Tektronix®

PRISM MPI
Media Analysis Platform
Dual Rack Cabinet Version 1 Installation

Instructions

Contacting Tektronix

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For product information, sales, service, and technical support:
- In North America, call 1-800-833-9200.
- Worldwide, visit www.tek.com to find contacts in your area.

Important safety information

Service safety summary

The *Service safety summary* section contains additional information required to safely perform service on the product. Only qualified personnel should perform service procedures. Read this *Service safety summary* and the *General safety summary* before performing any service procedures.

To avoid electric shock.   Do not touch exposed connections.

Do not service alone.   Do not perform internal service or adjustments of this product unless another person capable of rendering first aid and resuscitation is present.

Disconnect power.   To avoid electric shock, switch off the product power and disconnect the power cord from the mains power before removing any covers or panels, or opening the case for servicing.

Use care when servicing with power on.   Dangerous voltages or currents may exist in this product. Disconnect power, remove battery (if applicable), and disconnect test leads before removing protective panels, soldering, or replacing components.

Verify safety after repair.   Always recheck ground continuity and mains dielectric strength after performing a repair.

Dual rack cabinet installation

There are two optional dual rack cabinets (19", 3RU) available for the PRISM MPI monitor:

- **MPI-RACK-MM.** Allows you to install one MPI unit or two MPI units side-by-side. Each side of the cabinet front panel has two USB ports and a headphone jack for each MPI unit.

- **MPI-RACK-MW.** Allows you to install one MPI unit or one MPI unit in a side-by-side installation with a Tektronix WFM52x0, WFM7200, WFM8x00 waveform monitor. The left side of the cabinet front panel has two USB ports and a headphone jack for one MPI unit.

Dual rack cabinet versions

There are two versions of the instructions for the MPI-RACK-MM and MPI-RACK-MW dual rack cabinets:

Table 1: PRISM dual rack cabinet documentation

Document	Tektronix Part Number	Description
PRISM MPI Dual Rack Cabinet Version 1 Installation Instructions	071-3501-XX (English)	In the first version of the instructions, the MPI-RACK-MM and the MPI-RACK-MW cabinets are the same size.
PRISM MPI Dual Rack Cabinet Version 2 Installation Instructions	071-3577-XX (English)	In the second version of the instructions, the MPI-RACK-MW cabinet comes with a removable extender installed that makes it longer than the MPI-RACK-MM cabinet.

Dual rack cabinet cooling and clearance requirements

⚠ *CAUTION. To prevent risk of fire, adequate airflow to instrument(s) and rack adapter must be maintained. Failure to provide adequate airflow to instrument(s) could cause an instrument to shut down.*

Inadequate airflow includes placing instrument(s) and rack adapter in any small, enclosed room that lacks a ventilation system, such as a closet. If the airflow is restricted or blocked and the instrument(s) do not shut down, the risk of fire is increased and the instrument(s) could be permanently damaged.

The instrument has specific cooling and clearance requirements. Make sure that the clearance requirements for proper airflow are met for both the dual rack cabinet and the instrument. See the *PRISM Installation and Safety Instructions* manual for information about the environmental operating requirements for the instrument.

Table 2: Clearance requirements for the dual rack cabinet

Instrument side	Clearance requirement
Top and bottom	None
Left and right sides	2 in (51 mm)
Front	None
Rear	3 in (76 mm)

