

PRISM MPI2-RACK-MD
Extended Touch Display with Rack Cabinet
Installation and Safety Instructions

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Contacting Telestream

Telestream, LLC 848 Gold Flat Road Nevada City, CA 95959 USA

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Important compliance and safety information

United States of America Compliance Notices

Class A Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Safety

UL 61010-1: 2012 R4.16: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements.

Environmental

Perchlorate Materials: this product contains one or more type CR lithium batteries. According to the state of California, CR lithium batteries are classified as perchlorate materials and require special handling.

See www.dtsc.ca.gov/hazardouswaste/perchlorate for additional information.

Canada Compliance Notices

Department of Communications Radio Interference Regulations

This digital apparatus does not exceed the Class A limits for radio-noise emissions from a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications. This Class A digital apparatus complies with Canadian ICES-003.

Reglement sur le brouillage radioelectrique du Quadstere des Communications

Cet appareil numerique respecte les limites de bruits radioelectriques visant les appareils numeriques de classe A prescrites dans le Reglement sur le brouillage radioelectrique du Quadstere des Communications du Canada. Cet appareil numerique de la Classe A est conforme a la norme NMB-003 du Canada.

Safety

CAN/CSA-22.2 NO. 61010-1-12 + Gil + Gl2:: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements.

Sécurité

CAN / CSA-22.2 NO. 61010-1-12 + Gil + Gl2 :: Exigences de sécurité pour l'électricité Matériel de mesure, de contrôle et d'utilisation en laboratoire - Partie 1: Généralités Exigences.

European Union and European Free Trade Association (EFTA) Compliance Notices

This equipment may be operated in the countries that comprise the member countries of the European Union and the European Free Trade Association. These countries, listed in the following paragraph, are referred to as The European Community throughout this document:

AUSTRIA, BELGIUM, BULGARIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, UNITED KINGDOM, !CELANO, LICHTENSTEIN, NORWAY, SWITZERLAND

Declaration of Conformity

Marking by the "CE" symbol indicates compliance with the Essential Requirements of the EMC Directive of the European Union 2014/30/EU

This equipment meets the following conformance standards:

Safety

EN 61010-1: Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements

Low Voltage Directive 2014/35/EU

Emissions

EN 55032: 2012 + AC: 2013, CISPR 32: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013

Immunity

EN 55103-2: 2009, EN 61000-4-2: 2009,

EN 61000-4-3: 2006 + Al: 2008 + A2: 2010, EN 61000-4-4: 2004 + Al: 2010,

EN 61000-4-5: 2006, EN 61000-4-6: 2009, EN 61000-4-11: 2004

Environments: E2

Warnings



Warning! This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.



Achtung! Dieses ist ein Gerat der Funkstorgrenzwertklasse A. In Wohnbereichen konnen bei Betrieb dieses Gerates Rundfunkstorungen auftreten, in welchen Fallen der Benutzer fur entsprechende Gegenmal3nahmen verantwortlich ist.



Attention! Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de creer des interferences radioelectriques, ii appartiendra alors a l?utilisateur de prendre les mesures specifiques appropriees.

Notes:

- For Compliance with the EMC standards listed here, high quality shielded interface cables should be used.
- Emissions which exceed the levels required by this standard may occur when this equipment is

connected to a test object.

Environmental Compliance

This section provides information about the environmental impact of the product.

Product end-of-life handling

Observe the following guidelines when recycling an instrument or component:

Equipment recycling

Production of this equipment required the extraction and use of natural resources. The equipment may contain substances that could be harmful to the environment or human health if improperly handled at the product's end of life. To avoid release of such substances into the environment and to reduce the use of natural resources, we encourage you to recycle this product in an appropriate system that will ensure that most of the materials are reused or recycled appropriately.



This symbol on the product or its packaging indicates that this product complies with the applicable European Union requirements according to Directives 2012/19/EU and 2006/66/EC on waste electrical and electronic - equipment (WEEE) and batteries.

It also indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

Battery Recycling

This product may contain a rechargeable battery, which must be recycled or disposed of properly. Please properly dispose of or recycle the battery according to local government regulations.

