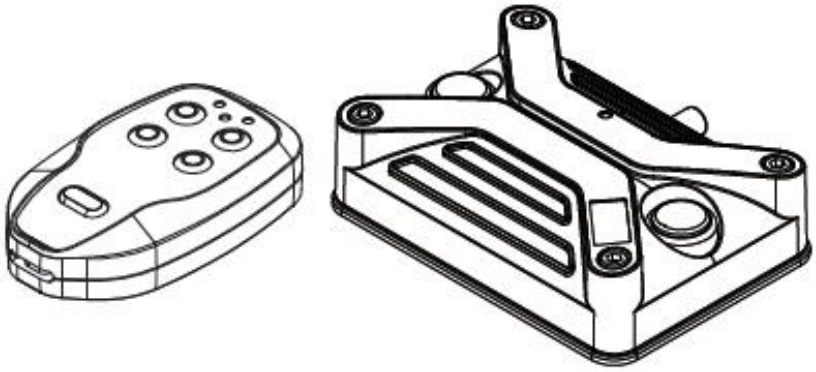
INMOTION Controls, Inc.

X receiver

N400(TC4) Series



Basic Installation Instructions

【H】(TC4)_2.4Ghz

JAN 2021

Contents

Guarantee, service, repairs and maintenance

Inmotion Controls, Inc. products are covered by a guarantee/warranty against material, construction and manufacturing defects. During the guarantee/warranty period, Inmotion may replace the product or faulty parts. Work under guarantee/warranty must be carried out by Inmotion Controls, Inc.

The following are NOT covered by the guarantee / warranty:

- Faults resulting from normal wear and tear
- Parts of a consumable nature such as pushbuttons, relays, fuses etc.
- Products that have been subject to unauthorized modifications
- Faults resulting from incorrect installation and use
- Condensation and water damage

Maintenance:

- Repairs and maintenance must be carried out by qualified personnel.
- Use spare parts from Inmotion Controls, Inc. only.
- Contact your representative if you require service or other assistance.
- Keep the product in a dry, clean place.
- Keep contacts and antennas clean.
- Wipe off dust using a slightly damp, clean cloth.

INTENDED USE

The HS and HM Receiving units are intended as the control unit interface for the Radio Remote Control for Hoists, Cranes, Monorail and Material Handling equipment.

OPERATING METHODS

The receiving unit accepts signals from the Radio Transmitter and processes them to open or close specific relays for Hoist, Trolley, Bridge and various auxiliary functions.

Chapter 1: Customer Information

Thank you for purchasing an Inmotion Controls, Inc. radio remote control.
READ ALL INSTRUCTIONS CAREFULLY BEFORE MOUNTING, INSTALLING AND CONFIGURATING THE PRODUCT.
This manual includes general information concerning the operation of the radio remote control transmitter.

General Information on Safety

•Persons under the influence of drugs and/or alcohol and/or other medicine that impairs their reaction may not assemble, disassemble, install, put into operation, repair or operate the product.

•All conversions and modifications of an installation/system must conform to the relevant safety requirements. Work on the electrical equipment must be performed only by qualified, authorized personnel and in accordance with the relevant safety requirements.

•In the event of malfunctioning, visible defects or irregularities, the product must be stopped, switched off and the relevant master switches must be switched off.

Used Symbols and Definitions for Warnings	
	Warning against hazardous situation Do not use in high humidity and heavy dust environment. Protective pouch is highly suggested to use in high humidity and heavy dust environment. Avoid using in acid and alkali environment.
	Warning against electrical voltage

FCC Part 15 FCC ID : RX-(RN489896162-B0129) / TX-(RN489896162-B0134)

* 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.

* You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

European Union Regulatory Notice

This device bearing the CE marking is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. This device complies with the following harmonized European standards.

Safety: EN 60950-1:2006+A11:2009+A1:2010+A12:2011

EMC: ETSI EN30 1489-1 V1.9.2 2001-09; ETSI EN 301 489-3 V1.4 .1 2002-08

Radio: ETSI EN 300 220-1 v2.4.1: 2012; ETSI EN 300 220-2 v 2.4.1: 2012

The following CE marking is valid for EU harmonized telecom products.

