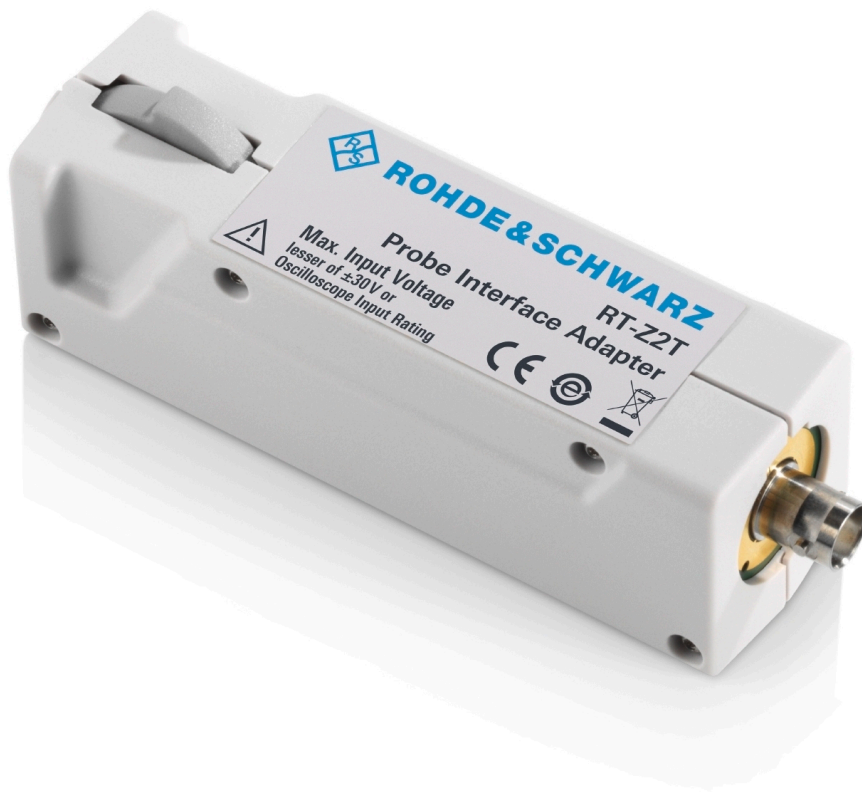


R&S® RT-Z2T

Probe Interface Adapter

Manual



1326438302

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

© 2018 Rohde & Schwarz GmbH & Co. KG

Mühlhofstr. 15, 81671 München, Germany

Phone: +49 89 41 29 - 0

Fax: +49 89 41 29 12 164

Email: info@rohde-schwarz.com

Internet: www.rohde-schwarz.com

Subject to change – Data without tolerance limits is not binding.

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG.

TEKTRONIX, TEK, and TEKPROBE are registered trademarks of Tektronix, Inc.

Trade names are trademarks of the owners.

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.

1 Product Description

The R&S RT-Z2T probe interface adapter is a product designed to connect a series of active Tektronix oscilloscope probes with TekProbe BNC™ level II interface to every R&S oscilloscope that is equipped with the Rohde & Schwarz probe interface.

The adapter provides power to operate the probe. The R&S oscilloscope is adjusted to the correct settings by selecting the probe from a list of predefined probes in the probe menu of the oscilloscope.

1.1 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

1.2 Usage Information

The R&S RT-Z2T probe adapter is an add-on probe adapter, intended to be used at laboratory or test and measurement areas. These areas are used for analysis, testing and servicing and where equipment is operated by trained personnel.

⚠ CAUTION**Risk of injury**

Use the accessory carefully to prevent electric shock, personal injury, or damage. Read and observe the "Basic Safety Instructions" that are delivered as a printed brochure.

Also, read and observe the safety instructions of the oscilloscope the accessory is connected to.

1.3 Deliveries

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

- R&S RT-Z2T probe interface adapter
- Manual
- "Basic Safety Instructions" brochure

1.4 Inspecting the Contents

- Inspect the package for damage.
Keep a damaged package and the cushioning material until the contents have been checked for completeness and the device has been tested.
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 product.
If there is any damage or defect, or if the R&S RT-Z2T does not operate properly, notify your Rohde & Schwarz service center.

2 Device Description

The R&S probe interface of the R&S RT-Z2T probe interface adapter is attached to a Rohde & Schwarz oscilloscope.

