SRS LIGHTING

Wireless DMX Transmitter Receiver and Splitter

Instruction Manual

Models:

DST4W-PRO-3, DST4W-PRO-5 DST4W-PRO-C

version 1.0 since 3 February 2020

IMPORTANT SAFETY INFORMATION

The following general safety precautions have to be observed during all phases of operation, service, and the repair of this equipment. Failure to comply with these precautions or with specific warnings in this manual violates safety standards of design, manufacture, and the intended use of this equipment.

Do not operate in an explosive atmosphere!

Do not operate this equipment in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard. Device should never be placed near or over a heat register or other source of heated air or it should not be installed or operated without proper ventilation.

Mains AC 85-265V connection

AC power is connected to the splitter via Neutrik PowerCon blue connector. Standard supply is UNISCHUKO lead with Neutrik PowerCon. Always respect the marking of L and N on the connector for correct wiring of Line and Neutral.

Battery connection

Battery for DST4 can be connected to screw terminal on the rear side of the device. There is no strict requirement of polarity – AC or DC power with the limitation of voltage 12-24V can be used.

DMX connection

DMX connectors are located on both sides of the splitter board. They are separated into two groups. First group is wired in ratio 1:1 and marked as DMX input and DMX thru. This line is not optically isolated and when the device is the last in line, it should be terminated by the termination resistor of 120ohm wired between pins 2 and 3.

The other part of the splitter consists of 4-way optically isolated lines marked with letters A-D. Each line has a separate power supply, line driver and indication of signals D+, D- on both signal lines. These LEDs are active when the splitter is retransmitting DMX signal and there is no short circuit between data lines.
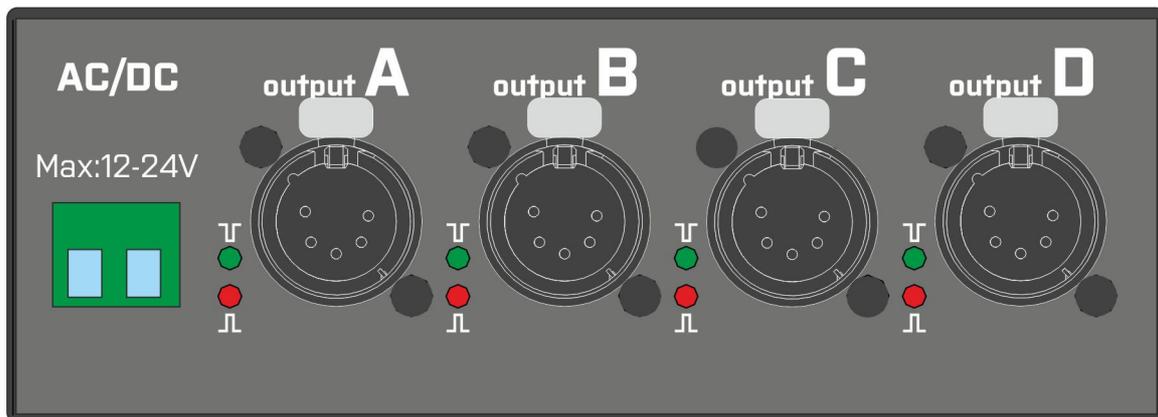
In case of a short circuit between data pins D+/D- and the CMN pin, the LED connected to the data line will go off.