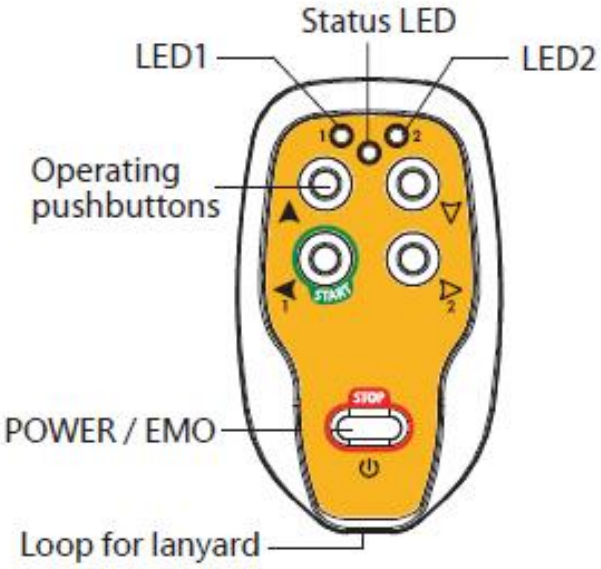
CE 0560

IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Chapter 2: General Description

Transmitter



Technical data

TRANSMITTER

Frequency range	2.4GHz
Modulation method	LoRa
Typical operating range	250 M
Control system	PLL
Antenna impedance	50Ω
Typical response time for Stop command and commands	50mS~100mS
Power supply	LR03 (AAA)1.5V x2
Antenna	Internal
Average power consumption	16mA@DC3V (default setting)
Radio-frequency power	<10dBm (default setting)
Operating and storage temperature	(-20°C)~(+55°C) / (-40°C)~(+65°C)
Protection degree	IP65
Dimensions	3.11" × 1.8" × 0.93"
Weight (including battery)	Approx. 2.75 ounces
Housing material	PA6(30% GF)

STOP, ON/OFF switch

The N series transmitter has a STOP button on the button side.
The STOP switch has 2 functions:
1. Press to "STOP".
2. Press 5 secs for turning ON and OFF the transmitter.

Start the transmitter.

1. Press ⏻ 5 secs for turning ON the transmitter.
2. Press the " START" button.

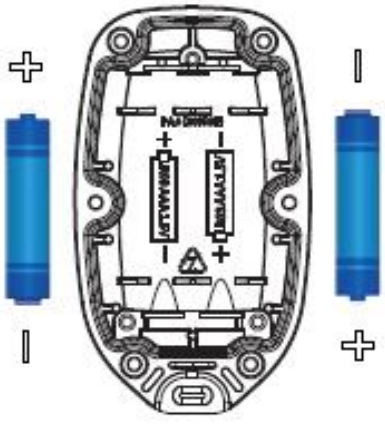
Turning the transmitter off

Press ⏻ 5 secs for turning OFF the transmitter.
The transmitter turns off. All relays deactivate.

Change the batteries

BATTERY TYPE: 2 x 1.5V(LR03 AAA)

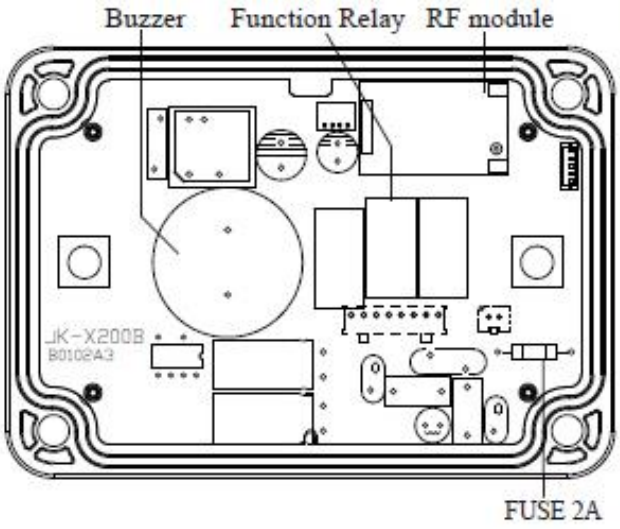
1. Remove the battery cover
2. Remove both batteries.



