

the t.bone

free solo

active antenna splitter

th•mann
MUSIC IS OUR PASSION

user manual

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device, include the manual for the next owner.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used to distribute and amplify antenna signals of wireless transmission systems. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety



DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly the user.

Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features and scope of delivery

This appliance is used when multiple radio links are to be operated with a single antenna pair.

The following features characterize the device:

- Amplifying the high frequency signal of a pair of antennas and distribution to 4 × 2 antenna outputs in the frequency range of 500 MHz to 900 MHz
- Central 12 V power supply for up to four units
- 19" rack mountable

Included accessories: 12 V power supply, 2 × UHF omni-directional antennas, 10 × BNC cables.

4 Installation and starting up

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

Rack mounting

The unit has been designed for rack mounting in a standard 19-inch rack; it occupies one rack unit.

Notes on radio transmission

Before you start, make sure that the frequencies of the connected wireless systems are legitimate in the respective country and check whether the operation must be registered with the responsible authority. For further information on that refer to the manual of the wireless systems.

Attaching and connecting antennas.

Attach the supplied antennas to appropriate positions, such as the PA rack. To improve the transmission quality and to adapt to the spatial conditions, the antennas are rotatable and swivelling. Position the antennas so that all used transmitters (e.g., wireless microphones, body-pack transmitters) are within radio range. Install a BNC cable from both antennas to one of the antenna inputs each of the device.

Setting up the radio connection

Connect one antenna output pair of the device each to the two antenna inputs of a wireless system. To do so, use the supplied BNC cables.

Connecting the power supply

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Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

Connect the 12 V outputs of the device to the 12 V power supply inputs of the wireless systems. To do so, use the supplied power cords.

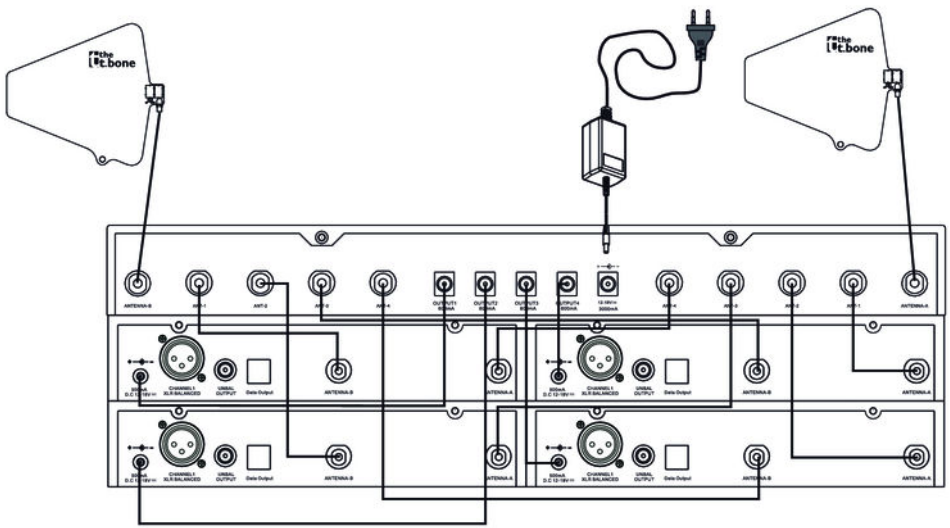
Connect the power adapter to the unit and then plug the power adapter into the power outlet.

Taking system in operation

Now switch on the device and the connected wireless systems.