Recommended tool list
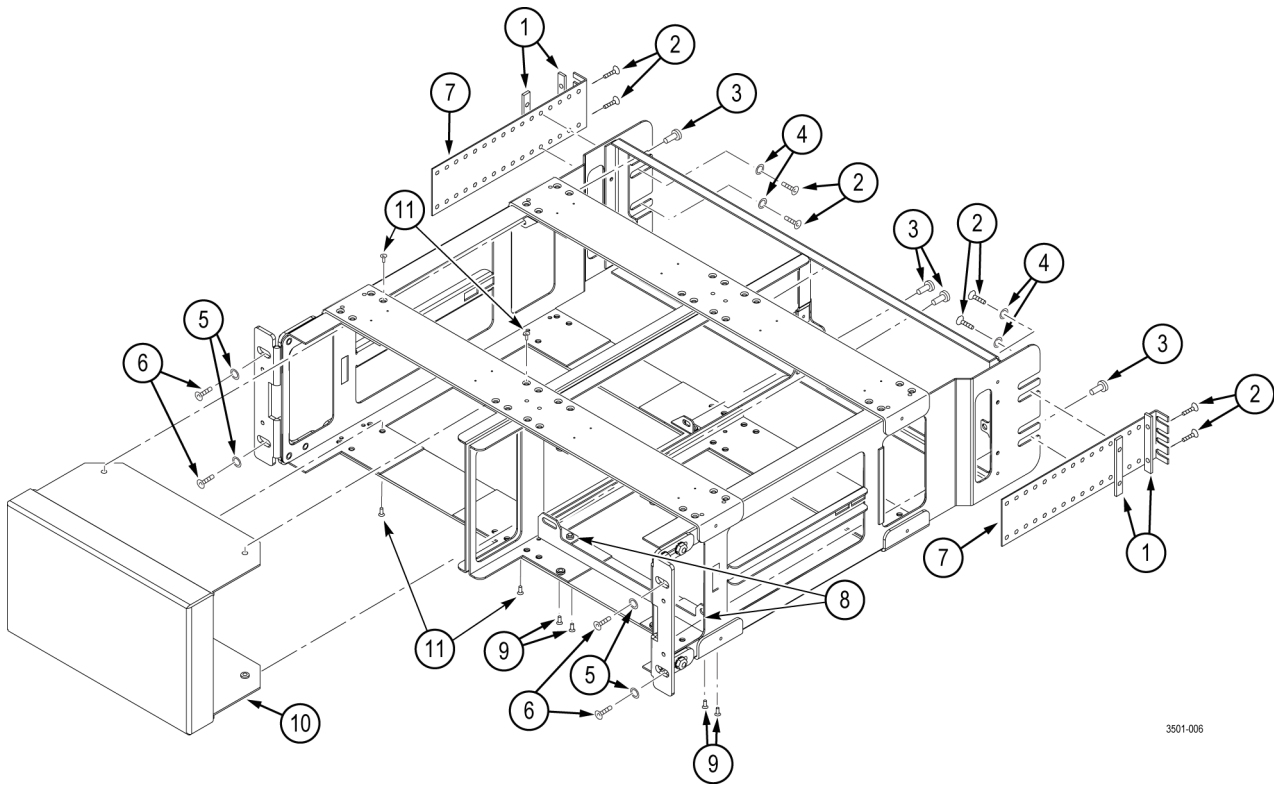
Table 3: Recommended tool list

Name	Description
Screwdriver handle	Torque driver handle. Accepts 1/4-in. hex-head driver tips
#2 Phillips tips or PoziDriv tip	Phillips or PoziDriv-driver tip for #2 size screw heads
T-10 TORX tip	Used for removing instrument screws. TORX-driver bit for T-10 size screw heads.
T-15 TORX tip	Used for removing instrument screws. TORX-driver bit for T-10 size screw heads.

Supplied hardware

The following table lists the hardware supplied with the dual rack cabinet kit. The installation instructions includes references to these parts by the item numbers to aid in selecting the correct parts.

Table 4: Supplied hardware

Item number	Tektronix part number	Description	Quantity
Hardware kit			
1	381-0251-XX	NUT BAR; 10-32 X 3.0 X 0.375 X 0.120	4
2	212-0577-XX	SCREW, MACHINE; 10-32 X 0.625, TRH, ZINC PLATED STEEL, PHIL	8
3	211-0511-XX	SCREW, MACHINE; 6-32 X 0.5, PNH, STEEL, ZINC PLATED, T15 TORX	8
4	210-1061-XX	WASHER, FLAT; 0.203 ID X 0.625 OD X 0.062, ZINC PLATED STEEL	4
5	210-1298-XX	WASHER; SHOULDER & RETAINER, 0.195 ID X 0.195 THK, PLASTIC, TV GRAY, 6.575 OD	4
6	212-0591-XX	SCREW, MACHINE; 10-32 X 0.750 OVAL HEAD, POZI	4
Guide Bracket			
7	407-3752-XX	BRACKET, EXT; 2.5 X 8.06 X 0.06, STEEL; SAFETY CONTROLLED	2
WFM52x0 Bracket (MPI-RACK-MW only)			
8	407-6011-XX	RACK MOUNT, INSTRUMENT MTG BRACKET, 5000 SERIES	1
9	211-0718-XX	SCREW, MACHINE; 6-32 X 0.312, FLH100, STEEL, ZINC FINISH, T-10 TORX DR	4
Blank panel			
10	200-5432-XX	PANEL, BLANK MPI, WFM, RACK	1
11	211-0734-XX	SCREW, MACHINE; 6-32 X 0.250, FLH100, STEEL, ZINC FINISH, T-10 TORX DR	4