Chapter 3: Receiver

Receiver

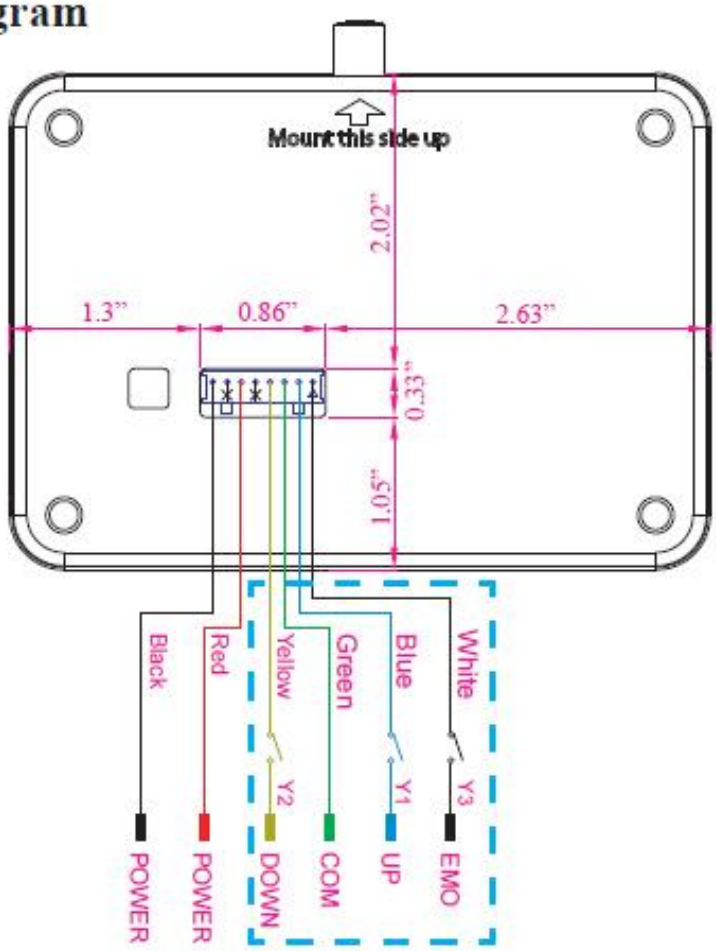
WARNING! The receiver must NOT be opened by any other than a qualified installer. Make sure to turn the electricity off before opening the receiver.



Technical data

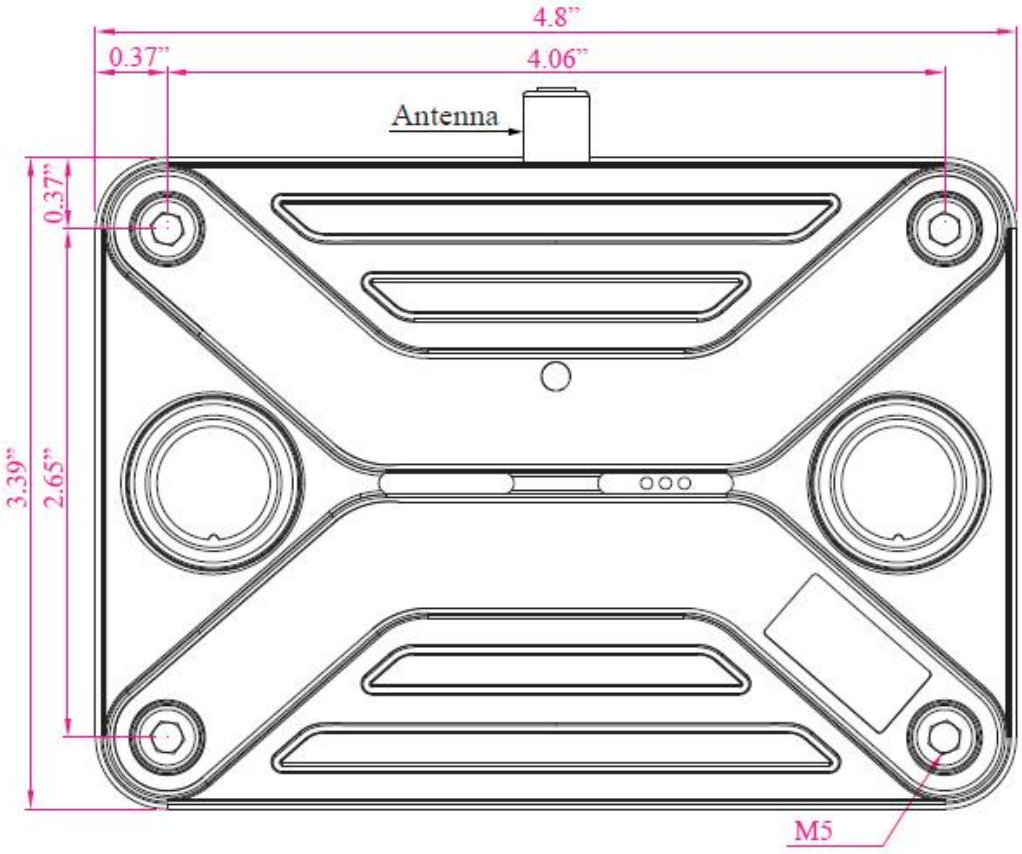
Frequency	2.4GHz
Modulation method	LoRa
Sensitivity	-112dBm@baud1.2K bps
Control system	PLL
Antenna impedance	50Ω
Typical response time for Stop command and commands	50mS~100mS
Power supply	Specified on the receiver
Antenna	Internal (External as optional)
Standby power	16mA@AC220
Operating and storage temperature	(-20°C)~(+55°C)/(-40°C)~(+65°C)
Protection degree	IP65
Dimensions	8.7"×3.4"×1.31"
Weight	Approx. 7.76 ounces
Housing material	PA6(30% GF)