Transporting Batteries or products with Batteries in them

The capacity of the lithium ion secondary battery shipped with this product is under 100 Wh. The lithium content of the installed primary battery is under 1 g. Each battery meets the applicable requirements of UN Manual of Tests and Criteria Part III Section 38.3. Battery quantity is under the limit for shipment according to Section II of the relevant Packing Instructions from the IATA Dangerous Goods Regulations. Consult your air carrier for applicability and determination of any special lithium battery transportation requirements.

Restriction of Hazardous Substances

This product is classified as an industrial monitoring and control instrument, and is not required to comply with the substance restrictions of the RoHS 3 Directives 2011 /65/EU and EU 2015/863 until July 22, 2021. This product does, however, comply with the RoHS 2 Directive 2011/65/EU.

Korea Compliance Statement

A급 기기 (업무용 방송통신기자재)	이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.
Class A (Broadcasting Communication Equipment for Office Use)	As an electromagnetic wave equipment for office use (Class A), this equipment is intended to use in other than home area. Sellers or users need to take note of this.

Taiwan Compliance Statement

警告使用者:

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻 干擾,在這種情況下,使用者會被要求採取某些適當的對策。

This is a Class A product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438, Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Japan Compliance Statement

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

This is a Class A product based on the standard of the VCCI Council (VCCI 32: 2016). If this equipment is used in a domestic environment, radio interference may occur, in which case, the user may be required to take corrective actions.

Important Safety Information

This manual contains information and warnings that must be followed by the user for safe operation and to keep the product in a safe condition.

To safely perform service on this product, see the Service safety summary that follows the General safety summary.

General Safety Summary

Use the product only as specified. Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. Carefully read all instructions. Retain these instructions for future reference.

Comply with local and national safety codes.

For correct and safe operation of the product, it is essential that you follow generally accepted safety procedures in addition to the safety precautions specified in this manual.

The product is designed to be used by trained personnel only.

Only qualified personnel who are aware of the hazards involved should remove the cover for repair, maintenance, or adjustment.

Before use, always check the product with a known source to be sure it is operating correctly.

While using this product, you may need to access other parts of a larger system. Read the safety sections of the other component manuals for warnings and cautions related to operating the system.

When incorporating this equipment into a system, the safety of that system is the responsibility of the assembler of the system.

To Avoid Fire or Personal Injury

Use proper power cord: Use only the power cord specified for this product and certified for the country of use. Do not use the provided power cord for other products.

Ground the product: This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, ensure that the product is properly grounded. Do not disable the power cord grounding connection.

Power disconnect: The power cord disconnects the product from the power source. See instructions for the location. Do not position the equipment so that it is difficult to operate the power cord; it must remain accessible to the user at all times to allow for quick disconnection if needed.

Observe all terminal ratings: To avoid fire or shock hazard, observe all rating and markings on the product. Consult the product manual for further ratings information before making connections to the product. Do not apply a potential to any terminal, including the common terminal, that exceeds the maximum rating of that terminal.

Do not operate without covers: Do not operate this product with covers or panels removed, or with the case open. Hazardous voltage exposure is possible.

Avoid exposed circuitry: Do not touch exposed connections and components when power is present.

Do not operate with suspected failures: If you suspect that there is damage to this product, have it inspected by qualified service personnel.

Disable the product if it is damaged. Do not use the product if it is damaged or operates incorrectly. If in doubt about safety of the product, turn it off and disconnect the power cord. Clearly mark the product to prevent its further operation.

Before use, inspect voltage probes, test leads, and accessories for mechanical damage and replace when damaged. Do not use probes or test leads if they are damaged, if there is exposed metal, or if a wear indicator shows.

Examine the exterior of the product before you use it. Look for cracks or missing pieces.

Use only specified replacement parts.

Do not operate in wet/damp conditions: Be aware that condensation may occur if a unit is moved from a cold to a warm environment.

Do not operate in an explosive atmosphere.

Keep product surfaces clean and dry: Remove the input signals before you clean the product.

Provide proper ventilation: Refer to the manual's installation instructions for details on installing the product so it has proper ventilation.

