

R&S[®]RT-Z2T

Probe Interface Adapter

Manual



1326438302
Version 04



Mess- und Prüftechnik. Die Experten.

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This manual describes the R&S RT-Z2T probe interface adapter (1338.0007.02).

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Throughout this manual, products from Rohde & Schwarz are indicated without the ® symbol, e.g. R&S®RT-Z2T is indicated as R&S RT-Z2T.

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1 Safety information

The product documentation helps you use the product safely and efficiently. Follow the instructions provided here and in the following chapters.

Intended use

The R&S RT-Z2T probe interface adapter is designed for measurements on circuits that are only indirectly connected to the mains or not connected at all. It is not rated for any measurement category.

The product is intended for the development, production and verification of electronic components and devices in industrial, administrative, and laboratory environments. Use the product only for its designated purpose. Observe the operating conditions and performance limits stated in the data sheet.

The R&S RT-Z2T probe interface adapter is designed to connect active Tektronix oscilloscope probes with TekProbe BNC™ level II interface to oscilloscopes that have a Rohde & Schwarz probe interface.

Where do I find safety information?

Safety information is part of the product documentation. It warns you of potential dangers and gives instructions on how to prevent personal injury or damage caused by dangerous situations.

- Printed "Safety Instructions for Oscilloscopes and Accessories" in many languages is delivered with your Rohde & Schwarz oscilloscope and probes.
- The documentation of the oscilloscope and measurement equipment provides safety instructions when you need to take care during setup or operation.

Operating site

Only use the product indoors, and keep it dry. The product casing is not waterproof.

You can operate the product up to the altitude specified in the data sheet. The lowest specified altitude for a product of the measurement setup defines the altitude for the complete setup.

The product is suitable for pollution degree 2 environments where nonconductive contamination can occur. For more information on environmental conditions such as ambient temperature and humidity, see the data sheet.

Product integrity

The R&S RT-Z2T can withstand a moderate amount of physical and electrical stress. To avoid damage, treat the adapter with care:

- Do not exceed the specified voltage limits.
- Connect the R&S RT-Z2T only to an instrument with Rohde & Schwarz probe interface. Never connect it to a usual BNC jack. Although the 7 mm coaxial connector looks like a standard BNC connector, it is constructed differently and does not fit to the standard BNC jack. The interface of the R&S RT-Z2T can withstand a higher frequency limit.
- Prevent the adapter from receiving mechanical shock.
- Do not spill liquids on the adapter.
- Store the adapter in a shock-resistant case, e.g. in the foam-lined shipping case.

2 Product description

The R&S RT-Z2T probe interface adapter is designed to connect active Tektronix oscilloscope probes with TekProbe BNC™ level II interface to oscilloscopes that have a Rohde & Schwarz probe interface.

The adapter provides power to the probe. The Rohde & Schwarz oscilloscope is adjusted to the correct settings by selecting the probe from a list of predefined probes.

2.1 Supported Tektronix probes

The following probes are supported by the R&S RT-Z2T adapter:

- Single-ended probes: P6205, P6243, P6245, P6241, P6249
- Current probes: TCP202
- Differential probes: P6246, P6247, P6248, P6250, P6251
- High-voltage differential probes: P5205, P5210
- Electro-optical probes: P6701B, P6703B, P6711, P6713

2.2 Deliveries

The R&S RT-Z2T delivery package contains the following items:

- R&S RT-Z2T probe interface adapter
- Manual

2.3 Inspecting the contents

- Inspect the package for damage.
Keep the package and the cushioning material until the contents have been checked for completeness and the device has been tested.

Description of the adapter

If the packaging material shows any signs of stress, notify the carrier and your Rohde & Schwarz service center. Keep the package and cushioning material for inspection.

- Inspect the adapter.
If there is any damage or defect, or if the R&S RT-Z2T probe interface adapter does not operate properly, notify your Rohde & Schwarz service center.
- Inspect the accessories.
If the contents are incomplete or damaged, notify your Rohde & Schwarz service center.

2.4 Description of the adapter

The R&S RT-Z2T has a Rohde & Schwarz probe interface on one side, and a TekProbe BNC™ level II interface on the other side. The interfaces provide power to the probe.