Figure 1: Parts diagram

Install the dual rack cabinet in the equipment rack

Before you install an instrument into the rack adapter, install the adapter into the rack using the following steps:

1. Position the dual rack cabinet so that the headphone jack(s) on the front of the cabinet is on the bottom. (See Figure 2.)

NOTE. The MPI-RACK-MM cabinet has headphone jacks on both sides of the cabinet; the MPI-RACK-MW cabinet has one headphone jack on the left side of the cabinet.

2. **MPI-RACK-MW only**: Perform the following steps if you are installing a WFM52x0 waveform monitor in a MPI-RACK-MW cabinet:

    a. Install the WFM52x0 bracket (item 8 in Table 4) in the right side of the cabinet as shown. (See Figure 2.)

    b. Use a screwdriver with a TORX T-10 tip to attach the WFM52x0 bracket to the cabinet with four 6-32 X 0.312 screws (item 9 in Table 4).

3. If desired, you can adjust the position of the handle brackets to mount the adapter flush with other equipment in the rack. To do this, loosen the nuts that attach the handle brackets to the rack adapter, adjust the position of the handle brackets as desired, and then tighten the nuts securely. (See Figure 3.)

4. Use a screwdriver with a PosiDriv tip to attach the rack adapter assembly to the front frame of the rack with four 10-32 X 0.750 screws (item 6 in Table 4) and four shoulder washers (item 5 in Table 4).

5. Use a screwdriver with a Phillips tip to install one guide bracket (item 7 in Table 4) to one side of the rear frame of the rack with two 10-32 X 0.625 screws (item 2 in Table 4) and one nut bar (item 1 in Table 4) as shown. (See Figure 2.)

6. Use a screwdriver with a Phillips tip to attach the guide bracket to the cabinet with two 10-32 X 0.625 screws (item 2 in Table 4), two washers (item 4 in Table 4) and one nut bar (item 1 in Table 4). Use the holes in the bracket that will accommodate the depth of the instrument rack frame being used. Leave the screws loose.

