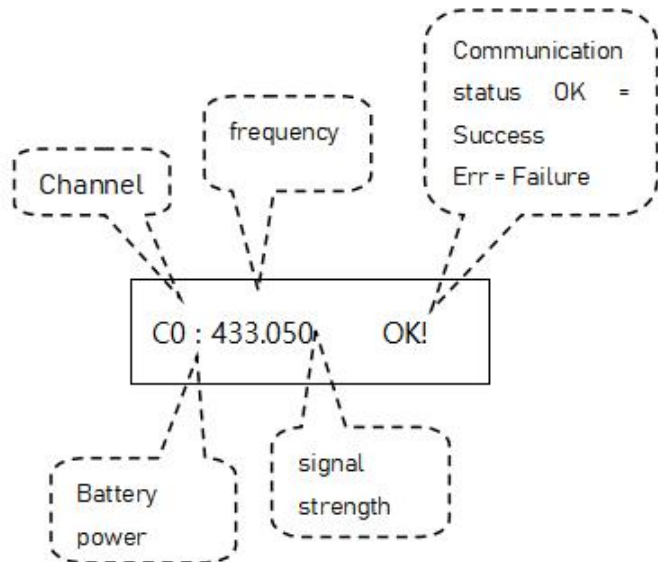


MKF-RF02

Normal operation display

C0 : 433.050	OK!
Bat:100	56



Set the main menu

> Joystick Setup Set Joystick Dir
> System Option Set Wireless
> Factory Test Exit

Joystick Setup: Sets/calibrates joystick center and edges.

Set Joystick Dir: Sets joystick direction.

System Option: Sets system parameters.

Set Wireless: Sets wireless parameters.

Factory Test: Performs factory testing.

Exit: Exits.

Press and hold S1+S2 to enter the main menu. Press and hold button 2 for 8 seconds to enter the menu interface.

S1: Move options.

S2: Confirm/Exit.

1. Joystick Setup

Set median

No1: Set joystick
Set Center Pos

Press S2 to confirm →

No1: Set joystick
Set center pos OK

Set boundaries

No2: Set joystick
Set Boundary

Press S2 to confirm →

No2: Set joystick
Set Boundary OK

Storage parameters

No3: Set joystick
Save data

Press S2 to confirm →

No3: Set joystick
--Success--

II. Setting the Joystick Direction (Set Joystick Dir)

Joy1:	X=0	Y=0
Joy2:	X=0	Y=0

Joy1: Joystick 1

Joy2: Joystick 2

X=0 X refers to the horizontal direction; 0 means the direction remains unchanged, 1 means the left and right directions are swapped.

Y=0 Y refers to the vertical direction; 0 means the direction remains unchanged, 1 means the forward and backward directions are swapped.

Button S1 moves the cursor >

Button S2 changes 0 or 1

After entering this interface, use S1 to move the cursor to the last data, then press the S1 button again to exit this interface.

III. Setting System Parameters (System Option)

In this interface, use the first joystick to modify parameters and move the cursor.

Joystick forward/backward: Move the cursor.

Joystick left/right: Change parameters.

Number of receivers

No1: Receiver

< 2 >

Receiver 1 address

No2: Receiver1-ID

< 1 >

Receiver 2 address

No3: Receiver2-ID

< 2 >

Set CAN baud rate

No4: Can Baud Rate

< 250K >

Set the CAN send period

No5: Can Tx Cycle

< 40ms >

Stored data

No6: Save Data

Enter&Back

Press the confirmation key S1 to save the data and return to the main menu.

Save Data

No7: Exit

Press the confirmation key S1 to exit and return to the menu (without saving parameters).

IV. Setting Wireless Parameters

In this interface, use the first joystick to modify parameters and move the cursor.

