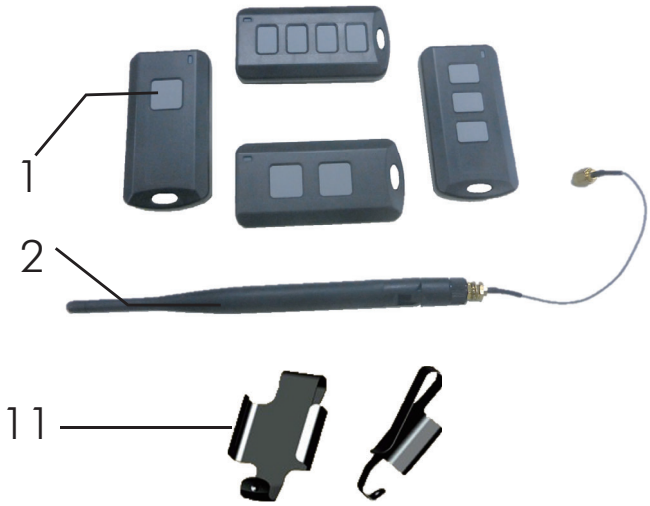
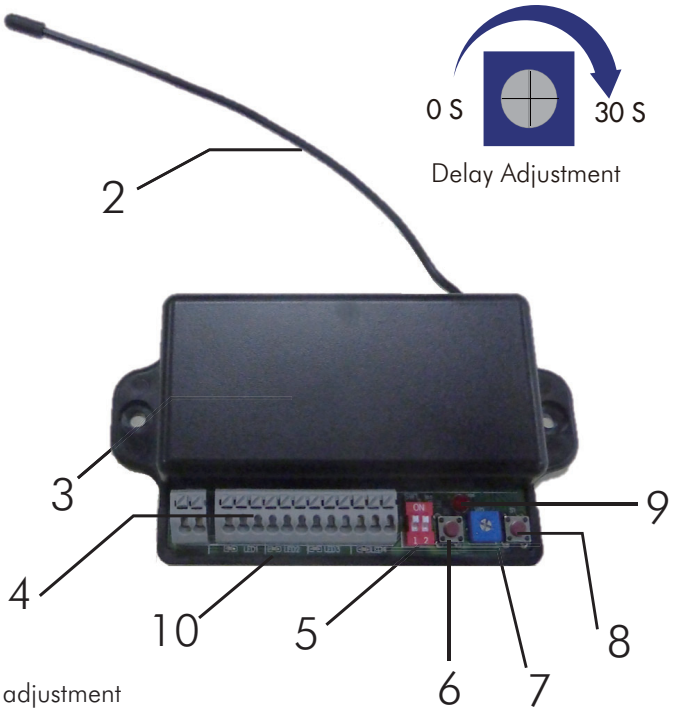
IDS433/IDRC433 K1/K2/K3/K4
Industrial Remote Control

Other use of the device is outside the permitted purpose and can not be guaranteed by the manufacturer. The manufacturer cannot be held responsible for incorrect installations or innapropriate adjustments of the sensor.

DESCRIPTION





1. Transmitter
2. Extended antenna
3. Receiver
4. Terminal strip
5. Dip-switch
6. Learn with delay button
7. Potentionmeter for time adjustment
8. Learn W/O delay button
9. Indicator
10. LED*4
11. Belt clip

Specifications are subject to changes without prior notice.
All values measured in optimal conditions.

