

R&S® GA5450-Z Cable and PTT Switch for GA5450 Headset -CN Version

Specifications



Data Sheet
Version 02.00

ROHDE & SCHWARZ

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1. Definitions

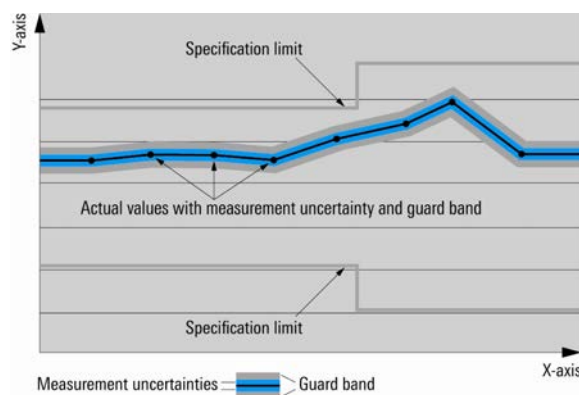
General

Product data applies under the following conditions:

- Three hours storage at ambient temperature followed by 30 minutes warm-up operation
- Specified environmental conditions met
- Recommended calibration interval adhered to
- All internal automatic adjustments performed, if applicable

Specifications with limits

Represent warranted product performance by means of a range of values for the specified parameter. These specifications are marked with limiting symbols such as $<$, \leq , $>$, \geq , \pm , or descriptions such as maximum, limit of, minimum. Compliance is ensured by testing or is derived from the design. Test limits are narrowed by guard bands to take into account measurement uncertainties, drift and aging, if applicable.



Specifications without limits

Represent warranted product performance for the specified parameter. These specifications are not specially marked and represent values with no or negligible deviations from the given value (e.g. dimensions or resolution of a setting parameter). Compliance is ensured by design.

Typical data (typ.)

Characterizes product performance by means of representative information for the given parameter. When marked with $<$, $>$ or as a range, it represents the performance met by approximately 80 % of the instruments at production time. Otherwise, it represents the mean value.

Nominal values (nom.)

Characterize product performance by means of a representative value for the given parameter (e.g. nominal impedance). In contrast to typical data, a statistical evaluation does not take place and the parameter is not tested during production.

Measured values (meas.)

Characterize expected product performance by means of measurement results gained from individual samples.

Uncertainties

Represent limits of measurement uncertainty for a given measurand. Uncertainty is defined with a coverage factor of 2 and has been calculated in line with the rules of the Guide to the Expression of Uncertainty in Measurement (GUM), taking into account environmental conditions, aging, wear and tear.

Device settings and GUI parameters are indicated as follows: "parameter: value".

Typical data as well as nominal and measured values are not warranted by Rohde & Schwarz.

2. Introduction

The R&S®GA5450-Z Cable and PTT Switch for the GA5450 Headset - CN Version is a headset controller with Push-to-Talk function and represents a complementary accessory that connects the GA5450 Headset with the Controller Working Position subsystem. This is used with the R&S®GB5400V Audiobox Headset/Handset and the R&S®GB5450 Compact Controller Working Position.

3. R&S®GA5450-Z Overview

The figure below illustrates the physical appearance of the device.

Figure 3.1: R&S®GA5450-Z - Cable and PTT Switch for GA5450 Headset - CN Version



The GA5450 Headset shall be connected to the Audiobox Headset/Handset or to the Compact Controller Working Position (Compact CWP) by a cable fitted with suited connectors. The connection scheme is according to the figure below and the role of each connector is explained in the table below.

Figure 3.2: R&S® GA5450-Z - Connection With Audiobox Headset/Handset Or Compact CWP



Connector on headset	
1	This connector must be connected to connector 2 of the cable (it assures the connection between the headset and the PTT cable).
Connectors on cable and PTT switch	
2	This connector must be connected to connector 1 of the headset (it assures connection between the cable and the headset).
3	This connector must be connected to connector "HS1 CONTROLLER" or "HS2 INSTRUCTOR" of the Audiobox Headset/Handset or the Compact CWP (it assures the connection between the cable and the Audiobox Headset/Handset or the Compact CWP). It is a Push-pull 10-pin connector (male).
Connectors on Audiobox Headset/Handset or Compact Controller Working Position	
4	The cable must be connected to "HS1 CONTROLLER" or "HS2 INSTRUCTOR" connector from the Audiobox Headset/Handset or the Compact CWP. It is a Push-pull 10-pin connector (female).

Note: The original connectors of PTT switch and cable - Plantronics SHS-1890-15 have been removed and replaced.

4. Technical Specification

Manufacturer product number	SHS-1890-15
Manufacturer	Plantronics
Design	6 wire ultra controllers, for emergency dispatch applications
Cord	15 foot coil
Push-to-Talk switch	Selectable locking or momentary operation
Compatibility	Any H-series headset top in 6-wire controller and dispatch operations
Receiver	Allows the use of a wide variety of receiver types
Acoustic limiter	Solid-state limiting device across the receiver transducer
Microphone/Amplifier Characteristics	
Output level	-22.5 dBV \pm 5 dBV (42.2 mV RMS to 133.4 mV RMS)
Frequency range	300 Hz to 3 300 Hz
Distortion	< 5 %, 300 Hz to 3 300 Hz
DC resistance	> 35 ohms
Mic impedance	47.5 ohms
Polarity	Nonpolar

4.1. General Data

Weight	230 g
Cable length	2 m

4.2. Physical Interfaces

Physical interfaces	Push-pull 10-pin connector
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4.3. Electrical Conditions

Operating current range	10 mAC dc to 120 mAC dc
Terminal voltage	7.0 Vdc at 50 mA

4.4. Environmental Conditions

Environmental conditions	Acc. to EN 60068-2-1, 60068-2-2
Operating temperature range	0 °C to +50 °C
Storage temperature range	-40 °C to +65.5 °C
Humidity	+25 °C / +40 °C, 95 % relative humidity / cyclic acc. to DIN/EN 60068-2-30
Shock	Acc. to EN 60068-2-27 MIL-STD 810E, Method 516.4, Procedure I
Vibration (sine)	Acc. to EN 60068-2-26 (5 Hz to 150 Hz)
Vibration (random) class B	Acc. to EN 60068-2-26 (10 Hz to 500 Hz)
Electromagnetic compatibility (EMC)	Acc. to EN 300339, ETSI EN301489-1, ETSI EN301489-22
Operating altitude	Up to 3 000 m
Transportation altitude	Up to 10 000 m
RoHS compatibility	In line with EN 50581:2012

4.5. Electromagnetic Compatibility (EMC)

Emissions	In line with EN 55022:2010
Immunity to interfering field strength	In line with ETSI EN 301489-1 V1.8.1 (2008-04) In line with ETSI EN 301489-22 V1.3.1 (2003-11) EN 61000-3-2: 2006+A1: 2009+A2:2009; EN 61000-3-3: 2008

4.6. Electrical Safety

Compliance	In line with EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
Further compliance	FCC Part 68 Testing

5. Packing List

Item	Pcs.
Cable and PTT Switch for GA5450 Headset - CN Version / GA5450-Z / DT-E538-8 / 6211.8472.00	1

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