

# RIGOL

## 用户手册

## User's Guide



### T2R1000 有源探头适配器

### T2R1000 Active Probe Adaptor

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## 电流探头

型号	带宽	增益	说明
TCP202	50MHz	10A/V	交直流电流探头

## 光电探头

型号	带宽	增益
P6701B	1GHz	0.001W/V
P6703B	1.2GHz	0.001W/V
P6711	250MHz	0.0002W/V
P6713	300MHz	0.0002W/V

## 联系我们

如您在使用此产品或本手册的过程中有任何问题或需求,可与 **RIGOL** 联系:

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## Product Overview

T2R1000 active probe adaptor can be used to connect the TekProbe-BNC level II probe with **RIGOL** DS6000 series or MSO4000/DS4000 series digital oscilloscope.

T2R1000 converts the TekProbe-BNC interface to RIGOL-Probe interface and supplies power, calibration and DC offset adjustment function for probe.



To TekProbe-BNC Interface



To RIGOL-Probe Interface

## Connection Method

Firstly, connect the probe with TekProbe-BNC interface to T2R1000. Then, connect the other terminal of T2R1000 to the analog input terminal of the oscilloscope with RIGOL-Probe, as shown in the right figure.

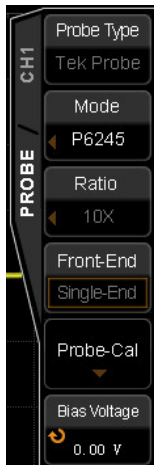
By operating the oscilloscope menu, you can select the corresponding probe model, the probe ratio and the type of the probe front end. In addition, the calibration function and the bias voltage adjustment function are provided for some probes.




## Menu Operation

In this section, CH1 of MSO4000 is taken as an example to illustrate the menu operation. After connecting T2R1000 and Tektronix probe to the input terminal of the oscilloscope, press **CH1** → **Probe** to open the menu as shown in the figure on the right side. At this point, **Probe Type** shows "Tek Probe". You can set the probe model, the probe ratio and the type of the probe front end by pressing the corresponding menu. For P6241, P6245, P6246, P6247, P6248, P6249, P6250 and P6251, **Probe-Cal** and **Bias Voltage** are also provided.

1. For a probe with fixed probe ratio or with a single type of probe front end, the oscilloscope identifies the probe ratio or the type of the probe front end automatically. You cannot set the probe ratio or the



type of the probe front end.

2. Probe-Cal: connect T2R1000 and Tektronix probe to the input terminal of the oscilloscope and select the corresponding probe model. Then, press **Probe-Cal**. At this point, "Please connect the probe to the GND" is displayed. Ground the input terminal of the probe according to the prompt message and press **OK**; the oscilloscope executes the probe calibration program to perform self-calibration on the probe offset.
3. Bias Voltage: this function is used to adjust the signal under test that exceeds the input dynamic range of the probe amplifier to a proper range to ensure the integrity of the signal under test. Press **Bias Voltage** and rotate  to adjust the bias voltage. The range available is determined by the DC offset voltage of the probe.

## Tektronix Active Probes Supported by T2R1000

### Single Ended Active Voltage Probes

Model	Bandwidth	Attenuation	Support DC offset adjustment?
P6205	750MHz	10:1	No
P6243	1GHz	10:1	No
P6245	1.5GHz	10:1	Yes
P6241	4GHz	10:1	Yes
P6249	4GHz	5:1	Yes



## Differential Active Voltage Probes

Model	Bandwidth	Attenuation	Support DC offset adjustment?
P5205	100MHz	50:1/500:1 optional	No
P5210	50MHz	100:1/1000:1 optional	No
P6246	400MHz	10:1/1:1 optional	Yes
P6247	1GHz	10:1/1:1 optional	Yes
P6248	1.5GHz	10:1/1:1 optional	Yes
P6250	500MHz	50:1/5:1 optional	Yes
P6251	1GHz	50:1/5:1 optional	Yes

## Current Probes

Model	Bandwidth	Attenuation	Description
TCP202	50MHz	10A/V	AC/DC current probe

## Optical Probes

Model	Bandwidth	Attenuation
P6701B	1GHz	0.001W/V
P6703B	1.2GHz	0.001W/V
P6711	250MHz	0.0002W/V
P6713	300MHz	0.0002W/V

## RIGOL Oscilloscope Supported by T2R1000

If you have purchased DS6000 or MSO4000/DS4000 series digital oscilloscope, before using T2R1000, you need to update your software to or above the version listed in the table below.

Series	Model	Software Version
DS6000	DS6062/DS6064/DS6102/DS6104	00.01.05.00.00 or above
DS4000	DS4014/DS4024/DS4034/DS4054/ DS4012/DS4022/DS4032/DS4052	00.02.01.00.04 or above
MSO4000	MSO4014/MSO4024/MSO4034/ MSO4054/MSO4012/MSO4022/ MSO4032/MSO4052	

## Specifications

Bandwidth	>4GHz (T2R1000 only)
Power Supplies	$\pm 5V$ , $\pm 15V$
Max Output Current	150mA
DC Offset Range	$< \pm 1V$ (from the output terminal of T2R1000)
Max Input Voltage	42Vpk, 30Vrms
Temperature	Operation: $0^{\circ}C$ - $50^{\circ}C$ ; Non-operation: $-40^{\circ}C$ - $70^{\circ}C$
Humidity	95%RH at $50^{\circ}C$
Altitude	4000m
Size	60mm (length) $\times$ 33.7mm (width) $\times$ 29.5mm (depth)
Weight	132g (with package); 41g (without package)

## Contact Us

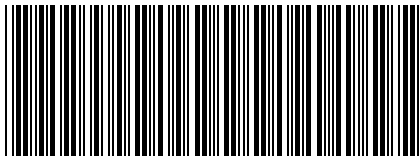
If you have any problem or requirement when using our products or this manual, please contact RIGOL Technologies, Inc.

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UGE25X02-1110

Aug. 2014



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