



MINIATURE HF ARDF TRANSMITTER

MICROFOX HF

instruction manual

INTRODUCTION

This transmitter was especially designed for training purpose, foxoring competitions, promotion events and other special ARDF events. Frequency, transmitted code, keying speed and timing schedule are widely adjustable. Integrated antennas make the installation very easy - just hang it at a tree branch.

Small size and weight, low consumption and price, rugged house and easy operation - these features make this transmitter an ideal device for all competitors or trainers.

IMPORTANT!

Read carefully this manual before attempting to operate the transmitter.

Save this instruction manual. This instruction manual contains important safety and operating instructions for the **MICROFOX HF**.

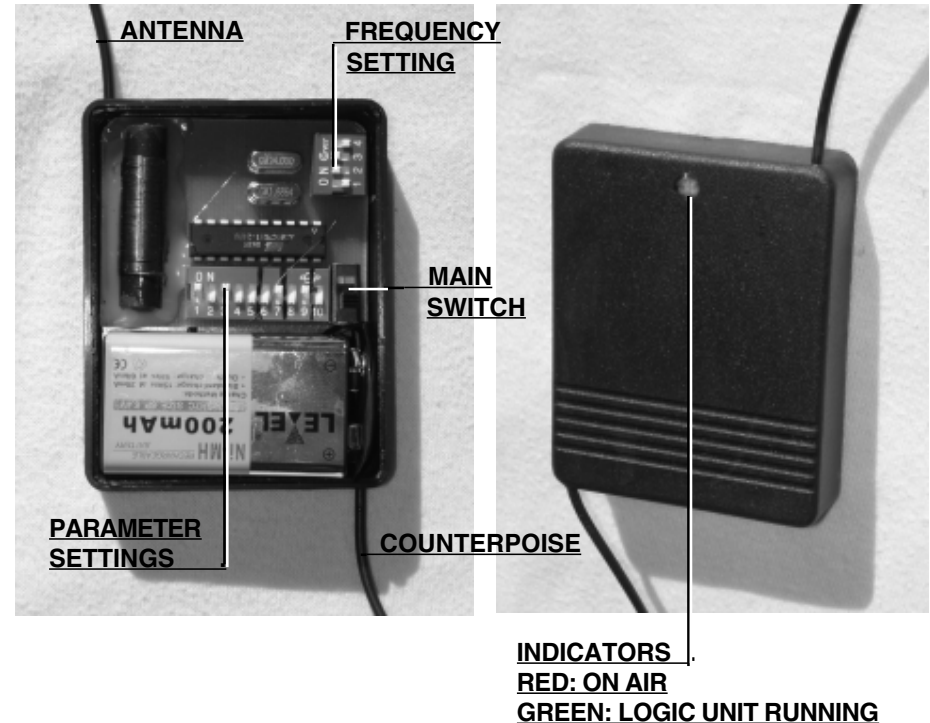
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UNPACKING

Accessories included with the MICROFOX HF:
- this manual

1 TRANSMITTER DESCRIPTION



2 PRECAUTIONS

Do not let exhausted batteries in the transmitter! If you do not intend to use the transmitter for a longer period, remove the battery. If the battery leaked out already, remove it immediately, wash the transmitter with a lots of warm water, then dry it thoroughly.

Do not connect any voltage sources except for the assigned battery to the transmitter!!

3 INSTALLATION

■ Unpacking

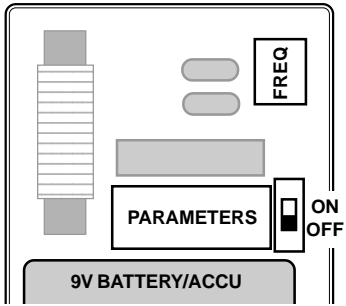
After unpacking, check carefully the transmitter. In the case of any damage do not use the transmitter and contact immediately the manufacturer.

■ Before operating

Connect 9V battery or accumulator.

■ Parameter settings

Open the transmitter house. Parameters (transmitted code, keying speed, timing schedule, operation mode and frequency) are set by DIP switch according to the following table:



freq 1234
3520 I110
3530 I000
3550 I101
3560 I010
3570 0100
3580 I111
3590 I001
3600 0110
3610 0000
3620 I011
3630 0101
3640 0010

TRANSMITTER PARAMETERS SETTING (I=ON, 0=OFF)			
code 12345	code 12345	code 12345	speed 67
A	0000	N I0110	MOE 01011 100 00
B	I0000	O 01110	MOI I1011 70 10
C	0I000	P I1110	MOS 00111 50 01
D	I1000	Q 00001	MOH I0111 35 11
E	00100	R I0001	M05 01111 timing 89
F	I0100	S 01001	MO 11111 60/240 00
G	01100	T I1001	30/120 10
H	I1100	U 00101	60/60 01
I	00010	V I0101	12/48 11
J	I0010	W 01101	
K	01010	X I1101	operation 10
L	I1010	Y 00011	continuously 0
M	00110	Z I0011	intervals I