7. Repeat steps 5 and 6 to install the second guide bracket to the other side of the cabinet.

8. Tighten all of the attaching screws that were left loose in the previous steps.
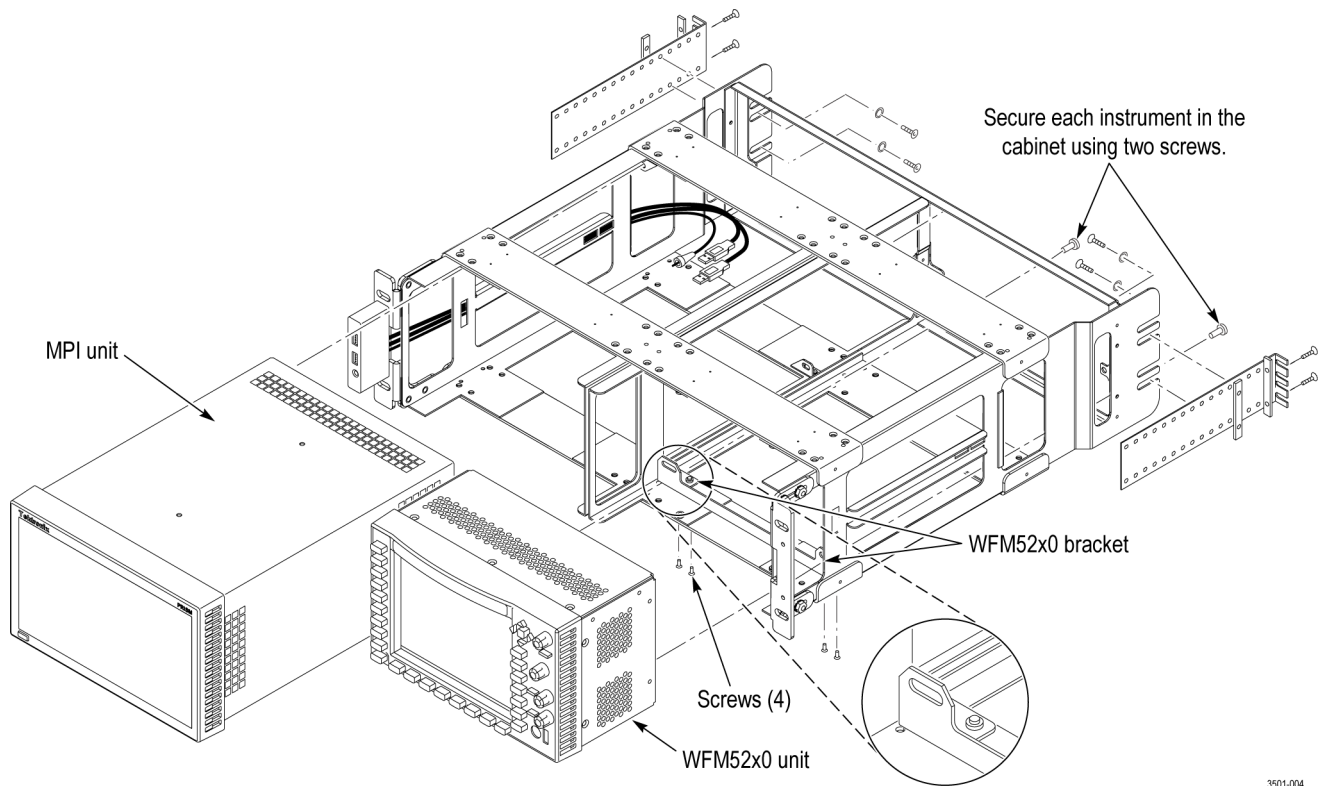
Figure 2: Installing one MPI monitor and one WFM52x0 waveform monitor in the MPI-RACK-MW dual rack cabinet

NOTE. *If only one instrument is installed in the MPI-RACK-MW dual rack cabinet, a blank panel can be attached to the front of a empty slot on either side of the cabinet. The blank panel (item 10 in Table 4) and four 6-32 X 0.250 screws (item 11 in Table 4) used to attach it to the front frame are supplied in the rack kit.*

WFM7200 or WFM8x00 unit

MPI unit

Secure each instrument in the cabinet using two screws.

To adjust the handle bracket to be flush with other equipment in the rack, attach the handle bracket using one of the three settings shown below.

3501-002

Figure 3: Installing one MPI monitor and one WFM7200 or WFM8x00 waveform monitor in the MPI-RACK-MW dual rack cabinet