TECHNICAL SPECIFICATION

Frequency:	433MHz
Emitted radio power:	⩽7 dBm (Transmitter)
Current consumption:	32mA(Transmitter) 40mA (Receiver)
Contact range:	1.0 A @30 VDC
Power supply:	3VDC(CR 2032 3V battery*2), 50,000 cycles (Transmitter) 9~30 VDC/AC (Receiver)
Operating temperature:	-30℃ to 70℃
Max NO. of programmed units per receiver:	100 Transmitters
Modulation:	GFSK

PRECAUTION

1. Ensure compliance with all applicable safety standards during installation.
2. Shut off all power going to work area before attempting any wiring procedures.
3. Maintain a clean& safe environment when working in public areas.
4. Ensure compliance with all laws during installation and tests.
5. Constantly be aware of pedestrian traffic around the area.
6. Circuit boards are vulnerable to damage by electrostatic discharge. Before handling ensure you dissipate your body's charge.
7. Always check placement of components before powering up so that moving parts will not catch any wires or cause damage to equipment.
8. Do not attempt any internal repair of the components. All repairs and/or component replacements must be performed by BEA, Inc. Unathorized dissambly or repair:
   1. May jeopardize personal safety and may expose one to the risk of electrical shock.
   2. May adversely affect the safe and reliable performance of the product resulting in a voided warranty.

PROGRAMMING

1. Installation instructions

The status of dip switch should be configured well before starting learning process. After learning, the relay could only start working when transmitter is on one type of output (no matter is for delay or non-delay).

2. Dip switch setting

Mode 1
By pressing the key on the transmitter, the LED on the receiver will blink twice and then switch off, while relay will be activated for 0.5 S.

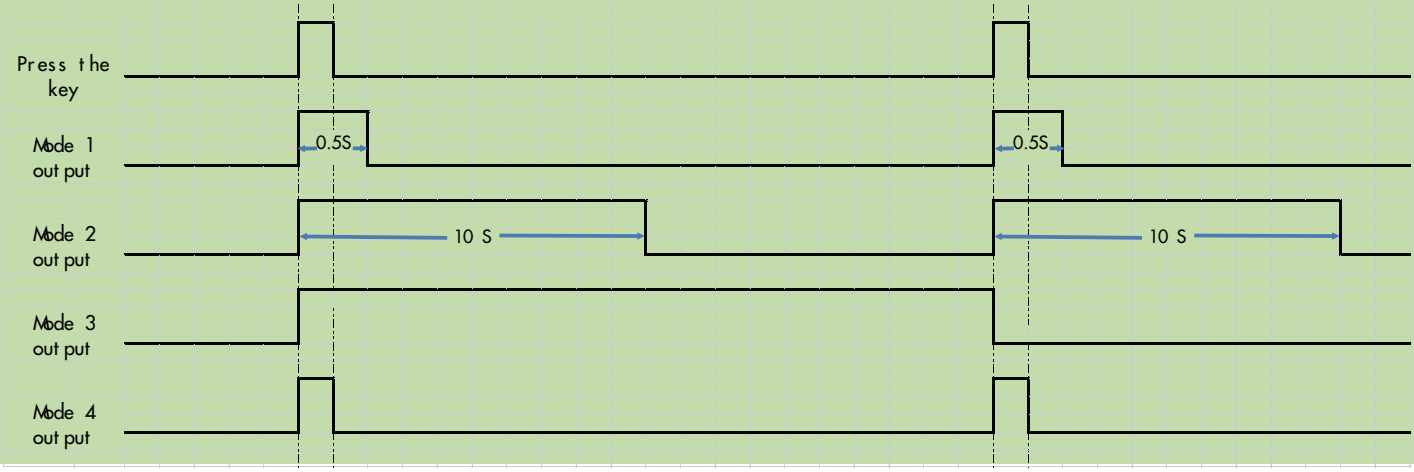
Mode 2
By pressing the key on the transmitter, the LED on the receiver will blink twice and then switch off, while relay will be activated for 10 S.

Mode 3
By pressing the key on the transmitter, the LED on the receiver will blink twice and then switch off, while relay will be activated. By pressing the key on the transmitter once again, the LED on the receiver will blink twice and then switch off, while relay will be deactivated.

Mode 4
By pressing the key on the transmitter, LED on the receiver will keep blinking, while relay will be activated. By releasing the key on the transmitter, the LED on the receiver will blink twice and then switch off, while relay will be deactivated.

