

Data sheet / Manual



DBA 1000 / item no.: 1033



Description

The mast preamplifier DBA 1000 is used to improve the reception properties of amateur radio stations in the 6 m and 4 m band. Due to the already built-in diplexer, only one RF socket is required to connect the (dual-band) antenna and the derivation cable. The automatic transmit / receive switchover (VOX) switches the amplifier off when transmitting and on again when receiving. The maximum switchable power is effectively 100 watts. With higher transmission powers, a sequencer must be used to control the system. The amplifier is equipped with a UV-resistant, weatherproof housing and N sockets. Hot-dip galvanized clamps and assembly material made of V2A are included in the scope of delivery.

Installation

The DBA 270 preamplifier is attached directly to the antenna mast near the antenna using the clips supplied. The connection sockets must point downwards, otherwise rainwater can penetrate the device. Low-loss coaxial cables should be used to connect the amplifier, e.g. B. Ecoflex 10 or Ecoflex 15. The antenna input ("ANT" socket) of the amplifier should be connected to the antenna with the shortest possible coaxial cable. The output ("TRX" socket) is connected to the antenna socket of the transceiver using a coaxial cable.

Supply

With the direct power supply via the UHF socket (13.8V), the preamplifier is connected using a coaxial cable, e.g. Aircell 7, connected to the power supply. The inner conductor of the cable is connected to the positive (+) pole, the shielding to the negative (-) pole of the power supply unit. The power supply can also be installed directly under the roof. In this case, however, only VOX operation is possible and the preamplifier cannot be switched off when receiving. When using a transceiver with LNA remote power supply, the output of the amplifier ("TRX" socket) is connected to the antenna socket of the transceiver using a coaxial cable. In this case, the amplifier can be activated or deactivated during reception using the LNA button on the front panel of the transceiver. If the transceiver used does not have an LNA power supply, a remote feeder can be used for transmission powers up to a maximum of 100 W. e.g.. DCC 5000 pro, can be connected upstream of the antenna socket for remote powering of the preamplifier. In this case, the power supply can come from the transceiver's power supply unit. The transmit / receive switchover is implemented by the VOX circuit of the preamplifier, but it is possible to deactivate the preamplifier during reception by switching off the power supply from the remote feeder. For transmission powers over 100 W when using a power amplifier with an internal sequencer, the preamplifier is fed remotely via the antenna socket of the power amplifier. When using a power amplifier without an internal sequencer, an external sequencer, e.g. DCW 2004 B to use.

Technical data:

Frequency range:	50-52 MHz; 69-71 MHz
Noise figure, Typ.:	1,0 dB / 6 m; 1,0 dB / 4 m
Gain	18 dB / 6 m; 17 dB / 4 m
OIP3:	22 dBm / 6 m; 23 dBm / 4 m
Max. transm. Powe mit HF VOX:	200 W PEP SSB 100 W CW, FM, WSJT, FT8
Transferable power with the use of a sequencer:	750 W PEP SSB 750 W CW, FM, WSJT, FT8
Insertion loss TX:	0,04 dB
Connection norm:	N-socket
DC input local:	UHF-socket
Remote feed:	N-output socket
Operating voltage:	12 V - 14 V
Current consumption Typ.:	220 mA
Mast diameter:	max. 58 mm
Switching time (TX->RX):	0,50 Sek.
Switching time (RX->TX):	0,02 Sek.

Detailed data and measurement protocols can be found on our homepage on the internet.

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 us: support@ssb-electronic.com.

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



The CE mark is a free trade mark. It does not guarantee any product features. The product does apply all relevant regulations within the scope of 94/62/EG.

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