Slots and openings are provided for ventilation and should never be covered or otherwise obstructed. Do not push objects into any of the openings.

Provide a safe working environment: Always place the product in a location convenient for viewing the display and indicators.

Be sure your work area meets applicable ergonomic standards. Consult with an ergonomics professional to avoid stress injuries.

Use only the Telestream rackmount hardware specified for this product.

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.

Terms in the Manual

These terms may appear in this manual:



WARNING. Warning statements identify conditions or practices that could result in injury or loss of life



CAUTION. Caution statements identify conditions or practices that could result in damage to this product or other property.

Terms on the Product

These terms may appear on the product:

DANGER indicates an injury hazard immediately accessible as you read the marking. WARNING indicates an injury hazard not immediately accessible as you read the marking.

CAUTION indicates a hazard to property including the product.

Symbols on the Product When this symbol is marked on the



When this symbol is marked on the product, be sure to consult the manual to find out the nature of the potential hazards and any actions which have to be taken to avoid them. (This symbol may also be used to refer the user to ratings in the manual.)

The following symbol(s) may appear on the product:



CAUTION Refer to Manual



Protective Ground (Earth) Terminal



Standby



RNING Disconnect all



General Safety Product Specific Statements

Use the product only as specified. Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. Carefully read all instructions. Retain these instructions for future reference.

Comply with local and national safety codes.

For correct and safe operation of the product, it is essential that you follow generally accepted safety procedures in addition to the safety precautions specified in this manual. The product is designed to be used by trained personnel only.

Only qualified personnel who are aware of the hazards involved should remove the cover for repair, maintenance, or adjustment.

Before use, always check the product with a known source to be sure it is operating correctly.

This product is not intended for detection of hazardous voltages.

Use personal protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.

When incorporating this equipment into a system, the safety of that system is the responsibility of the assembler of the system.



WARNING. To prevent injury or death, power off the display and disconnect it from line voltage before cleaning.



CAUTION. Avoid the use of chemical cleaning agents that might damage the plastics used in the items. Use a 75% isopropyl alcohol solution as a cleaner and rinse with deionized water. Before using any other type of cleaner, consult support: telestream.net/telestream-support/video/support.htm.



CAUTION. To reduce risk of fire and shock, use the certified power cord provided with the product.



CAUTION. Damage to the module can occur if this module is powered on at temperatures outside the specified temperature range.



WARNING. To reduce the risk of fire and shock, ensure that the mains supply voltage fluctuations do not exceed 10% of the operating voltage range.



WARNING. In the module, only the line conductor is fused for over-current protection. The fuse is internal and not user replaceable. Do not attempt to replace the fuse. If you suspect the fuse has blown, return the unit to an authorized service center for repair.



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.



CAUTION. To minimize the risk of damage to the module, it is strongly recommended that the power cord be connected to the module before the power cord is connected to the AC power source.

Preface

This manual describes how to install the PRISM MPI2-RACK-MD extended touch display with rack cabinet and provides basic safety and operating information. Detailed operating information of the PRISM MPI2 product is available in the User Manual. A complete list of PRISM documentation is provided in this manual. (See *Documentation*.)

Product description

The PRISM MPI2-RACK-MD provides a 3RU rack cabinet with an extended touch display for MPI2 applications that require additional monitoring workspace. The touch display extends the functionality of the MPI2 product by providing an additional full HD application tile. The additional tile supports several different monitoring applications, including picture, trace, audio, and status. The PRISM MPI2-RACK-MD rack cabinet is 19 inches wide and comes with a USB/Headphone connector on the rack ear.



Figure 1: PRISM MPI2 (left; not included) mounted in the MPI2-RACK-MD

Documentation

Table i: Product documentation

			Availability	
Document	Manual type	Description	Print	Web
PRISM MPI2 Installation and Safety Instructions	User	Describes how to install the PRISM waveform monitor and provides basic safety and operating information	V	V
PRISM MPI2 and MPX2 User Manual	Primary User	Provides detailed operating information for the PRISM waveform monitor		V

Searching for documents on www.telestream.net/video/resources.htm.

