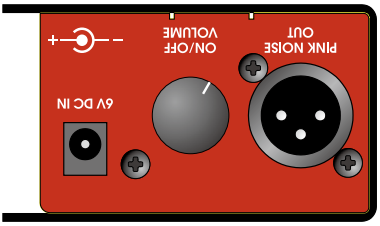
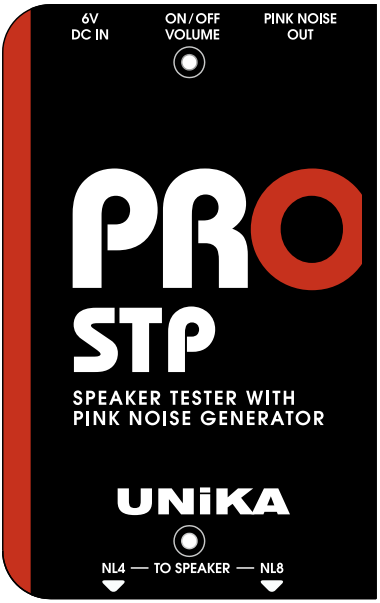
UNiKA
PROFESSIONAL AUDIO

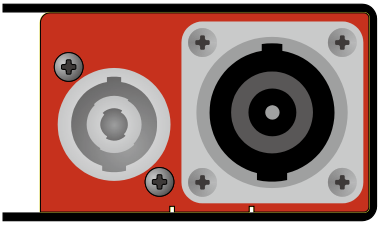
USER MANUAL

PRO STP

PRO SERIES AUDIO INTERFACE
SPEAKER TESTER WITH PINK NOISE GENERATOR
DESIGN & MADE IN TAIWAN







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UNiKA Electronic Co., Ltd.
www.unikapro.com
6F, No.168, Xin-Hu 2nd Rd.
Nei-Hu District, Taipei City. 11494.
Taiwan, R.O.C.
+886 2 27933017
+886 2 27928264
info@unikapro.com

GENERAL PRECAUTION

Thank you for purchasing the UNiKA product. Before using,please read this manual carefully and pay attention to every detail that you must payattention to. Please make sure the power switch is on the "OFF" position before you plugged power adaptor in outlet. And make sure the power switch is on the “OFF” position before you pulled out power adaptor from outlet.

And rotate volume control to the end of counterclockwise position to avoid the sudden sounds hurting your ears. Please do not plug or unplug the wires arbitrarily to avoid signal loss. Pleaserefer to the following instructions for the soldering method of the plugs to ensure theexpected level and keep the signal smooth.

If you need further installation or operation guidance, please directly contact UNiKA's dealer or distributor, or write to the following mail address for help:

info@unikapro.com

SAFETY INSTRUCTIONS

- Please Read this instruction manual carefully and completely before using the product.
- Save this manual for future reference.
- Remember and follow all safety instructions.
- Follow all steps.
- Please always include this instruction manual when passing the product on to third parties.
- Please do not use an obviously defective product.
- Please place the device away from the water source.
- When cleaning, please unplug the power plug, and then use a dry cloth to clean the device.
- Make sure that the ventilation openings of the device are not blocked.
- Please place the device away from heat sources.
- Prevent the power adaptor (ext. power supply) from being trampled or dragged.
- Please be sure to use the included external power supply. Using any of other power supplies may cause equipment damage or leakage.
- Please place the device in a stable position.
- Please unplug the power adaptor during thunderstorms or when not in use for a long time.
- In case of failure, please consult or send it to professional technicians. Do not open the inside of the device for maintenance without authorization.
- To prevent the risk of fire or electric shock, do not expose the device to rain and moisture.
- Do not expose the device to dripping and splashing water or under a water container.

CAUTION

Because PRO-STP needs to use 6VDC power supply, users need to install 4 pieces of AA batteries. However, since the voltage of the rechargeable battery is only 1.2V, it is not like ordinary 1.5V zinc-carbon cells or alkaline batteries.

SO PLEASE DO NOT USE RECHARGEABLE BATTERY.