Joystick forward/backward: Move the cursor

Joystick left/right: Change parameters

Set frequency

No1: frequency OK!
Ch0: 433.050

No2: TX Power
< 13 >

Transmit power, 4-15, 15 maximum power

Set password

No3: Password
< 123 >

Stored data

No4: Save Data
Enter&Back

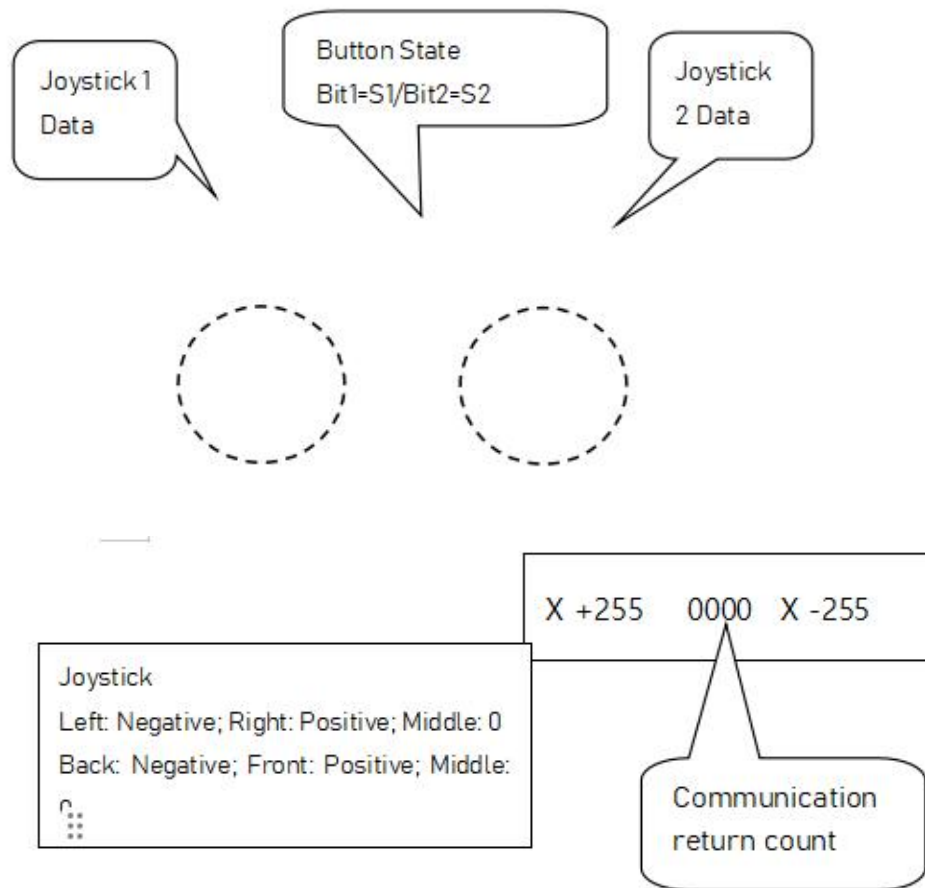
Press the confirmation key S1 to save the data and return to the main menu.

Save Data

No5: Exit

Press the confirmation key S1 to exit and return to the menu (without saving parameters).

V. Factory Test



System communication protocol for bidirectional communication and display

I. Transmission Control Protocol Format (Transmitter/Receiver):

1. Control commands, 50ms interval (Transmitter → Receiver)

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	Explanation:
Byte0	0XAA								Head
Byte1	S2R	S2L	S2B	S2F	S1R	S1L	S1B	S1F	direction
Byte2	S1-X/0-255								
Byte3	S1-Y/0-255								
Byte4	S2-X/0-255								
Byte5	S2-Y/0-255								
Byte6	button								Key value
Byte7	The checksum CH = Byte1 + Byte2 + Byte3 + Byte4 + Byte5 + Byte6 + Byte7 + Byte8, excluding the header, is the least significant byte of the sum.								and validation

2. Request ACK command, interval 100ms (transmitter → receiver)

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	Explanation:
Byte0	0XA5								Head
Byte1	S2R	S2L	S2B	S2F	S1R	S1L	S1B	S1F	direction
Byte2	S1-X/0-255								
Byte3	S1-Y/0-255								
Byte4	S2-X/0-255								
Byte5	S2-Y/0-255								
Byte6	button								Key value
Byte7	The checksum CH = Byte1 + Byte2 + Byte3 + Byte4 + Byte5 + Byte6 + Byte7 + Byte8, excluding the header, is the least significant byte of the sum.								and validation

3. Return ack (receiver → transmitter)

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	Explanation:
Byte0	0XF5								Head
Byte1	01 = Frequency ACK / 02 = System Parameter ACK / 09 = Control ACK								direction
Byte2	01								Address
Byte3									Return data 2
Byte4									Return data 3
Byte5									Return data 4
Byte6	Cycle count 0-255								Loop count
Byte7	The checksum CH = Byte1 + Byte2 + Byte3 + Byte4 + Byte5 + Byte6, excluding the header, is the least significant byte of the sum.								And check

II. Configuration Parameters

1. Set Channel/Offset + Channel (Transmitter/Receiver)

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
0XA7	01	PreqOffset1 highest position	PreqOffset2	PreqOffset3	PreqOffset4 least significant bit	Channel	CH
Hear	Frequency	frequency offset				Chanel	Validity and

The checksum CH = Byte1 + Byte2 + Byte3 + Byte4 + ... + Byte14 (excluding the header, the least significant byte of the sum of all other bytes).

2. Other parameter settings (transmitter and receiver)

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
0XA7	02	Rfpower	code	id	Canbaud	period	CH
Head	2 = System parameters	Transmit power	Encoding	Receive address	CAN baud rate	CCAN transmission period	Parity

The checksum CH = Byte1 + Byte2 + Byte3 + Byte4 + ... + Byte14 (excluding the header, the least significant byte of the sum of all other bytes).

3. The receiver receives the above parameter settings and returns ACK (Receiver → Transmitter)

F5 Ack 01 00 00 00 00 CH

Power-on connection command

1. Transmitter power-on request (Transmitter → Receiver) /Start_Inq

Data format: F5 07 01 00 00 00 00 CH

The receiver receives it and replies with ACK(7)

3. Transmitter sends power-on command /StartWork

Data format: F5 08 01 00 00 00 00 CH

The receiver receives it and replies with ACK(8)

4. Power-on confirmation /WorkOk (Transmitter → Receiver)

Data format: F5 09 01 00 00 00 00 CH

The receiver receives it and confirms successful power-on.

The receiver receives it and replies with ACK(9)