- 1. Go to the Telestream website: telestream.net/video/resources.htm#Literature.
- 2. Scroll to the "Literature" topic and click on the "Prism" category.
- 3. Scroll down and find the Manual or document you need. Next to each title, you can part number, document type and release date.

Conventions used in this manual

The following icons may be used throughout this manual.

The following following, so along all ong following files.



Sequence Step





Connect power









USB

Installation

Initial product inspection

Perform the following product inspection procedure when you receive your extended touch display with rack cabinet:

- 1. Inspect the two shipping cartons for external damage, which may indicate damage to the rack cabinet and extended touch display.
- 2. Verify that the one shipping carton contains the rack cabinet and the other shipping carton contains the extended touch display, the standard accessories, and any optional accessories that you ordered. (See *Accessories*.)
- 3. Remove the PRISM MPI2-RACK-MD from the shipping cartons, and then check that the extended touch display with rack cabinet has not been damaged in transit. Prior to shipment the items are thoroughly inspected for mechanical defects. The exterior should not have any scratches or impact marks.

NOTE. Save the shipping cartons and packaging materials for module repackaging in case shipment becomes necessary.

Exterior cleaning

The extended touch display with rack cabinet exteriors were inspected for debris when shipped. If necessary, you can clean the exterior of the items as follows.



WARNING. To prevent injury or death, power off the display and disconnect it from line voltage before cleaning.

Clean the exterior surfaces of display with a dry lint-free cloth or a soft-bristle brush. If any dirt remains, use a cloth or swab dipped in a 75% isopropyl alcohol solution. Use a swab to clean narrow spaces around controls and connectors. Do not use abrasive compounds on any part of the extended touch display that may be damaged by it.



CAUTION. Avoid the use of chemical cleaning agents that might damage the plastics used in the items. Use a 75% isopropyl alcohol solution as a cleaner and rinse with deionized water. Before using any other type of cleaner, consult support: telestream.net/telestream-support/video/support.htm.

Accessories

International power cords. Your module was shipped with one of the following power cord options. Power cords for use in North America are UL listed and CSA certified. Cords for use in areas other than North America are approved by at least one authority acceptable in the country to which the product is shipped.

- Opt. A0 North America power cord
- Opt. A1 Universal EUR power cord
- Opt. A2 United Kingdom power cord
- Opt. A3 Australia power cord
- Opt. A4 240 V, North America power cord
- Opt. A5 Switzerland power cord
- Opt. A6 Japan power cord
- Opt. A10 China power cord
- Opt. A11 India power cord
- Opt. A12 Brazil power cord
- Opt. A99 ¹ No power cord

¹ When ordering the A99 option, it is the responsibility of the end user to ensure that a certified power cord, for the country or region it is installed, is used with this module.



CAUTION. To reduce risk of fire and shock, use the certified power cord provided with the product.

Operating requirements

This section provides the environmental and power operating requirements for the module.

Environmental operating requirements

Check that the location of your installation has the proper operating environment as listed in the following table.



CAUTION. Damage to the module can occur if this module is powered on at temperatures outside the specified temperature range.

Table 1: Environmental requirements

Parameter		Description
Temperature	Operating	0 °C to +40 °C
	Non Operating	-20 °C to +60 °C
Humidity	Operating	20% to 80% relative humidity (% RH) at up to +40 °C, non-condensing
	Non Operating	5% to 90% relative humidity (% RH) at up to $40~^{\circ}\text{C}$ and derated linearly to 45% RH at $60~^{\circ}\text{C}$, non-condensing
Altitude	Operating	To 3,000 m (10,000 feet)
		Maximum operating temperature decreases 1 °C each 300 m above 1.5 km
	Non Operating	To 12,000 m (40,000 feet)
Cooling		Internal fans provide forced air circulation. Do not block ventilation openings.
	Bare Instrument	To ensure proper airflow, there must be at least 2 inches of clearance on both sides of the instrument, at least 2 inches of clearance from the rear of the instrument, and at least a 1/2 inch of clearance from the top of the instrument.

Electrical power requirements

The extended touch display operates from an AC power input. Check that your location provides the proper electrical power requirements as listed in the following tables.