If you want to use external swap power instead of battery. Please purchase a 1A/6VDC power adaptor that conforms to the local AC plug specification.

Please remove all of batteries if the device was not used for a long time. Please replace the batteries whether the current batteries still electricityor not when the batteries have been put in over one year.

FEATURES

- Generate and output pink noise from XLR to mixeror self-powered speaker cabinet.
- Generate and output pink noise from NL4 and NL8 to speaker cabinet.
- Pink Noise is equipped with a dedicated on-off volume potentiometer.
- The momentary button to create 5VDC is used to detect the impedance of the speaker.
- 4 toggle switches are used to determine the 5VDC output to NL4 and NL8 wiring pins.
- The 4/8/16 ohms LED indicators are used to display the impedance result of the test.

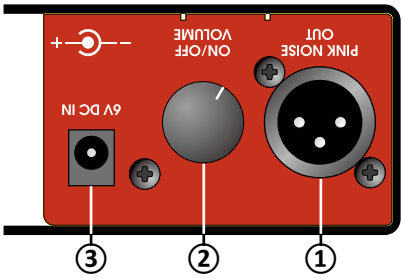
PRODUCT OVERVIEW

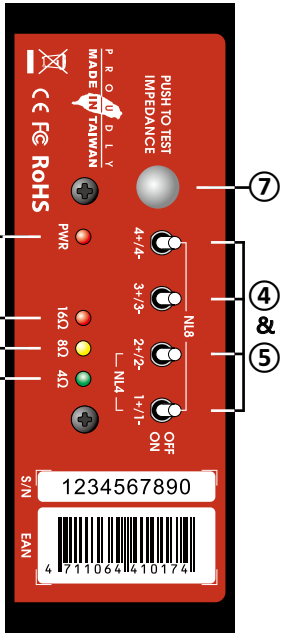
The pink noise level can be adjusted to appropriate levels for subwoofers, midrange cones and compression drivers and tweeters. There is also an XLR line output for feeding the pink noise to self-powered speaker units.

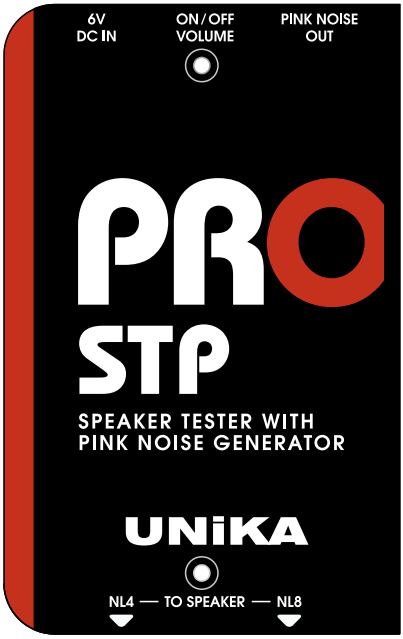
A DC OHMS TEST button applies 5 VDC to the output terminals selected with the pushbuttons for observing cone movement to identify speaker and cabling polarity errors. This also performs a DC Ohms test where three LEDs indicate approximate ranges of 4, 8, or 16 Ohms. This helps identify blown drivers in cabinets where the cones cannot be readily observed or in cabinets with multiple drivers in series parallel configurations.

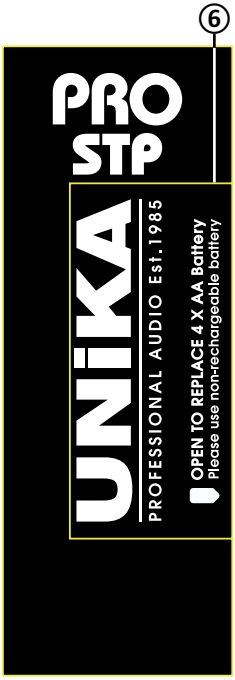
The PRO-STP is powered by 4 AA non-rechargeable batteries or can be powered by an external rated 1Aat 6VDC power adaptor (not included).

