

# **SHR-7 K1**

**Id.-Nr.: 0370.24**

## **MANUAL**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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**Caution:**

**Please read attentively this manual. Damages caused by misuse are not subject to warranty. The producer may not be responsible for further damages, caused indirectly by use of this equipment.**

**All changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

## **1. DESCRIPTION**

This receiver SHR-7 K1 is to function with the appropriate handheld transmitter SHT-7. The radius of action may reach several hundred meters in free field applications. Buildings and any other things will reduce seriously the functioning range.

The receiver checks the coded signal coming from the transmitter. In case of validity the relay output is activated as long as the incorporated timer is set to (the manufactureres time setting is 7,5 Min.).

The pushbutton 1 of the transmitter SHT-7 activates the relay contact and pushbutton 2 may interrupt the timerperiod before time out.

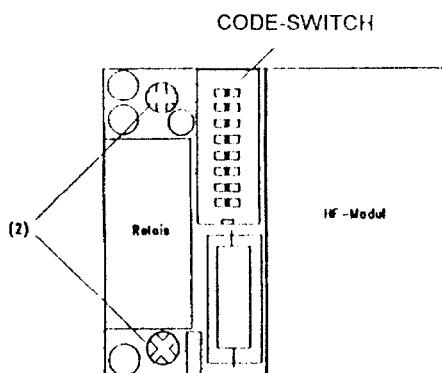
SH-7 acts in a frequency band that is less occupied by similar radio equipment than others. The especially designed RF-input-circuit makes sure, that only wanted signals are demodulated and assures a very high sensibility with the less possible disturbances.

## 2. OPERATING INSTRUCTIONS

### 2.1 Individual Code Setting

Open the housing by turning the 4 screws in the bottom left hand side. Take off the upper case. Now You may chose Your individual code by setting the 8 little switches which all have 3 different positions. That is why You have a choice of 6561 possibilities.

**Caution: The code setting has to be the same as in the corresponding transmitter.**



*picture 1: top view opened / position of code switch*

### 2.2 Choice of Receiver Function

If the manufacturer settings are to be changed You have to take off the PCB (open the screws (2)). On the lower side You will find another DIP-switch with 10 binary switches:

<u>switch No.</u>	<u>function</u>
1 at Pos. "ON"	The pushbutton 1 of the transmitter activates the relay contact.
2 at Pos. "ON"	The pushbutton 2 of the transmitter activates the relay contact.
3 at Pos. "ON"	The pushbutton 3 of the transmitter activates the relay contact.
4 at Pos. "ON"	The pushbutton 1 deactivates the relay contact before time out.
5 at Pos. "ON"	The pushbutton 2 deactivates the relay contact before time out.
6 at Pos. "ON"	The pushbutton 3 deactivates the relay contact before time out.
7 to 10	The setting of those four switches will define the timer delay from 0.1 Sec. to 60 Minutes (see table below):

<i>delay time</i>	<i>switch 7</i>	<i>switch 8</i>	<i>switch 9</i>	<i>switch 10</i>
60 Min.	ON	ON	ON	ON
30 Min.	OFF	ON	ON	ON
15 Min.	ON	OFF	ON	ON
<b>7,5 Min.</b>	<b>OFF</b>	<b>OFF</b>	<b>ON</b>	<b>ON</b>
3,7 Min.	ON	ON	OFF	ON
1,8 Min.	OFF	ON	OFF	ON
56 Sec.	ON	OFF	OFF	ON
28 Sec.	OFF	OFF	OFF	ON
14 Sec.	ON	ON	ON	OFF
7 Sec.	OFF	ON	ON	OFF
3,5 Sec.	ON	OFF	ON	OFF
1,75 Sec.	OFF	OFF	ON	OFF
0,88 Sec.	ON	ON	OFF	OFF
0,44 Sec.	OFF	ON	OFF	OFF
0,22 Sec.	ON	OFF	OFF	OFF
0,11 Sec.	OFF	OFF	OFF	OFF

remarque: the manufacturer setting is 7,5 minutes

If You want the "RF-pushbutton-mode" which means the activation of the relay contact as long as the transmitters pushbutton is held, You have to chose the shortest delay time of 0.11 Sec.

When switching inductances or other equipment producing RF-disturbances You should augment the timer delay up to 0.44 Sec. in order to overcome disturbances that cut the RF-communication with

the result that the relay switches off and after that the RF-communication is recognized once again, and so on.

### **2.3 The Antenna**

The receiver SHR-7 K1 is equipped with a Lambda/4-wire-antenna. After installation the antenna should not be wounded around other cables or should not be hidden by metallic objects.

After preparation of the receiver for Your application, please fix the PCB again and close the housing.

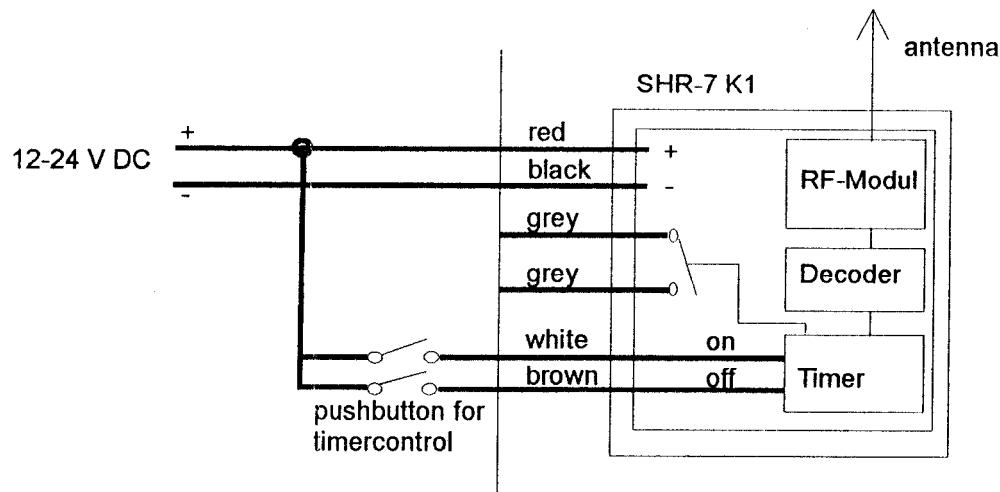
### 3. Connections

The supply voltage has to be connected to the red (+) and the black (-) cable.

The relays NO-contact is free of potential and may be connected with the two grey cables.

Take care of the maximum supply voltage as well as of the maximum switching power (see technical data).

To switch on the NO-contact without the handheld RF-transmitter You may connect the white cable by i.e. a pushbutton to the positiv supply voltage. The connection of the brown cable to the Supply voltage will switch off the NO-contact before time out.



picture 2: connections

#### 4. TECHNICAL DATA SHR-7 K1

frequency	:	433,920 MHz +/- 150kHz
demodulation	:	log. AM-demodulator
supply voltage	:	12 V DC to 24 V DC (max. 30V)
supply current	:	13 mA ( 25 mA with relay )
output	:	potential free relay contact
switching voltage	:	< 42 V
nominal sw. current	:	< 8 A
switching power	:	< 150 W / 2000 VA
temperature range	:	-20 °C bis +65 °C