AC line power. Use the proper power cord with the module. (See *International power cords*.) The following table lists the power requirements for the module.

Table 2: Extended touch display AC line power requirements

Parameter	Description
Line voltage range	100 - 240 VAC
	WARNING. To reduce the risk of fire and shock, ensure that the mains supply voltage fluctuations do not exceed 10% of the operating voltage range.
Line frequency	50/60 Hz
Maximum power	0.75 A



WARNING. In the module, only the line conductor is fused for over-current protection. The fuse is internal and not user replaceable. Do not attempt to replace the fuse. If you suspect the fuse has blown, return the unit to an authorized service center for repair.

Physical characteristics

The following table lists the physical characteristics of a module.

Table 3: Extended touch display physical characteristics

Parameter	Description	
Dimensions		
Height	13.72 cm (5.4 in.)	
Width	21.84 cm (8.6 in.), includes bezel	
Depth	11.18 cm (4.4 in.), includes bezel	
Weight		
Net	1.59 kg (3.5 lbs.)	
Shipping	3.57 (7.87 lbs.)	

Rear panel connectors

Figure 2 shows the connections to the rear panel of the display.



Figure 2: PRISM MPX2-RACK-MD extended touch display rear panel

Item number (See Figure 2.)	Description
1	AC power input. Connector for AC power source.
2	DisplayPort (DP). DisplayPort input for the display. The maximum resolution of the display is 1920x1080.
3	USB B port. A USB 3.0 port for connecting to a PRISM waveform monitor for touchscreen operation.
4	USB A ports. Currently not enabled. Do not make connections to theseports.
5	Headphone jack. Currently not enabled. Do not make connections to this port.

Equipment rack installation

The rackmount kit is a collection of parts that, once installed, configures the MPI2 PRISM monitor (not included) and extended touch display for mounting into a standard 19-inch equipment rack.

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 rack cabinet and the instrument. See the *PRISM MPI2 Installation and Safety Instructions* manual for information about the environmental operating requirements for the instrument.

Table 4: Clearance requirements for the 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 5: 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 rack cabinet. The installation instructions include references to these parts by the item numbers to help in selecting the correct parts.

Table 6: Supplied hardware

Item number	Part number	Description	Quantity
Hardware I	kit 016-1133-XX		
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 brac	cket		
7	407-3752-XX	BRACKET, EXT; 2.5 X 8.06 X 0.06, STEEL; SAFETY CONTROLLED	2

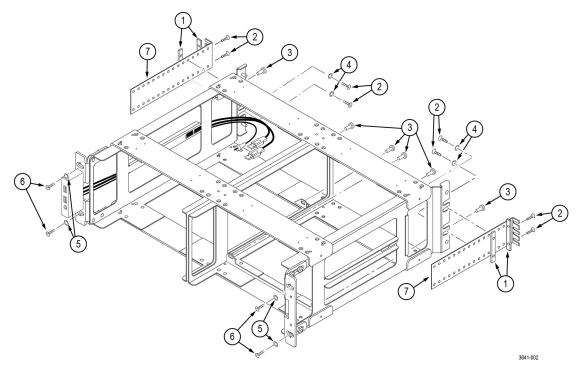


Figure 3: MPI2-RACK-MD parts diagram

Install the 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 rack cabinet so that the headphone jack(s) on the front of the cabinet is on the bottom.
- 2. 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 4.)
- 3. 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).
- **4.** 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).
- 5. 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.
- 6. Repeat steps 5 and 6 to install the second guide bracket to the other side of the cabinet.
- 7. Tighten all of the attaching screws that were left loose in the previous steps.

