# Data sheet / instructions for use

LNA 30 / Item.No.: 1014





#### **Description:**

The **LNA** 30 is a broadband amplifier for applications in the frequency ranges VLF, LF, MW and HF. Signals above 30 MHz are strongly suppressed by a low pass at the input of the amplifier. The MMIC used enables a low noise figure with high large signal strength. This amplifier is supplied with 12 to 24 V voltage via the UHF socket. Alternatively, the device can be powered by a 24 V battery. The highest large signal strength is achieved with a 24 V voltage supply and the smallest noise figure at 12 V. Only linear power supplies are recommended for the voltage supply of the LNA 30. power supplies generate interference level in the low frequency ranges and are not suitable for this application.

## Assembly:

Attach the amplifier near the receiving antenna using the clamps provided. The sockets must be aligned downwards after assembly. Connect the amplifier input ("ANT" socket) to the antenna using a coax cable. If the antenna used does not have a 50 ohm impedance, an antenna matching device should be connected between the antenna and the 50 ohm cable leading to the input of the amplifier. Then connect the coaxial cable going to the receiver to the "TRX" socket. The amplifier is powered via the UHF socket. A shielded cable should be used for this. The inner conductor of the supply cable is connected to the plus (+) pole, the shield to the minus (-) pole. This cable is connected to the UHF socket of the preamplifier via a commercially available UHF plug.

#### **Technical Data:**

Frequency Range 5 kHz – 30 MHz

Gain / Noise Figure at 10 MHz 21 / 1,8 dB

with a 24 V power supply at 15 MHz 20 / 1,7 dB

at 20 MHz 19 / 2,1 dB

at 30 MHz 19 / 2,2 dB

at 30 MHz 19 / 2,2 d OIP3 38 dBm

Connection norm N - socket

DC Input UHF - socket

Operating voltage 12 - 24 V

Current consumption ca. 150 mA

Mast diameter max. 58 mm

### Notes on environmental protection



Electrical and electronic devices may not be disposed of with household waste. This must be handed in separately at collecting points or returned to the point of sale. Packaging materials must be separated and disposed of through the municipal waste by material type.

#### Maintenance

Do not open the unit. It does not contain any parts needing maintenance. If you need help regarding technical matters, please contact support@ssb-electronic.com. For a lowest possible noise figure of the complete system set preamp to maximum gain.

#### Safety, Warranty

Not suitable for children! The packaging material and the device may contain small parts which may be swallowed. Repairs may only be performed by qualified personnel. Opening the device or improper use will void any warranty claims. No guarantee will be given. The device applies to the Low Voltage Directive 2006/95/EG, as well as to 2004/108/EG, 2002/96/EG, 1999/44/EG.

## **Declaration of Conformity**



We hereby declare that the above Product meets all relevant regulations for the product within the scope of the directives 73/23 / EEC, 89/336 / EEC and 99/5 / EC of the Council.

Manufacturer is: SSB-Electronic GmbH, Am Pulverhäuschen 4, 59557 Lippstadt/Germany Technical changes are reserved. Contents of this document are the intellectual property of SSB-Electronic GmbH. Reproduction is only permitted with the express written approval.

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