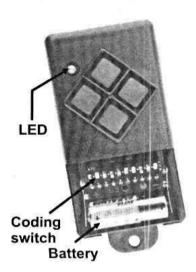
Operating Instructions AM Manual Transmitter MAHS433



With this purchase, you have bought a high- performance transmitter. The transmitter has been given general approval, and is therefore not subject to any registration requirements or further charges. In order to achieve the best operating performance and safety, please read the following instructions carefully.

1. Programming

So that the transmitter and receiver "understand" each other, the code must be set as follows:

- Remove the battery cover by sliding it in the direction of the keyring tab.
- Set your personal code at the coding switch using a ballpoint pen or similar. See Point 2 Coding / Function
- Close the battery cover.
- Set the code in the receiver.
 Carry out the learning process as described in the receiver operating instructions.

2. Coding / Function

The sender works with 387 million internal coding permutations, of which 59049 can be freely set using the 10-pin tristate coding switch. The greatest operating safety will be achieved by using a nonsymmetrical code. Moving all the switches in one direction, e.g. "+", "-" or setting them to the middle position is not permissible. The receiver checks the radio signal three times before the output is activated and can be used to control your equipment. To do this, the transmitter button must be held down for at least 2 seconds. If the battery has a sufficient charge, the LED on the transmitter lights up during this time.

3. Range

The greatest range will be achieved under the following conditions:

- optimum arrangement of the receiver antenna.
- aimed transmission in the direction of the receiver, free of obstacles, and with the highest possible transmitter position.
- the transmitter button must be held down for at least 2 seconds.

Typical ranges are as follows:

- 20-50 m from inside cars and buildings.
- 50-100 m in the open.

The range actually achieved when using the transmitter depends on the position of the receiver and the sender, and on the arrangement of the receiver antenna. The range can be affected by rain, fog, snow, local interference and proximity to concrete structures, other electronic equipment and electrical

power lines. The optimum arrangement of the receiver antenna is described in the operating instructions for the receiver.

4. Cleaning

A dirty transmitter housing can be cleaned using a damp cloth and a little washing-up liquid. No cleaner or water should however be allowed to get inside the unit.

5. Battery

The installed battery is empty when the LED goes out when pressing the transmitter button for about 2 seconds. Remove the battery cover and take out the empty battery for recycling. A new battery can be obtained from your specialist dealer. The battery used is a 12V alkalinemanganese round-cell battery, type 23A. The battery must be inserted observing the correct polarity! Note the symbols stamped inside the housing, and test the transmitter function immediately after inserting the battery. A battery inserted incorrectly will be discharged within an hour!

6. Technical date

Approval: to I-ETS 300 220
Frequency: 433.92 MHz
Modulation: Amplitude modulation
Coding: 387 million possible
codes 59049 freely selectable
Range: approx. 100 m in the open
Operating-voltage: 12V alkalinemanganese round-cell battery, type
23A

Power consumption: typically 12mA for transmitter operation
Dimensions: 82 x 39 x 17 mm
Weight:approx. 36 g incl. battery

7. Troubleshooting in the event of problems

The receiver does not react, but the transmitter LED lights up

- > The transmitter code has not been learnt by the receiver.
- > The transmitter button was not held down for 2 seconds.
- > The transmitter has been set to an incorrect receiver channel.

The LED on the transmitter does not light up

- > The battery is empty.
- The battery has been inserted incorrectly.
- > The transmitter is defective.

The range is too low

- > Poor receiver antenna arrangement.
- > Bad position or operating location of the transmitter.
- > The receiver battery is empty.

8. Safety instructions

The use of this remote control is only permitted for equipment and systems in which a fault in the operation of the transmitter or receiver will not cause any danger to persons or property, or where such a risk is prevented by other safety devices. The remote control of equipment or systems with an increased risk of accident (e.g. cranes) is prohibited!

For safe operation, the local safety conditions relating to the system in question must be observed!

Information on relevant safety instructions is available from efactories, the VDE and the relevant trade associations. The user should note that the remote control of equipment and systems with an increased risk of accident should only be carried out in direct visual contact with the equipment, if at all.

The transmitter should not be used or stored in areas subject to damp, steam, dust, sun, high air humidity or similar conditions. When operating the transmitter from a vehicle, it should not be stored where it is exposed to direct sunlight.

The transmitter should always be stored in a safe place. Impacts resulting from being dropped or falling can lead to damage to the transmitter, or reduction in the operating range.