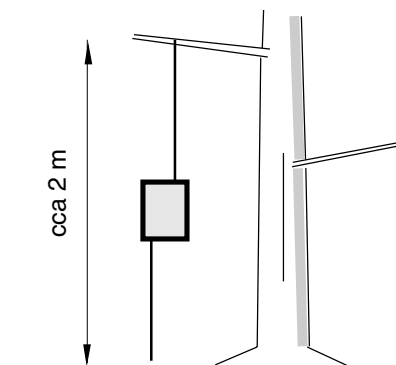
This table can be found also on the inner side of the transmitter cover.

■ Clock start

The transmitter is to be started at the beginning of its transmitting period by turning on (ON/OFF switch). Before this, you must set the timing (DIP switch 8-9) and select operation mode (DIP switch 10). Other parameters (frequency, code, keying speed) can be set any time, even while transmitting.

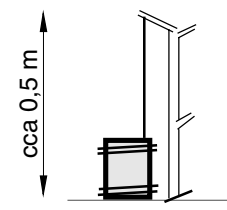
■ Transmitter installation

Unfold the antenna (both wires) and hang the transmitter so that the antenna (wire close to the indicators) is up and the end of lower wire is close to the ground. The whole radiator should be in free space (especially during the rain). With the antenna installed as this, the transmitter will be audible from the distance over 1 km.



■ Transmitter installation for foxoring

Unfold approx. 50 cm of antenna wire and wind the rest of both wires around the transmitter body. Install transmitter so that the transmitter body sits on the ground and the antenna stands up. The transmitter should be audible from 50-100m distance. Check the audibility with the receiver of average sensitivity. Be sure that the antenna is in the free air, otherwise the "final approach" of competitors could be very difficult!



4 MAINTENANCE

Keep the transmitter dry and clean. If the transmitter becomes wet, dry it by the clean cloth, open it and let it dry in a room temperature. **Never** use strong heaters!

If the transmitter becomes dusty or dirty, clean it with a brush or a dry, soft cloth. **Avoid** the use of strong chemical solvents such as benzine or alcohol to clean the transmitter.

The transmitter needs no maintenance above the mentioned procedures.

5 TROUBLESHOOTING

The following list is designed to help you correct problems which are not equipment malfunctions. If you are unable to locate the cause of a problem or solve it through the use of this list, contact the manufacturer.

■ The transmitter is not audible (green LED flashes)

Possible cause: the transmitter is out of the transmitting period or out of band. Note that only 12 combinations of FREQ DIP switches result in frequency within 3,5 MHz band.

Solution: check for the transmitter settings and start it again

■ The transmitter is not audible (green LED does not flash)

Possible cause: battery is exhausted or not properly connected

Solution: check or replace the battery

6 WARRANTY, SERVICE

Should this equipment malfunction under normal use, it will be repaired without charge for a period of one year from the date of purchase.

The customer shall not have any claim under this warranty for repair or adjustment expenses if the trouble is caused by improper, rough or careless treatment or mechanical damage, by a fire or other natural calamity or by improper repair or adjustment made by anyone other than manufacturer.

Any information, service or modifications are provided by the manufacturer:

Jiří Mareček, OK2BWN, Obřanská 593, CZ-664 01 Bílovice nad Svitavou
phone/fax +420 545227041, e-mail: marecek@sky.cz

7 SPECIFICATIONS

■ GENERAL:

Supply 9V battery or NiMH accumulator (6F22 size)
Operating period (using battery or accumulator 200 mAh)
continuously 6,5 hours
intervals 17 hours

Operating temperature range -10...+ 60°C
Storage temperature range -20...+ 60°C
Covering IP53
Dimensions 57 (W) x 73(H) x 22 (D) mm
Weight 50 g (without battery)

■ TRANSMITTER:

Carrier frequency PLL controlled (3,52 ... 3,64 MHz)
Modulation CW
Output RF power 50 mW
Antenna vertical wire 2 x 1,2 m (audible over 1 km)

■ LOGIC UNIT:

Transmitted codes: MOE, MOI, MOS, MOH, MO5, MO, A ... Z
Keying speed: 35,50,70 or 100 PARIS
Time schedules: 60 s transmitting/240 s space
30 s transmitting/120 s space
60 s transmitting/60 s space
12 s transmitting/48 s space
continuous operation
Time base stability: +-20 ppm (approx 2 s/day)



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