NOTE. If only one instrument is installed in the MPI-RACK-MW dual rack cabinet, a blank panel can be attached to the front of a empty slot on either side of the cabinet. The blank MPI panel (item 10 in Table 4) and four 6-32 X 0.250 screws (item 11 in Table 4) used to attach it to the front frame are supplied in the rack kit.
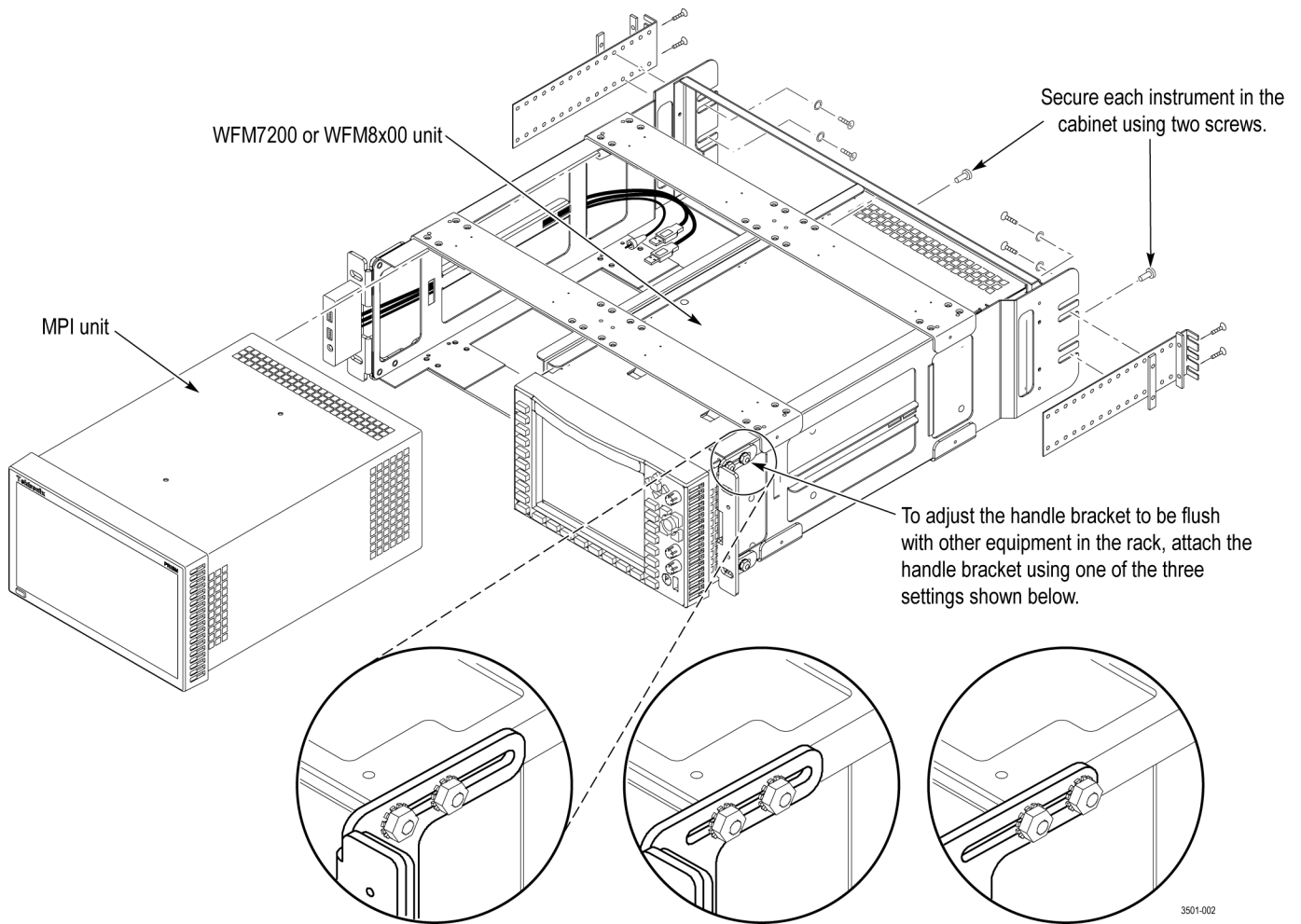
Secure each instrument in the cabinet using two screws.

To adjust the handle bracket to be flush with other equipment in the rack, attach the handle bracket using one of the three settings shown below.

