TEK USER'S MANUAL

Part No. 070-5236-00
Product Group 45

MP1101
PROGRAMMABLE DIGITIZER MEASUREMENT PACKAGE

FILE COPY
Please return
to ISI Manuals

Please Check for
CHANGE INFORMATION
at the Rear of This Manual

First Printing OCT 1984

Tektronix®
COMMITTED TO EXCELLENCE

Copyright © 1984 Tektronix, Inc. All rights reserved. Contents of this publication may not be reproduced in any form without the written permission of Tektronix, Inc.

Products of Tektronix, Inc. and its subsidiaries are covered by U.S. and foreign patents and/or pending patents.

TEKTRONIX, TEK, SCOPE-MOBILE, and are registered trademarks of Tektronix, Inc. TELEQUIPMENT is a registered trademark of Tektronix U.K. Limited.

Printed in U.S.A. Specification and price change privileges are reserved.

TABLE OF CONTENTS

Section 1 GENERAL INFORMATION..... 1-1

Package Description..... 1-1
Hardware Supplied..... 1-1
Standard Package Components..... 1-1
Description of Package Components..... 1-1

Section 2 SPECIFICATIONS..... 2-1

Electrical..... 2-1
Environmental..... 2-1
Physical..... 2-1

Section 3 PACKAGE INSTALLATION..... 3-1

Unpacking..... 3-1
Putting the Hardware Together..... 3-1
Preparing the Cabinet and Instruments..... 3-1
Installing the Instruments..... 3-1
Installing the Signal Cabling..... 3-2

Section 4 GETTING STARTED..... 4-1

Section 5 PACKAGE OPERATION..... 5-1

Section 6 ACCESSORIES..... 6-1

Section 7 PACKAGE OPTIONS..... 7-1

Option 1..... 7-1

Section 1

GENERAL INFORMATION

This section of the manual briefly describes the Tektronix MP1101 Programmable Digitizer Package and its associated equipment.

PACKAGE DESCRIPTION

The MP1101 is a high-speed transient signal acquisition package based on the Tektronix 7912AD Programmable Transient Waveform Digitizer with IEEE Standard 488 Interface (GPIB). The MP1101 provides a compatible signal acquisition and display package that can be controlled from the 7912AD front panel, or completely programmed via the IEEE Standard 488 Interface from any suitable controller, including the Tektronix CP1100 Series and 4041 System Controllers.

HARDWARE SUPPLIED

STANDARD PACKAGE COMPONENTS

The standard MP1101 package includes the following components (with manuals):

7912AD Programmable Transient Waveform Digitizer with:
- 7A16P Programmable Amplifier
- 7B90P Programmable Time Base

620 General Purpose Waveform Monitor
634 Hi-Resolution Video Monitor

Description of Package Components

Refer to the individual instrument manuals.

Section 2

SPECIFICATIONS

This section contains specifications that relate directly to the package's operation. Supplemental Information describes typical performance characteristics that are not verified by a procedure in the manual.

Each major component in the package may have its own performance requirements (verifiable by procedures provided in instrument manuals) or supplemental information.

ELECTRICAL

Characteristic	Supplemental Information
Line Voltage (nominal)	115 Vac
Line Frequency (nominal)	60 Hertz
Input Power (nominal)	450 Watts

ENVIRONMENTAL

Characteristic	Supplemental Information
Operating Temperature	0^{o} C to 40^{o} C (32^{o} F to 104^{o} F)
Thermal Output	Approximately 1550 BTU/hr
Operating Altitude	4600 meters maximum (15,000 ft)

PHYSICAL

Characteristic	Supplemental Information
Height	419 mm (16.5 in)
Width	537 mm (21.1 in)
Depth	813 mm (32.0 in)

Section 3

PACKAGE INSTALLATION

This section provides instructions for unpacking the MP1101 and putting the hardware together.