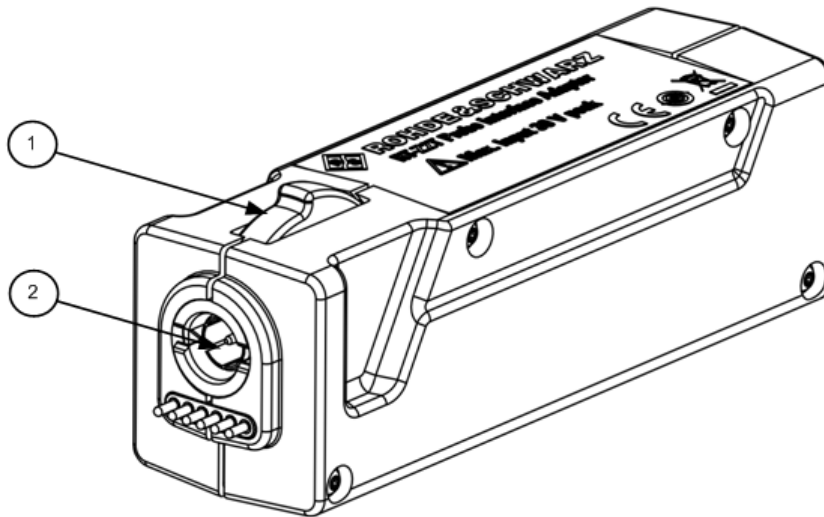


Figure 2-1: R&S probe interface of the R&S RT-Z2T

1 = Release knob

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

NOTICE

Risk of interface damage

Connect the adapter only to a base unit that has a Rohde & Schwarz probe interface. Do **not** connect the adapter to a commercially available BNC jack, as this connection can damage the interface irreparably. From the outside, the 7 mm coaxial connector of the R&S probe interface looks like a standard BNC connector. However, it is constructed differently and has a significantly higher frequency limit.

The Tektronix active probe is connected to the adapter's TekProbe BNC™ level II interface. This interface also provides the power for the probe.

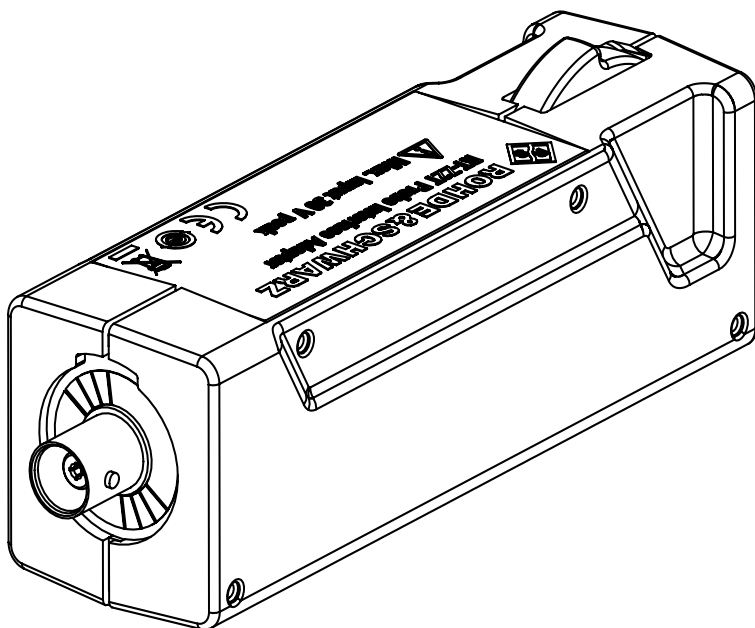


Figure 2-2: TekProbe BNC™ level II interface of the R&S RT-Z2T

3 Putting into Operation

The R&S RT-Z2T has been designed to withstand a moderate amount of physical and electrical stress. Treat the adapter with care.

NOTICE

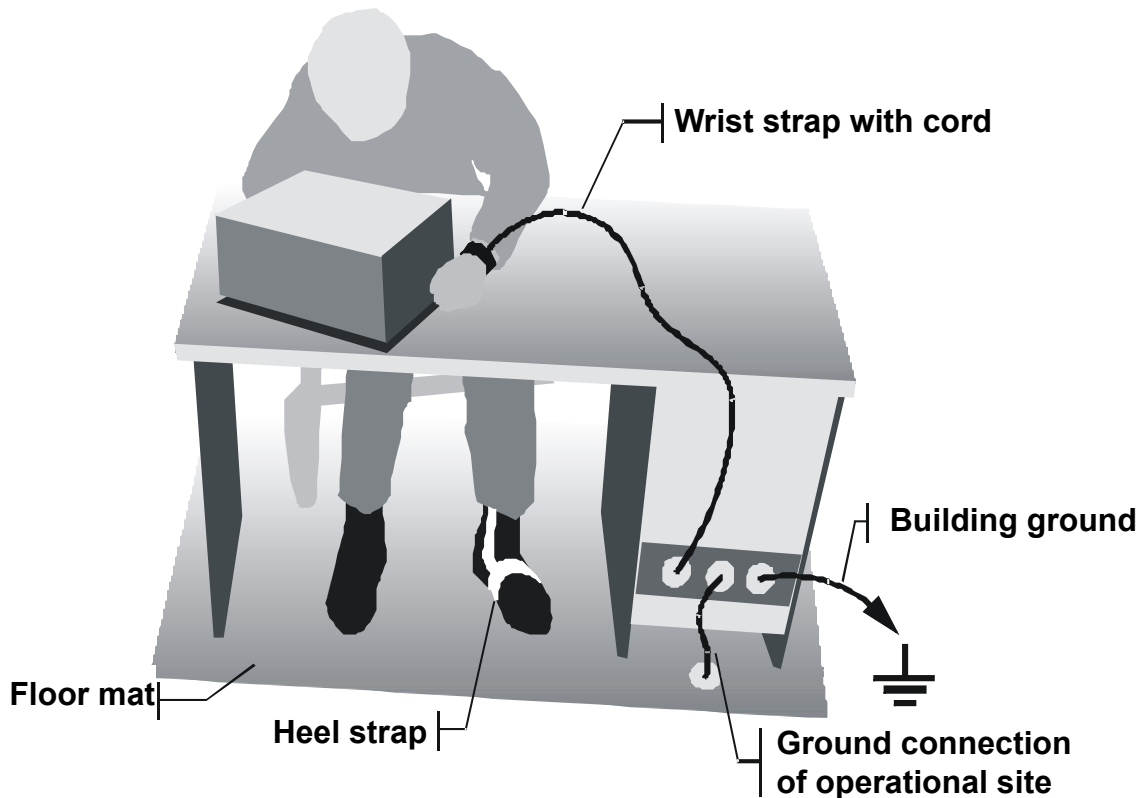
Risk of adapter and instrument damage due to excess power