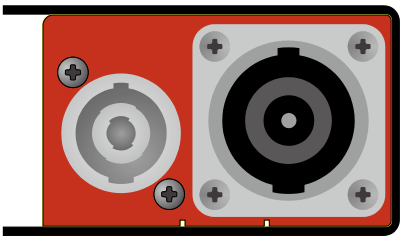
APPEARANCE PARTS & FUNCTIONS











APPEARANCE PARTS & FUNCTIONS

① This Male XLR connector can be transmitted the pink noise signal to mixer or selfpower speaker cabinet.

② This potentiometer includes power switch and level adjustment for pink noise output.

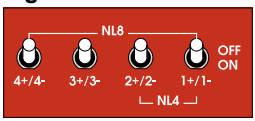
③ This 6VDC jack is using to connect AC to DC power adaptor. Manufacturer did not supply this.

④ This NL4 socket is used to connect the speaker under test. After connecting, through the first and second switches shown in **Figure A**, determine the connection to be tested including 1+/1- and 2+/2-. Whether it is using pink noise to test whether the speaker is normalor using 5VDC button to test the speaker impedance or phase*.

Figure A

⑤ This NL8 socket is used to connect the speaker under test. After connecting, through the first, second, third and fourth switches shown in **Figure B**, to determine the connection to be tested including 1+/1- and 2+/2-, 3+/3- and 4+/4-. Whether it is using pink noise to test whether the speaker is normal or using 5VDC button to test the speaker impedance or phase*.

Figure B



⑥ Disassembly this screw to put or replace 4 pieces of AA non-rechargeable battery.

⑦ 5VDC output button: Push to transmit 5VDC to the connected speaker system to test the loading impedance. When the button is pressed and released immediately, one of the three impedance indicator lights in item 9 will illuminate to show the current loaded speaker impedance.

⑧ Power on and off indicator.

⑨ Impedance indicator-4/8/16Ω: These three LEDs will show the load impedance on the speaker wire, which works by pressing and immediately releasing the 5VDC output button in item 7 to detect and return the impedance to these three LEDs. The number of speakers on the speaker line is not necessarily 1, but may be 2 or 4. Therefore, by calculating the principle of parallel or series, the obtained impedance will be different, which is used to identify whether the impedance of the speaker on the line is correct or not whether the number of speakers is correct.

*The test phase only supports the naked eye to observe the movement direction of the speaker cone, and does not provide a judgment signal.

About the test impedance

The DC Ohms Test measures the DC resistance of the voice coil circuit connected to the output terminals selected by one of the pushbuttons. This feature helps identify blown drivers in cabinets with multiple drivers in series parallel configurations.

Three LEDs indicate values of 4,8 or 16Ω:

- The green LED lights from 1.8 to 3.6Ω.
- The yellow LED lights from 3.6 to 7.2Ω.
- The red illuminates from 7.2 to 14.4Ω.

Pushing the switch applies a 5VDC voltage to the selected output terminals that can also be used for detecting cone speaker polarity and identifying speaker and cabling polarity errors. Current limiting on the output should protect compression drivers and tweeters, although caution should be exercised as with any battery test. Excess cable length may cause slightly higher readings.

NOTE - Considered cable impedance

Since Since the impedance of the speaker wire will affect the impedance test accuracy of the speaker, for example, too long distance or too thin wire diameter will increase the impedance.It is recommended to minimize the length of the wire between the PRO-STP and the speaker before testing. Or try to use thicker speaker wire. Usually, the maximum allowable wire diameter of NL8 and NL4 connectors is 12AWG (3.3mm^2). Some special models can be available for 10AWG (5.2mm^2).

About the relationship between line impedance and end impedance. We suggest user to calculate the required wire diameter by the formula as follows,

$$\frac{\text{Distance (m)}}{\text{2X Total speaker impedance (Ω)}}$$

The thicker speaker wire is required if the impedance of the speaker was lower.

USE, CARRY AND STORE

- Please refer to the manual before use
- When carrying, please avoid direct drop or collision, so as not to cause malfunction or affect the test accuracy.
- Please pay attention to the storage environment, avoid high temperature, high humidity and long-term sun exposure.

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