

# 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
<b>MHL individual test fixtures</b>		
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 Receptacle without Termination	640-0454-000
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-MHLCBS-SOSI	MHL CBUS Source/Sink Module with power supply	640-0485-100
<b>MHL test fixture kits</b>		
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-MHL-TPA-TEK-SO	MHL Source Test Kit Includes test fixtures: 640-0452 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

### 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](http://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](http://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](mailto: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](http://www.tektronix.com)).

### Restriction of hazardous substances

This product is classified as Monitoring and Control equipment, and is outside the scope of the 2002/95/EC RoHS Directive.