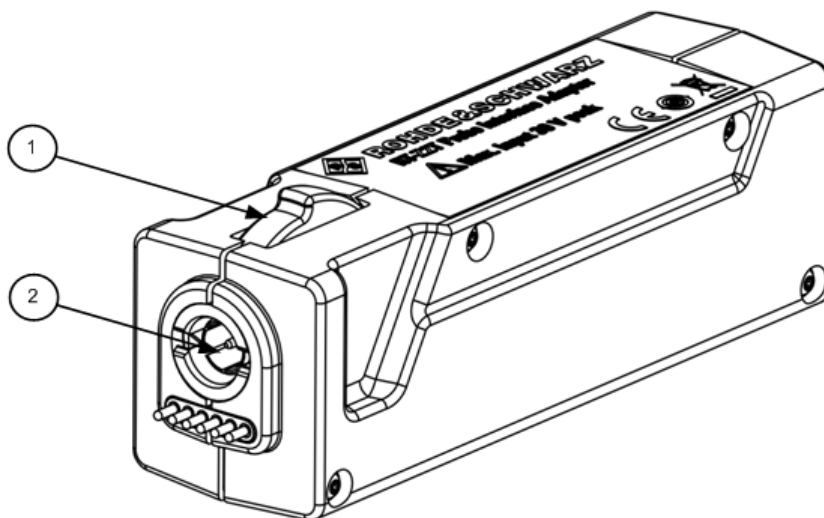


Figure 2-1: R&S probe interface of the R&S RT-Z2T

1 = Release knob

2 = Rohde & Schwarz probe interface with 7 mm (276 mil) coaxial connector and 6 pogo pins

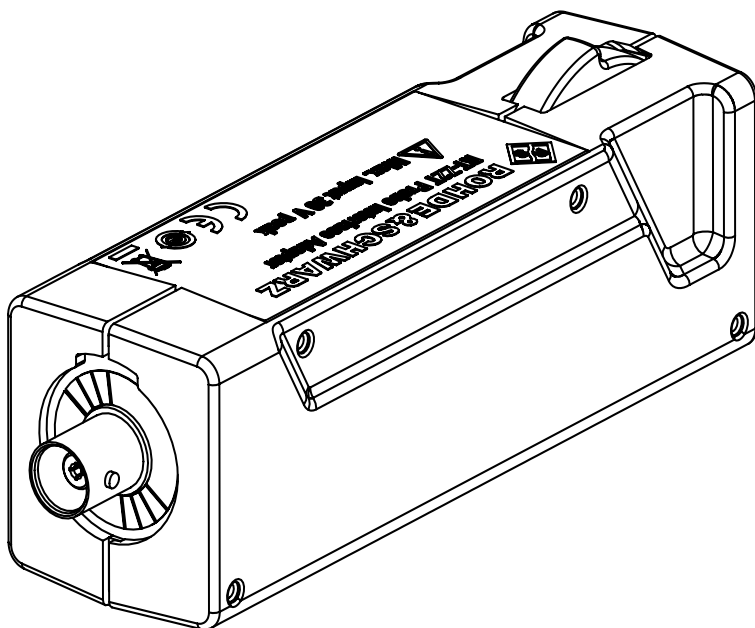


Figure 2-2: TekProbe BNC™ level II interface of the R&S RT-Z2T

3 Putting into operation

Read and observe the instructions in [Chapter 1, "Safety information"](#), on page 4 before using the adapter.

For your safety, follow the safety instructions delivered with your Rohde & Schwarz oscilloscope and probe, and the instructions given in the manuals of your measurement equipment.

Observe the voltage limits and ratings of the adapter and the measuring instrument. Limits and ratings are marked on the products and listed in the data sheets.

Do not exceed the lesser of the maximum input voltages specified for the adapter or the oscilloscope. If the oscilloscope is set to 50 Ω , input coupling, the maximum input voltage is usually determined by the oscilloscope. If the oscilloscope is set to 1 M Ω input coupling, the maximum input voltage is usually determined by the adapter.

Preventing electrostatic discharge (ESD)

Electrostatic discharge is most likely to occur when you connect or disconnect a DUT.

- ▶ **NOTICE!** Electrostatic discharge can damage the electronic components of the product and the device under test (DUT).

Ground yourself to prevent electrostatic discharge damage:

- a) Use a wrist strap and cord to connect yourself to ground.
- b) Use a conductive floor mat and heel strap combination.

3.1 Connecting the adapter to the oscilloscope

1. Make sure that the oscilloscope is properly grounded.
2. **NOTICE!** Risk of damaging the probe.
Connect the probe only to an instrument with Rohde & Schwarz probe interface. Never connect it to a usual BNC jack, because this can damage the probe interface.

Connecting the Tektronix probe to the adapter

Connect the adapter (1) to the Rohde & Schwarz probe interface of the oscilloscope (2).

The adapter snaps in when connected properly to the port.