3501-001

Figure 4: Installing two MPI monitors in the MPI-RACK-MM dual rack cabinet

NOTE. If only one instrument is installed in the MPI-RACK-MM dual rack cabinet, a blank panel can be attached to the front of a empty slot on either side of the cabinet. The blank MPI panel (item 10 in Table 4) and four 6-32 X 0.250 screws (item 11 in Table 4) used to attach it to the front frame are supplied in the rack kit.
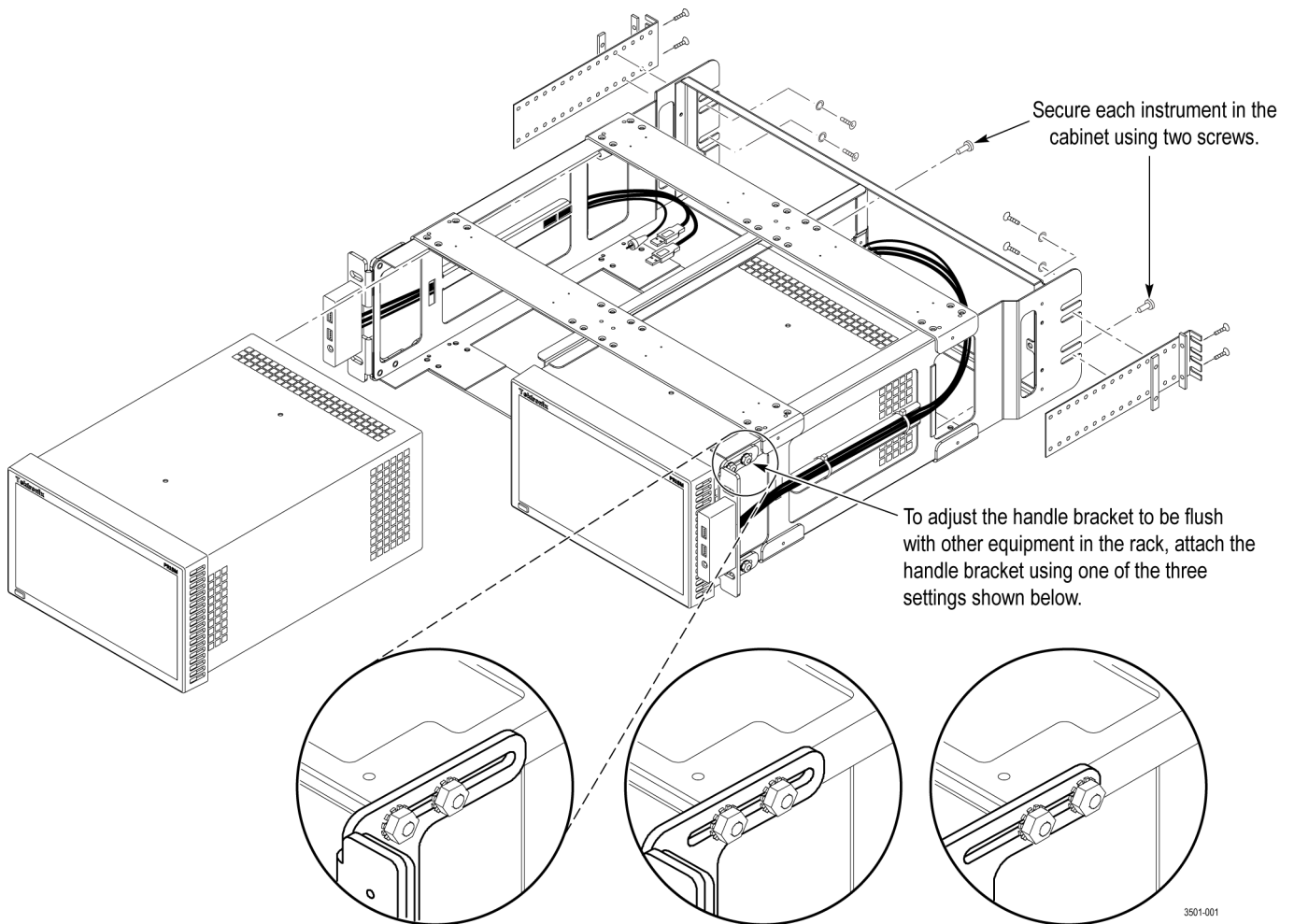
Install instrument(s) in the dual rack cabinet

After you install the dual rack cabinet in the equipment rack, perform the following steps to install instrument(s) in the cabinet:
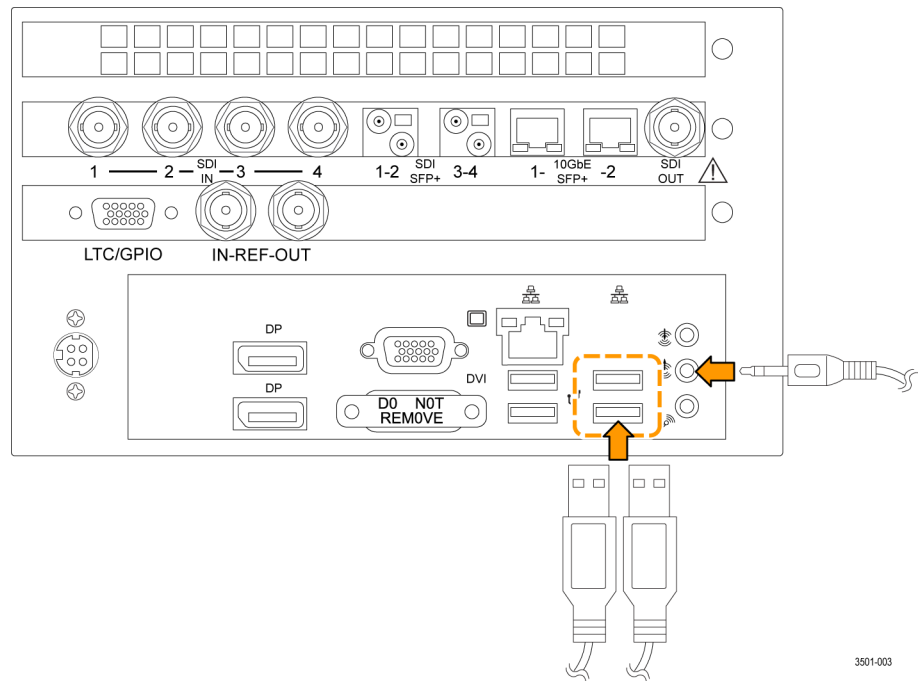
⚠ **CAUTION.** *To prevent the USB and headphone cables from being damaged, make sure the cables are not in the way as you slide the instrument into the rack cabinet.*