Pin 1	Common
Pin 2	Data-
Pin 3	Data +
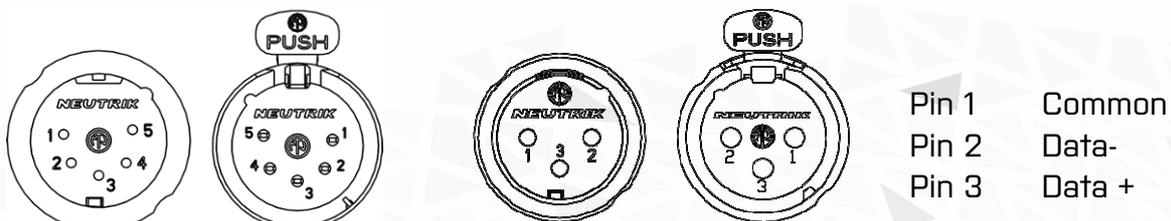
Front panel:
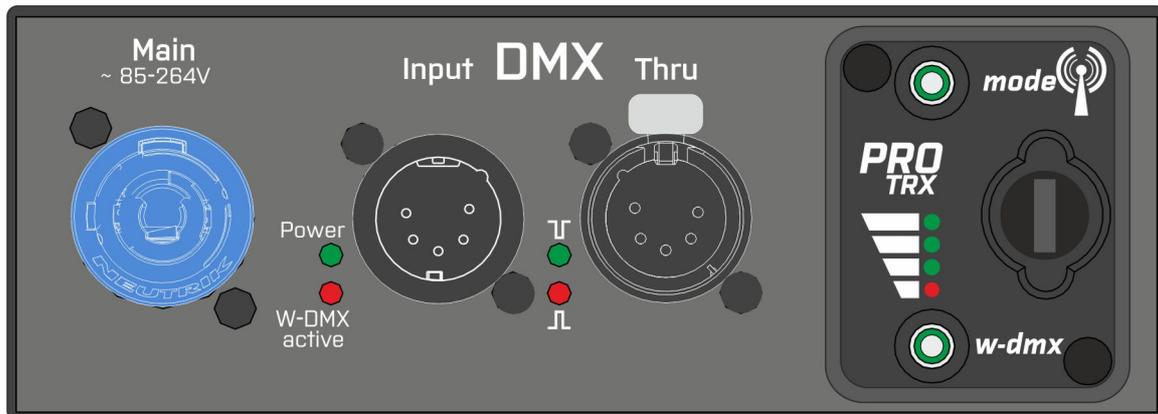
## Rear panel:

Device in use / service:

By default, Power LED indicates the device is on main power. When the Power LED is off, check the main power input.

The unit can be supplied with AC85-264V or AC/DC battery power. There is no polarity restriction for this port. AC or DC power with 12-24V can be used.

When the DMX cable is connected to the device, the LEDs marked as D+ and D- go on for the side marked as DMX input, thru and this indicates that the DST4W-PRO is receiving the DMX signal. Blinking frequency of these LEDs also indicates refresh rate of the DMX signal. Fast blinking – high refresh rate, slow blinking – low refresh rate.

On the rear panel of the DST4W-PRO, there are outputs A-D, which are retransmitting the input to the optically isolated outputs. If any of the data LEDs is off, unplug the signal cable corresponding to this output and check the cable for short circuit between D+ and CMN or D- and CMD lines.

DMX-only operation

mode button

Signal bargraph

PRO TRX

W-DMX button
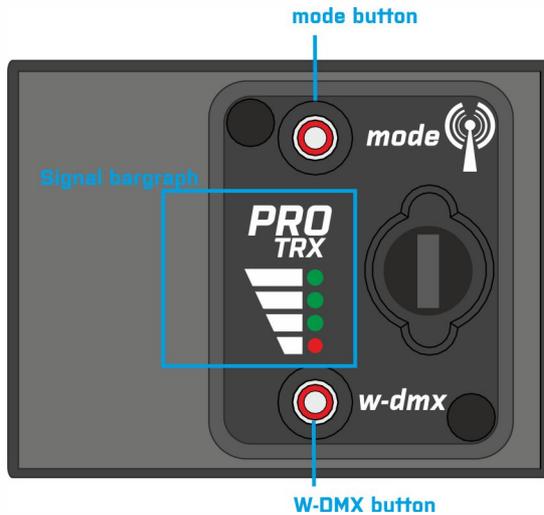
For the DMX operation, turn off the W-DMX module by holding the MODE button. Both W-DMX and MODE buttons light in red color.

Connect the DMX cable to the DMX-IN connector and use the DST4W-PRO as a standard DMX one-to-four isolated splitter.

Once the DMX signal is active, the LEDs marked as D+ and D- will go on for both input module and output modules A-D.

Changing W-DMX Receiver to Transmitter and vice versa:

Turn off the splitter by unplugging the power cable. Hold the W-DMX button and plug in the power cable. The unit has now changed its state. Without holding the W-DMX button, the unit will stay in the same mode as it was before.

