. It provides for Loop Start, Ground Start, DID and Types 1, 2 and 3 E&M signaling. It also incorporates a ring generator with manual cadence selection and automatic ring trip. The unit supplies switch selectable -24 and -48 VDC line supply voltages and a switch to allow for simulation of 1240  $\Omega$  loop resistance.



AM5XT-200 instrument with 30-0033XT Signaling Adaptor

# DDS/SW56 Loopback Test Set 30-0070 S:

The DDS Loopback Test Set provides CSU Loopback, DSU Non-Latching Loopback, DSU Latching Loopback and a Manual (or Forced) Loopback. DSU Latching is accomplished with or without secondary channel.



Model 30-0070 S DDS/SW56 Loopback Test Set.

The unit will transmit straightaway test patterns to the distant end with manual selection of test patterns 511,2047, SP1, SP2, SP3, SP4 and SP5. Once again, Secondary Channel is supported during all straightaway tests.

Supported data rates are 2400, 4800, 9600, 19.2K, 56K. 64K and Switched 56K bits per second.

Switched 56K testing is performed by connecting a telephone butt set or AM5XT to the TIMS TX port to provide ON/OFF Hook and pulse dial functions. Far end signaling (wink, delay, answer) is indicated via front panel LED.



(option 25-0045)

AM5eXT-200 (CE).

set-up and/or meas

Optional rear panel analog outputs are provided for

driving an XY plotter or strip chart recorder. This is

useful in graphing frequency response, plus group or

envelope delay results. This option is standard on the

An accessory printer (Model AM-47XT) is available

ment result. When making

ature nav be engaged for an

delay of requency response tests,

The test results in both

for use with the unit. When connected to the optional RS232 port, the printer can run a hard copy of any test

**Print or Plot Your Results** 

NIST, ISO, IEC, ANSI, NCSL, MIL-STD by www.raeservices.com

The DDS Loopbarto receive a calibration and/or repair quote-RMA from R.A.E. Services Inc.

panel cover lid for an Amerite click here>> www.raeservices.com/services/quote.htm

Transmission Test Set. It can also be used as a stand alone unit.

# DDS Loopback Test Set 30-0070

Similar to the 30-0070 S Test Set except without SW56 capability.

# Accessories and Options



Unit with cover, manual, power cord, optional soft case, printer and cables.

**Provided:** Model AM5XT-200 or AM5eXT-200. or AM5eXT (CE) removable front cover with cord storage, power cord and instruction manual.

Portable or Rack Mount: No other analog transmission test set this full-featured is so convenien About the size and weight of a telephone directory, (it) easily transported from lab to field. For perman installations, a rack mounting kit is available for AM5XT and AM5eXT models which will allow 19' relay rack mounting in only two rack in relays of

Optional Battery: An optional internal able battery pack is available for full portable operation. The batteries are of the scaled lead and require no maintenan indicator indicates when recharging is

The built-in charger and by the batteries to be charged even while the unit is in operation

Unit shown in rack mount configuration.

#### **Options:**

25-0019 RS232 Remote Control Port with Auxiliary RS232 Output Port. This option required for printer plotting or printer output. Included with AN5eXT-200(CE).

500 2000

Included with AM5eXT-200(CE).

Internal Power Rack (Sealed Rechargeable 24-0017 Lead Acid Ratteries) and Internal Charger. Included with AM5eXT-2000CE).

pe Line Test Set Connections. 25-0041 25-0045 AnalogXX Plotter Output (Prerequisite

25-0145 25-0840 Complex Into dance (AM5eXT-200). Contact factory for details.

## Accessories: (7/

**VBC** Source Battery Cover

Signaling Adaptor Cover

DDS Loopback Test Set Cover

DDS/SW56 Loopback Test Set Cover Padded Soft Carrying Case with Pouch for

AM-47XT Printer.

M-47XT Hand-Held Printer Plotter with Integral Rechargeable Batteries. Includes a Roll of Paper, AC Adaptor, Connecting Cable.

Prerequisite: Option 25-0019

Replacement Paper for AM-47XT. 26-0014

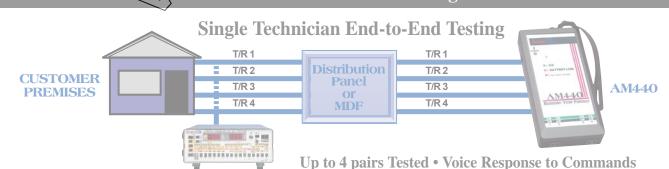
26-0015 Replacement Ink Cartridge for AM-47XT.

85-0076 19" Rack Mount Kit.

48-0062 6 Ft. Bantam to Clip Input Cable, two Req. 48-0047 6 Ft. Bantam to Bantam Input Cable, two Req.

48-0048 6 Ft. Bantam to 310 Input Cable, two Req.

#### **A5** and the AM440 Remote Testing Partner APPLICATION:



#### Through its DTMF dialing capability the AM5 commands the AM440 to:

- Open Tip and Ring for foreign voltage tests
- Short Tip to Ring to measure loop resistance
- Ground Tip and Ring for Tasistance to ANSI, NCSL, MIL-STD by www.raeservices.com
   Transmit preset tones from 304Hz to 384kHz, slopes, sweeps Test for Load Coils