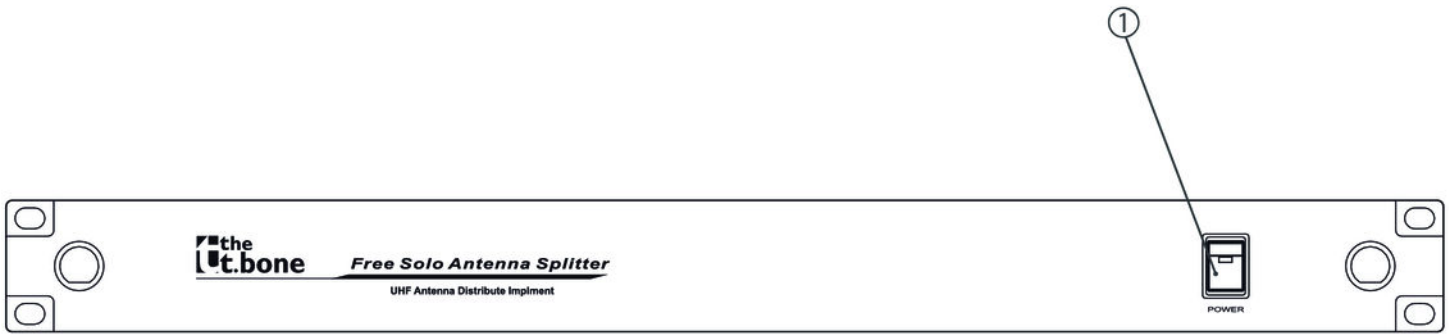
Example

The following illustration shows how to connect the device to the optional paddle antennas and four wireless systems. Instead of connecting the device to the paddle antennas you can use the provided antennas as well.

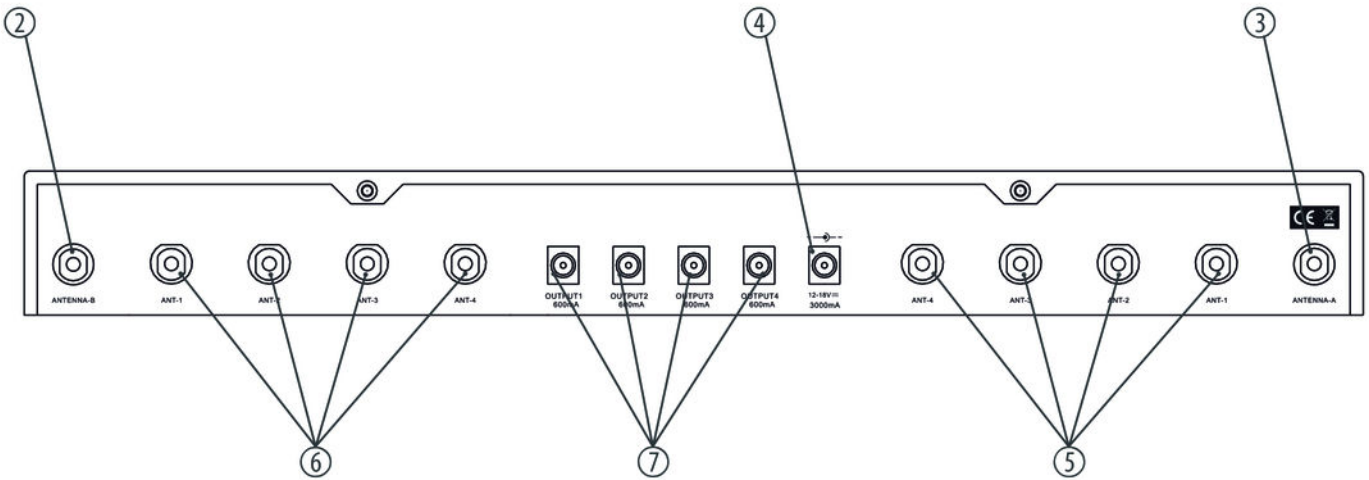


5 Connections and operating elements

Front panel



1	*[POWER]* Main switch. Turns the device on and off.


2
4
3
ANTENNA-B
ANT-1
ANT-3
ANT-4
OUTPUT1
600mA
OUTPUT2
600mA
OUTPUT3
600mA
OUTPUT4
600mA
12-18V
3000mA
ANT-4
ANT-2
ANT-1
ANTENNA-A
6
7
5

2, 3	**ANTENNA-A**, **ANTENNA-B** BNC chassis connectors for cable connection to the supplied UHF omni-directional antennas.
4	Socket for connecting the supplied power adapter.
5, 6	**ANT-1** … **ANT-4** BNC chassis connectors for cable connection to the connected wireless systems
7	**OUTPUT1** … **OUTPUT4** Power supply connections for the connected wireless systems.

6 Technical specifications

Input impedance	50 Ω
Output impedance	50 Ω
Gain	3 dB
Bandwidth	400 MHz
Operating supply voltage	DC 12…18 V ⎓, 3000 mA, via supplied power adapter
Dimensions (W × D × H, without antenna)	410 mm × 160 mm × 45 mm (1 RU)
Weight	2000 g

7 Protecting the environment

Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

Disposal of batteries



Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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