W-DMX receiver: Bargraph shows the signal strength or is off, if the unit is not linked to any transmitter.

W-DMX transmitter: Bargraph's green LEDs are lighting one by one showing that the unit is transmitting DMX signal over the air.

W-DMX/DMX operation

For the W-DMX/DMX operation, turn the W-DMX module on by holding the MODE button. Both W-DMX and MODE buttons should light in green color.

Connect the DMX cable to DMX in/thru connector and use the DST4W-PRO as a standard DMX isolated transmitter. For receiver mode, use outputs A—D.

Once the DMX signal is active, the LEDs marked as D+ and D- will go on for both input module and output modules A-D.

W-DMX Receiver / Splitter

You can use the DST4W-PRO as a Receiver with the Splitter output.

There is an automatic back-up of the W-DMX line using the cable connection. If the W-DMX is linked to the transmitter and the signal quality is poor, the W-DMX active LED goes off and the splitter will retransmit signal from cable in/thru port. In normal state, when the W-DMX signal quality is good, the W-DMX active LED is on.

The W-DMX button has only one function – logging off from the linked transmitter.

W-DMX LED signalization in the Receiver mode:

Not linked to any Transmitter

Linked to Transmitter + Missing DMX on Transmitter

Linked to Transmitter + Receiving DMX

Receiver Mode unlinked

MODE LED is green and the receiver W-DMX LED is red. The bargraph does not show the signal strength.

Receiver Mode linked

MODE LED is green and the receiver W-DMX LED is red or green according to the DMX connection on the Transmitter's side. The bargraph shows the signal strength.

W-DMX Transmitter / Splitter

The DST4W-PRO can be used in the Transmitter and DMX splitter mode at the same time. The DMX signal from input/thru is sent out via Wireless DMX to all other linked W-DMX devices.

Signal bargraph LEDs are blinking in a row to indicate that the module is in the Transmitter mode.

W-DMX button has two functions:
Short press: Linking of unlinked Receivers
Long press: Unlinking from all linked Receivers

W-DMX LED signalization in Transmitter mode:

Transmitter mode without DMX connected

Transmitter mode + DMX connected

Linking to Receivers

Transmitter mode, un-linking all connected Receivers

Transmitter without DMX
MODE LED is green and the W-DMX LED is red or green according to the status of the DMX connected to the in/thru port.

To add an unlinked Receiver, press the W-DMX button for a second. The unlinked Receiver will start blinking quickly.

After a successful pairing, the W-DMX buttons on both units will blink slowly showing the same status of the DMX connected to the Transmitter.

Transmitter with DMX
DMX is connected to the Transmitter and is transmitting the W-DMX signal. W-DMX LEDs on both Receiver and Transmitter light in green color.

Bargraph is active and shows the W-DMX signal strength and the DMX status on the Receiver.

Technical data

Mains input:
AC 100-255V / 50-60Hz / 5W

Battery input:
AC12-24V / 5W or DC12-24V /5W

Input / Output:
4x USITT DMX512 /RS485/ isolated up to 1000V

Housing & Dimensions:
Lightweight Aluminum box with powder coating: 234x154x62mm

Mounting points:
Located symmetrically on the base plate, 8mm-wide hole for securing line
Grid of mounting points: 222x78mm, 4x rubber foot on the bottom

Operating temperature:
-10 ºC…+45 ºC

Warranty:
Two-Year /24-month/ warranty

DECLARATION OF CONFORMITY
According to the guidelines 89/336 EEC and 92/31 EEC:

Name of producer: SRS Group s.r.o.
Address of producer: Rybnicna 38/B, SK- 83106 Bratislava, Slovak Republic
Declares that the product
Name of product: DST4W-PRO or DST4W-PRO LR, 4-way Wireless DMX / DMX splitter
Type: DST4W-PRO, DST4W-PRO LR

Corresponds to the following product specifications and R&TTE Directive of the European Union:

Safety: EN60065, resp. EN 60950
EMC: EN55103-1, resp. EN55103-2
Radio: EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2

Bratislava, 10 May 2011

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