* In delay mode, Mode 4 equals Mode 3.

The timing diagram below shows the logical between transmitter and the corresponding output in different modes.



3. Learning Mode

1. By pressing the delay learning or non-delay learning key on the receiver, the indicator and the corresponding LED on the receiver will be lighted up, which means it enters learning mode.
2. By pressing a key on transmitter, the key could be learnt by the relay which LED is on. It indicates learning successfully as the indicator blinks once and goes off, relay disconnects and quits learning mode automatically.
3. In the learning mode, switch relays in turn by pressing the delay or non-delay learning key on the receiver.
4. In the learning mode, if there isn't any action for 10S, the receiver will quit learning mode automatically.

NOTICE

1. One receiver can learn 100 keys at most.
2. Each key could be learnt by more than one receiver.
3. For one receiver, one key could only be learnt by one relay of the receiver.
4. Before entering the learning mode, delay time should be configured via potentionmeter on receiver.

4. Delete Mode

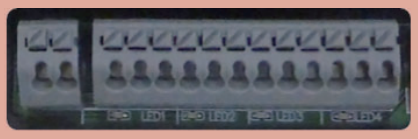
Delete one single key

1. Press non-delay learning key and delay learning key at the same time, until the indicator on receiver start to blink, which means receiver enters "delete one single key mode".
2. Press the key on the transmitter to delete it.
3. Repeat Step 2 within 10S to delete another key. If there isn't any action for 10S, the receiver will quit delete mode automatically; or press non-delay learning key and delay learning key once more to quit delete mode.

Delete all transmitters

1. Keep pressing non-delay learning key and delay learning key at same time;
2. The indicator will be lighted up after blinking 9 times. Then release non-delay and delay learning key.
3. The indicator will blink 4 times, which means all transmitters have been deleted.

WIRING



1	2	3	4	5	6	7	8	9	10	11	12	13	14
power supply		relay1			relay2			relay3			relay4		
9-30VDC/AC(non-polarized)		COM1	NC1	NO1	COM2	NC2	NO2	COM3	NC3	NO3	COM4	NC4	NO4

LED / INDICATOR

1. Receiver

a. When power up the receiver, the indicator will blink 3 times and then switch off.
b. During learning cycle the indicator and the LED of the learning relay will keep lighting , and then switch off after learning successfully.
c. LED will blink 5 times when the memory is full (receiver has learnt 100 transmitters).
d. The indicator will blink 3 times after one single key is deleted successfully; and it will blink 4 times when all the transmitters are deleted successfully.
e. Indicator will blink 2 times when receive the signal from a learnt key; indicator will blink quickly when receive the signal from an un-learnt key.

2. Transmitter

a. The LED will blink 3 times when power up.
b. The LED will blink 3 times when battery voltage is low (< 2.1V).
c. The LED will blink 5 times when battery voltage is extremely low (<1.8V).

PRODUCTS LIST

Transmitter	IDRC 433 K1	Transmitter with one key	Receiver	IDS 433	Standard receiver
	IDRC 433 K2	Transmitter with two keys		IDS 433+	Receiver for extended antenna*
	IDRC 433 K3	Transmitter with three keys	Accessories	IDATN	Extended antenna
	IDRC 433 K4	Transmitter with four keys		Belt clip	Transmitter belt clip, convenient to fix IDRC 433 K on the belt.
* : Extended antenna needed					

BATTERY REPLACEMENT

CAUTION: There is risk of explosion if an incorrect battery type is used. Dispose of used batteries according to its instructions.

	Transmitter
1	Remove three screws from back of transmitter.
2	Separate housing and install a fresh 3-Volt (Type CR2032) battery making sure to observe proper polarity.
3	Reassemble housing and replace screws.
NOTE: Don't throw used batteries away with the general trash. Discard per your local municipal laws and regulations.	