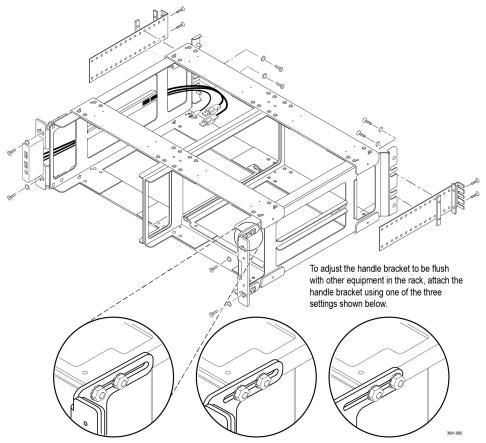


Figure 4: Adjusting the handle brackets and installing the guide brackets

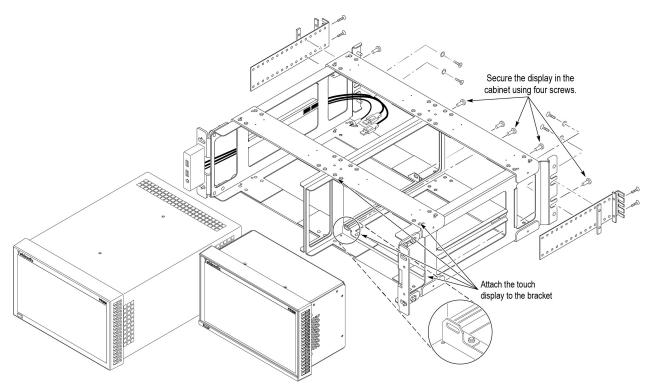


Figure 5: Installing the PRISM waveform monitor (not included) and extended touch display into the rack cabinet

Install instrument(s) in the rack cabinet

After you install the 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 the PRISM waveform monitor in the rack cabinet. (See Figure 5.)
 - a. Slide an PRISM waveform monitor into the left slot in the rack cabinet as viewed from the front.
 - **b.** Use a screwdriver with a TORX T-15 tip to secure the instrument in the 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 cable from the USB port and headphone jack on the rack cabinet to the rear of the instrument.
 - **d.** Connect signal and Ethernet cables to the instrument as needed. See the *PRISM MPI2 Installation and Safety Instructions* manual for information about making signal connections to the instrument.
 - **e.** Connect the power cable to the instrument. (See *Power cord installation*.)

- 2. Install the extended touch display in the right slot of the rack cabinet as viewed from the front.
 - a. Slide the extended display into the right slot in the rack cabinet as viewed from the front.
 - **b.** Use a screwdriver with a TORX T-15 tip to secure the extended display in the rack cabinet with four 10-32 X 0.625 screws (item 3 in Table 4). The screws attach to all four rear corners of the instrument.
 - c. Connect the display and USB cable (included) from the rear panel of the PRISM waveform monitor to the rear panel of the extended touch display. The display cable must be connected from DisplayPort2 (bottom port) on the PRISM waveform monitor to the DisplayPort on the extended touch display. The USB cable can be connected to any USB port on the PRISM waveform monitor. (See Figure 6.)
 - **d.** Connect the power cable to the extended touch display. (See *Power cord installation*.)

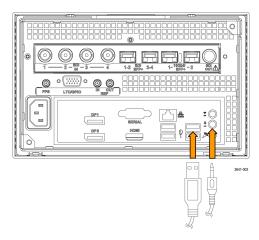


Figure 6: Connecting the cabinet USB and audio cables (use any USB port)

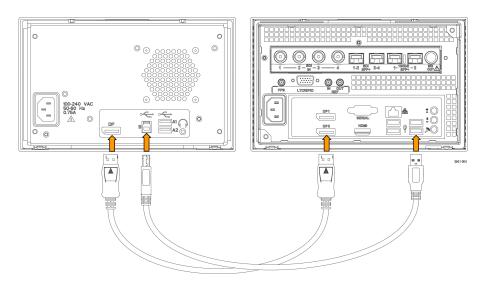


Figure 7: Connect the PRISM waveform monitor to the extended touch display

Power-on and power-off procedures

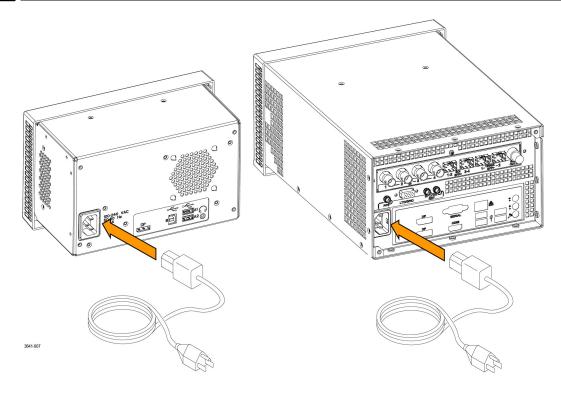
This section describes how to apply power-on and power-off the PRISM waveform monitor and extended touch display.

