

Read This First

MHL test adapter test fixture

This document contains information on the available MHL (Mobile High-Definition Link) test adapters and test fixture kits. These test adapters and test kits provide electrical test interfaces for MHL technology.

The test fixtures support MHL Source, Dongle, Cable, and Sink devices plus fixtures for Receiver Sense tests for MHL Source, Sink, and Dongle devices.

Tektronix nomenclature	Description	Wilder part number
MHL individual test fixtures		
TF-MHL-TPA-SOS-MUSB	MHL Test Point Adapter Micro USB Plug	640-0486-000
TF-MHL-TPA-SOSIS-HDM	MHL Test Point Adapter HDMI-A Plug	640-0487-000
TF-MHL-TPA-TT	MHL Termination Board	640-0452-000
TF-MHL-TPA-P-WOSO	MHL Source Test Board Plug without Termination	640-0453-000
TF-MHL-TPA-R-WOSO	MHL Dongle Test Board with Micro USB Receptacle without Termination	640-0454-000
TF-MHL-TPA-R-WOSOD	MHL Dongle Test Board with HDMI Receptacle without Termination	640-0463-000
TF-MHL-TPA-R-WOC	MHL Cable Test Board Receptacle without Termination	640-0455-000
TF-MHL-TPA-R-WOSI	MHL Sink Calibration Test Board Receptacle without Termination	640-0456-000
TF-MHL-TPA-P-WOSI	MHL Sink Test Board Plug without Termination	640-0457-000
TF-MHL-TPA-R-SO-RSEN	MHL Source RxSense Test Board Receptacle	640-0458-000
TF-MHL-TPA-R-SI-RSEN	MHL Sink and Dongle RxSense Test Board Receptacle	640-0459-000
TF-MHLCBS2-SOSI	MHL CBUS Source/Sink Module with power supply Power Supply: Tektronix Part number 119-7753-00 for all options	
Option A0	North America power cord: Tektronix Part number 161-3200-00	640-0485-101
Option A1	Universal EURO power cord: Tektronix Part number 161-0066-09	640-0485-111
Option A2	United Kingdom power cord: Tektronix Part number 161-0066-10	640-0485-121
Option A5	Switzerland power cord: Tektronix Part number 161-0154-00	640-0485-131
Option A6	Japan power cord: Tektronix Part number 161-0298-00	640-0485-171
Option A10	China power cord: Tektronix Part number 161-0304-00	640-0485-141
Option A11	India power cord: Tektronix Part number 161-0400-00	640-0485-151
Option A12	Brazil power cord: Tektronix Part number 161-0357-00	640-0485-161
TF-MHL-TPA-CBC	MHL Cable Calibration adapter unit <i>Since this fixture is not part of the Complete MHL Test Kit or Cable Test Kit, we recommend purchasing this fixture when purchasing the Complete MHL Test Kit and the MHL Cable Test Kit.</i>	640-0481-000



Tektronix nomenclature	Description	Wilder part number
MHL test fixture kits		
TF-MHL-TPA-TEK	Complete MHL Test Kit Includes test fixtures: 640-0452-000, 640-0453-000, 640-0454-000, 640-0455-000, 640-0456-000, 640-0457-000, 640-0458-000, 640-0459-000, and 640-0485-100 Includes two male-to-male SMA adapters	640-0475-000
TF-MHL3-TPA-KIT	MHL3.0 HDMI/uUSB Test Adapter Kit Includes 640-0486-000 and 640-0487-000	640-0488-000
TF-MHL-TPA-TEK-SO	MHL Source Test Kit Includes test fixtures: 640-00452 and 640-0453-000 Includes two male-to-male SMA adapters	640-0476-000
TF-MHL-TPA-TEK-SI	MHL Sink Test Kit Includes test fixtures: 640-0452-000, 640-0456-000, and 640-0457-000 Includes two male-to-male SMA adapters	640-0477-000
TF-MHL-TPA-TEK-DG	MHL Dongle Test Kit Includes test fixtures: 640-0452-000, 640-0453-000, and 640-0454-000 Includes two male-to-male SMA adapters	640-0478-000
TF-MHL-TPA-TEK-CB	MHL Cable Test Kit Includes test fixtures: 640-0455-000 and 640-0456-000	640-0479-000
TF-MHL-TPA-TEK-RSEN	MHL RxSense Kit Includes test fixtures: 640-0458-000 and 640-0459-000	640-0480-000
TF-MHL-DS-ACCKIT	MHL Direct Synthesis Accessory Kit Includes: Two 120 ps rise time filters (119-7601-00) Two Bias-tees (131-8489-00) Two 5866 amplifiers (119-8176-00) Two SMA-SMA barrel connectors (015-1011-00)	NA

Guidelines when making connections

- Align cables carefully
- Make preliminary connections lightly
- Torque the SMA connector to 3-5 in-lbs using a calibrated SMA torque wrench
- To tighten, turn connector nut only
- Do not apply bending force to cable
- Do not over-tighten preliminary connections
- Do not twist or screw-in cables

Other information

Visit the Wilder Technologies Web site (www.wilder-tech.com) for information about the test fixtures. The information available includes:

- User manual (PDF available for download)
- Electrical and mechanical characteristics
- Electrical care and handling (www.wilder-tech.com/care-handling.htm)
- Electrical characterization plots

For product information, sales, service, technical support, and product recycling, send an E-mail to Wilder Technologies at support@wilder-tech.com.

For MHL application information, refer to the Tektronix [MHL Advanced Analysis and Compliance Test Software](#) datasheet.

General safety summary

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it.

To avoid potential hazards, use this product only as specified.

Only qualified personnel should perform service procedures.

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.

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.

Observe all terminal ratings. To avoid fire or shock hazard, observe all ratings 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.

Power disconnect. The power cord disconnects the product from the power source. Do not block the power cord; it must remain accessible to the user at all times.

Do not operate without covers. Do not operate this product with covers or panels removed.

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

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

Use proper AC adapter. Use only the AC adapter specified for this product.

Do not operate in wet/damp conditions.

Do not operate in an explosive atmosphere.

Keep product surfaces clean and dry.

Symbols and terms on the product

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



Environmental considerations

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 indicates that this product complies with the applicable European Union requirements according to Directives 2002/96/EC and 2006/66/EC on waste electrical and electronic equipment (WEEE) and batteries. For information about recycling options, check the Support/Service section of the Tektronix Web site (www.tektronix.com).