# **Users Manual**

# MHP-200-R / Item.No.:1062-R





The **MHP 200 R** is an extremely low-noise mast preamplifier, suited for transmission powers up into the kilowatt range.

Based on the **LNA 200**, the **MHP 200 R** offers two additional coaxial power relais with N-connections. The LNA and the coaxial relais are supplied via the coaxial feed line.

An additional decoupling of the output of the preamplifier has been improved for transmitting branch to 60dB by a suitable circuit. The Input of the preamplifier is protected by two amplitude limiters.

#### Attention!

Please note that the device is not designed for the connection of RF loads. Before switching the performance license has to be ensured.

# **Connection instructions**

The amplifiers of the MHP series can be mounted with the included clamps directly on the antenna mast near the antenna system. The connection sockets must be directed downwards, otherwise rain-water can penetrate.

### **Technical Data**

Frequency range: 144-146 MHz

Noise figure, typ.: >0.3 dB Amplification, typ. 24 dB

Admissible power: 1500W PEP

add. decoupling: 60 dB Insertion loss: 0.04 dB

Operation voltage: 13,8V – 15,0V

Current consumption, typ.: 500 mA

Connection standard: N – socket

DC input: Remote supply

Mast diameter: max. 58 mm

## Attention!

The MHP 200 must be used with a sequence-controller. Transmissionmode without a sequence-controller will damage the unit! The antenna input (socket "ANT") of the preamplifier should be connected with the antenna system via a short, low-noise coaxial cable like **Ecoflex 10** or **Ecoflex 15**: Please use simple or multiple  $\lambda/2$  lengths. The output of the amplifier (socket "TRX") is connected to the output of the transceiver or power amplifier.

Important!:Please take into account the velocity factor in the calculation of cable lengths and use identical cable types if possible. We recommend **Ecoflex 10** or **Ecoflex 15**. The supply of operating voltage is carried out at this model via a DC voltage on the feeding coaxial line. For safe Shifting at least 460mA at 12V required.

#### Attention!

Please use shielded cables due to reasons of the EMC, for example **Aircell 5**. The inner conductor is connected to the positive (+) pole, the shielding to the minus pole (-). To ensure safe switching operation at least 460mA at 12V are required.

#### 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 quarantee 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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