Power cord installation

This module is powered by an AC power source. Connect the power cord to the power connector on the rear panel of each module. The power connector is keyed to be directional, with the flat portion of the power cord housing facing the left of the module (as viewed from the rear). When fully inserted, the power cord housing latches onto each module power connector.



CAUTION. To minimize the risk of damage to the module, it is strongly recommended that the power cord be connected to the module before the power cord is connected to the AC power source.



Power-on procedure

1. Apply power to the modules. (See *Power cord installation*.)

NOTE. If the PRISM monitor was previously powered off by a power interruption or by removing the power cord from the rear of the instrument, the instrument will power on when power is reapplied.

2. Press the Power/Standby button on the front of each display.

NOTE. The Power/Standby button on the MPI2 instrument illuminates during the power-on sequence and then turns of during normal instrument operation. The Power/Standby button on the extended touch display does not illuminate.



Figure 8: Extended display mode configuration with power buttons marked

Power-off procedure

1. Press the Power/Standby button on the front panel of both modules to turn each instrument off.



CAUTION. To prevent data loss on the MPI2, it is strongly recommended that you first shut down the instrument using the power button or the Settings > Utilities > Power submenu before disconnecting the power cord.

2. To completely remove power from the module, disconnect the power cord from each module. The power cord has a locking mechanism to keep it attached to each module. Push the button on the cord housing to release the locking mechanism.

Operation

Extending the PRISM waveform monitor display

When the extended touch display is connected to an MPI2 instrument, you have the option to extend the MPI2 display. Extending the display requires software option MP2-EXTNDSP, otherwise the extended touch display will mirror the MPI2 display.

- 1. Connect the PRISM MPI2 waveform monitor to the extended touch display.
- 2. Select Settings and then select Display.
- 3. Set the Extended Display Mode to **Enabled**. If the Extended Display Mode setting is turned off, then the second display mirrors the Primary display.

NOTE. When Extended Display Mode is turned on, the HDMI video port on the MPI2 will not be available.

4. When you first configure the extended display, identify the two touchscreens to use:

NOTE. When instructed to touch the Primary and Extended displays, make sure to actually touch the touchscreens; do not use a mouse. The touchscreens will not correctly identify if you use a mouse or if you configure remotely, such as with VNC.

a. In the EXTENDED DISPLAY section, select Start.



CAUTION. When the instructions tell you to touch the primary screen, be sure to touch the screen with the Status bar; this is the primary screen. (See Figure 9.) Touching the secondary screen at this step causes the displays to appear to be non-responsive.



Figure 9: Extended display with the Status bar, on the primary screen, marked

- b. Follow the on-screen instructions. Use touch to complete the steps; do not use the mouse.
- **5.** If the displays appear to be non-responsive:
 - a. Connect a mouse to the instrument.
 - b. Click Home, then click Settings, and then click Display.
 - In the EXTENDED DISPLAY section, click **Start**.
 The displays are reset and respond to touch again.
 - d. Follow the on-screen instructions. Use touch to complete the steps; do not use the mouse.

NOTE. The process to identify the touchscreens can be performed again at any time. When the process completes

successfully, it is not necessary to perform it again unless you change the touchscreen configuration. For example, if you change the USB port connections on the back of the MPI2 instrument.

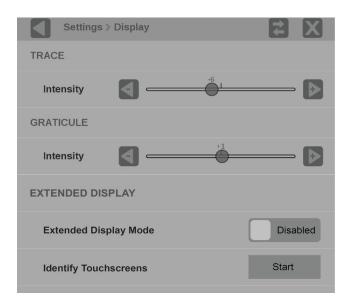


Figure 10: Extended display mode configuration