1. Install an MPI unit in the dual rack cabinet: (See Figure 2.) (See Figure 3.) (See Figure 4.)

   a. Slide an MPI unit into the left slot in the dual rack cabinet.

   NOTE. *For the MPI-RACK-MW cabinet, the MPI unit must be installed in the left slot of the cabinet. For the MPI-RACK-MM cabinet, you can install the MPI unit in the left or right slot of the cabinet.*

   b. Use a screwdriver with a TORX T-15 tip to secure the instrument in the dual rack cabinet with two 10-32 X 0.625 screws (item 3 in Table 4). The screws attach to the top right and bottom left holes in the instrument chassis as viewed from the rear.

   c. Connect the cables from the USB ports and headphone jack on the dual rack cabinet to the rear of the instrument. (See Figure 5.)

   d. Connect power, signal, and Ethernet cables to the instrument as needed. See the *PRISM Installation and Safety Instructions* manual for information about making signal connections to the instrument.

2. For the MPI-RACK-MM cabinet only, repeat step 1 to install a second MPI unit in the right slot of the dual rack cabinet.

3. For the MPI-RACK-MW cabinet only:

   a. Install a Tektronix WFM52x0, WFM7200, or WFM8x00 waveform monitor in the right slot of the dual rack cabinet. (See Figure 2.) (See Figure 3.)

   b. Use a screwdriver with a TORX T-15 tip to secure the waveform monitor in the dual rack cabinet with two 10-32 X 0.625 screws (item 3 in Table 4). The screws attach to the right and left holes in the middle of the instrument chassis as viewed from the rear.

   c. Connect power and signal cables to the waveform monitor as needed.

   NOTE. *See the installation manual for your waveform monitor for information about making power and signal connections to the instrument.*

Figure 5: Connecting the cabinet USB and audio cables to the PRISM monitor

4. If only one instrument is installed in the MPI-RACK-MM or MPI-RACK-MW dual rack cabinet, use the following steps to attach a blank panel over the front of the empty slot.

    a. Slide the blank MPI panel (item 10 in Table 4) into the empty slot in the rack cabinet.

    b. Use a screwdriver with a TORX T-10 tip to attach the blank panel to the front frame with four 6-32 X 0.250 screws (item 11 in Table 4).

Product documentation

The user documentation for your PRISM monitor is listed in the following table. Check the Tektronix Web site for the latest version of the documents (www.tek.com/downloads).

Table 5: PRISM product documentation

Document	Tektronix Part Number	Description	Availability Print	Web
Installation and Safety Instructions	071-3479-xx (English) 077-1215-xx (Russian)	Describes how to install the instrument and provides basic safety and operating information	✓	✓ ✓ ✓
User Manual	077-1216-xx (English) 077-1218-xx (Russian)	Provides detailed operating information		✓
Specifications and Performance Verification	077-1219-xx	Lists the product specifications and provides procedures for verifying the performance of the instrument		✓
Service Manual	077-1220-xx	Describes how to service the instrument to the module level (such as circuit boards and fuses)		✓
Declassification and Security Instructions	077-1221-xx	Describes how to clear or sanitize the data storage (memory) devices in the product for customers with data security concerns.		✓
Release Notes	077-1222-xx	Describes the new features, improvements, and limitations of the instrument firmware		✓

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