Voltages above the specified limits of the R&S RT-Z2T probe interface adapter or the connected R&S oscilloscope can damage the adapter or the oscilloscope. 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.

NOTICE**Damage caused by electrostatic discharge**

To avoid damage of electronic components, protect the operational site against electrostatic discharge (ESD).



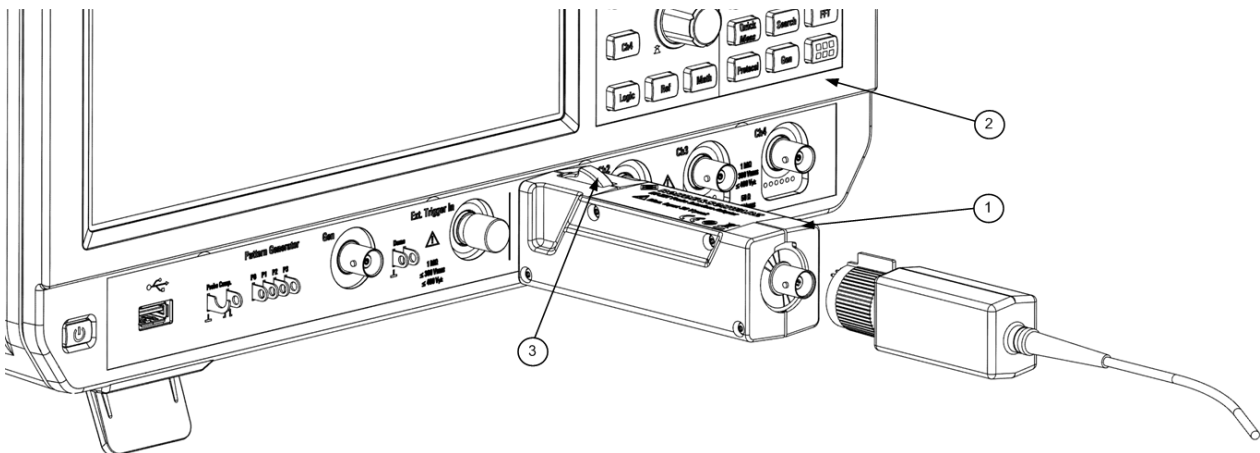
To protect the operational site, use one or both of the following measures:

- Wrist strap with cord to ground connection
- Conductive floor mat and heel strap combination

3.1 Connecting the Adapter to an R&S Oscilloscope

The R&S RT-Z2T has been designed for use with R&S oscilloscopes that feature an R&S probe interface.

Connecting the Tektronix Probe to the Adapter



- ▶ Connect the adapter (1) to the Rohde & Schwarz probe interface of the base unit (2). The adapter snaps in when connected properly to the port.
- ▶ To disconnect, press the release button (3). Pull the adapter away from the front panel of the base unit.

3.2 Connecting the Tektronix Probe to the Adapter

To connect a Tektronix probe to the probe interface of the R&S RT-Z2T adapter:

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. Adjust the oscilloscope settings by choosing the correct predefined probe or by entering the values for external attenuation, input coupling and display unit manually.

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

4 Maintenance and Service

4.1 Service Strategy

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

You can return the R&S RT-Z2T probe interface adapter for calibration. The service personnel will perform the required tests.

4.2 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.

4.3 Cleaning

NOTICE**Product damage caused by cleaning agents**

Cleaning agents contain substances that may damage the product; for example, solvent may damage the labeling or plastic parts.

Never use cleaning agents such as solvents (thinners, acetone, etc.), acids, bases or other substances.

NOTICE**Product damage caused by static electricity**

Before cleaning the facing surfaces of the sensor head, discharge any static electricity at your hands. Thus you ensure that no high voltage caused by static electricity is applied to the product. Application of a high voltage may damage the internal Hall elements or circuitry. You can attract static electricity to your hands by touching a nearby metal object.

To clean the exterior of the probe or adapter, use a soft cloth moistened with either distilled water or isopropyl alcohol. Before using it again, make sure to dry it completely.

4.4 Discarding the Product

Handle and dispose the product in accordance with local regulations.