UNPACKING

Carefully unpack each of the MP1101 components. Be sure to check all shipping cartons for spare parts, accessories, and instruction manuals. Compare the contents of each carton to the list of hardware and accessories in each instrument manual. If you find any discrepancies, notify your Tektronix Sales representative. (You may want to save the cartons and packing material for later shipping or moving.)

If you find any shipping damage, immediately notify the carrier and the closest Tektronix Service Center or your local representative.

PUTTING THE HARDWARE TOGETHER

For preliminary setup instructions, read the installation portion of the manuals that accompany each instrument. Pay close attention to all **Warning** and **Caution** statements.

PREPARING THE CABINET AND INSTRUMENTS

To prepare the cabinet and instruments, install the cabinet and equipment slide assemblies using the instructions provided in the 7912AD manual and the rackmount kits.

When installing the slide rails in the cabinet, install the 620/634 rails in the 6th and 7th holes from the top. Install the 7912AD rails in the 6th and 7th holes from the bottom. Install the 7912AD latch catch in the same 7th hole as the rail and the 8th hole from the bottom.

INSTALLING THE INSTRUMENTS

Before installing the instruments, be sure their power switches are off and that they are set to the proper operating voltage.

WARNING

When installing or removing instruments from the desktop cabinet, do not allow any instrument that has been fully extended on its slides to be unsupported until you are sure that it is stable. The cabinet and instrument may tip forward and injure the user.

For greater cabinet stability, install the instruments to be located in the bottom of the cabinet first.

Do not remove the weighted rear cabinet panel while the instruments are installed in the cabinet.

Install the 7912AD in the bottom portion of the cabinet and the 620/634 combination in the top portion of the cabinet.

CAUTION

Do not mount any other equipment in the cabinet as it may cause an excessive temperature rise that could result in equipment damage.

INSTALLING SIGNAL CABLING

When the instruments are installed in the cabinet, install the signal cabling as follows:

1. Locate three of the coaxial cables provided with the package. Connect one end of a cable to the "X" connector on the rear panel of the 620 and the other end of the cable to the "X" connector on the rear panel of the 7912AD. Connect the cables for the "Y" and "Z" connectors of the two instruments in the same way.

CAUTION

Always install the "X" and "Y" cables before the "Z" cable.

Always remove the "Z" cable before the "X" and "Y" cables.

These two rules prevent accidently burning the monitor crt with a Z-Axis signal in the absence of a sweep.

2. Locate the remaining two coaxial cables. Connect one cable between the SYNC OUT connector of the 7912AD and the EXT SYNC connector of the 634. Connect the other cable between the COMP VIDEO OUT (BINARY) connector of the 7912AD and the 75-ohm TERMINATION connector of the 634. Turn the switch associated with this connector to ON.

3. Double-check all connections. Then plug the units into an ac power source. (Use the cabinet ac power strip, if provided.)

Section 4

GETTING STARTED

Refer to Section 2 in each of the following manuals for information on initial operating information:

7912AD Operator's Manual
7A16P Instruction Manual
7B90P Instruction Manual
620 Instruction Manual
634 Instruction Manual

Section 5

PACKAGE OPERATION

Refer to Section 3 in these manuals:

7912AD Operators Manual
7A16P Instruction Manual
7B90P Instruction Manual

and Section 2 in the 620 and 634 Instruction Manuals for operating instructions.

Section 6

ACCESSORIES

The MP1101 package comes with the following accessories:

Desk Top Cabinet
Rackmounting Kits
Coaxial BNC Cables (5)
MP1101 User's Manual (Tektronix part 070-5236-00)

Section 7

PACKAGE OPTIONS

This section describes the options that are available for the MP1101 package. Where necessary, it also includes the information required to install or use the options. If the option is extensive, a separate manual may be provided.

For additional information on available options or optional accessories, see your Tektronix Catalog, or contact your nearest Tektronix Sales representative.

OPTION 1

Option 1 deletes the 7A16P Programmable Amplifier and the 7B90P Programmable Time Base.