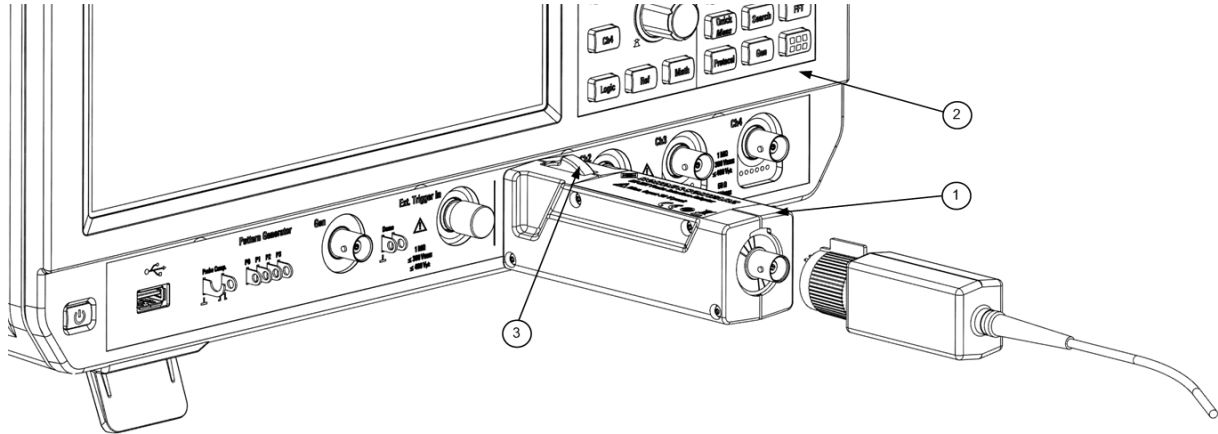


Figure 3-1: Connecting the R&S RT-Z2T to the Rohde & Schwarz oscilloscope

- ▶ To disconnect the adapter:
 - a) Press and hold the release button (3).
 - b) Pull the adapter away from the oscilloscope.

3.2 Connecting the Tektronix probe to the adapter

For a description of the usage of a Tektronix probe, refer to its user manual.

1. Turn the lever of the probe to the left side in the open position.
2. Connect the BNC connector of the probe to the BNC socket of the R&S RT-Z2T adapter.
3. Lock the probe by pushing the lever to the right into the closed position.
4. On the oscilloscope, choose the correct predefined probe, or enter the values for external attenuation, input coupling and display unit manually.

4 Maintenance and service

Like all Rohde & Schwarz products, Rohde & Schwarz probes and adapters are of high quality and require only minimum service and repair. However, if service or calibration is needed, contact your Rohde & Schwarz service center. Return a defective product to the Rohde & Schwarz service center for diagnosis and exchange.

4.1 Cleaning

1. Clean the outside of the product using a soft cloth moistened with either distilled water or isopropyl alcohol. Keep in mind that the casing is not waterproof.
Note: Do not use cleaning agents. Solvents (thinners, acetone), acids and bases can damage the labeling or plastic parts.
2. Dry the product completely before using it.

4.2 Contacting customer support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

Contact information

Contact our customer support center at www.rohde-schwarz.com/support, or follow this QR code:



Figure 4-1: QR code to the Rohde & Schwarz support page

4.3 Returning for servicing

Use the original packaging to return your R&S RT-Z2T to your Rohde & Schwarz-service center. A list of all service centers is available on:

www.services.rohde-schwarz.com

If you cannot use the original packaging, consider the following:

1. Use a sufficiently sized box.
2. Protect the product from damage and moisture (e.g. with bubble wrap).
3. Use some kind of protective material (e.g. crumpled newspaper) to stabilize the product inside the box.
4. Seal the box with tape.
5. Address the package to your nearest Rohde & Schwarz service center.

4.4 Calibration interval

The recommended calibration interval for R&S RT-Z2T probe interface adapter is two years. For servicing, send the probe to your nearest Rohde & Schwarz service center (see [Chapter 4.3, "Returning for servicing"](#), on page 12).

4.5 Storage

Protect the product against dust. Ensure that the environmental conditions, e.g. temperature range and climatic load, meet the values specified in the data sheet.

Store the product in a shock-resistant case, e.g. in the shipping case.

4.6 Disposal

Rohde & Schwarz is committed to making careful, ecologically sound use of natural resources and minimizing the environmental footprint of our products. Help us by disposing of waste in a way that causes minimum environmental impact.

Disposing electrical and electronic equipment

A product that is labeled as follows cannot be disposed of in normal household waste after it has come to the end of its service life. Even disposal via the municipal collection points for waste electrical and electronic equipment is not permitted.



Figure 4-2: Labeling in line with EU directive WEEE

Rohde & Schwarz has developed a disposal concept for the eco-friendly disposal or recycling of waste material. As a manufacturer, Rohde & Schwarz completely fulfills its obligation to take back and dispose of electrical and electronic waste. Contact your local service representative to dispose of the product.



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