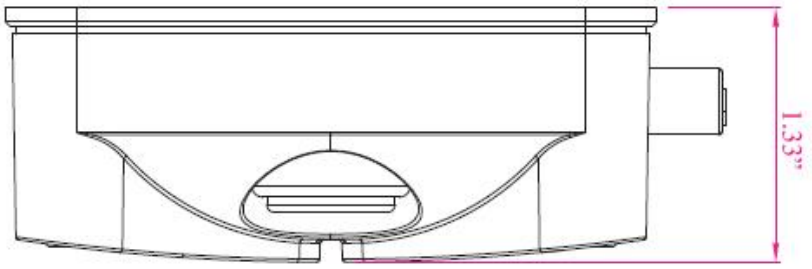
Wiring Diagram



Chapter 3: Receiver

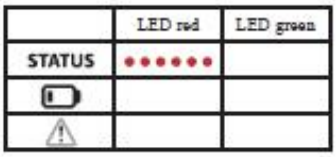
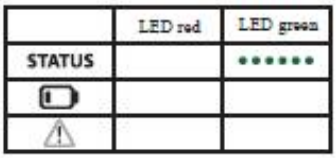
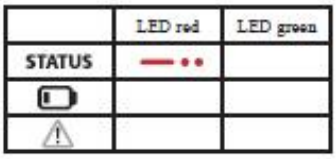
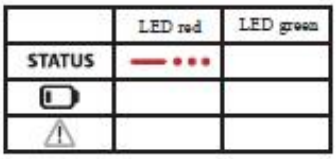
*** Actual Size ***





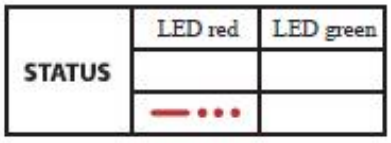
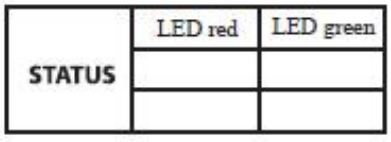
Chapter 4 : Troubleshooting

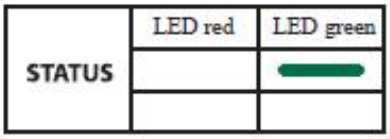
Transmitter

LED (● SHORT, — LONG)	Failure Analysis	Solution
	Corrosion on the battery - terminals. - Low battery. - Damage batteries.	- Clean the battery terminals -Replace the batteries
	- Transmitter is not communicating with the receiver.	- Check the power supply of the receiver. - Check the fuse in the receiver
	- Push button damaged.	- Contact the dealers.
	- RF error	-Check the antenna and make sure it is not loose. -Change a new RF module. -Contact dealer

Receiver

Should an error occur, the LED of the receiver will indicate the cause.

LED (● SHORT, — LONG)	Failure Analysis	Solution
	-RF error	-Check the antenna and make sure it is not loose. -Change a new RF module. -Contact dealer
	-Receiver is not powered.	-Check the fuse. -Check the power supply.



The receiver is receiving data.

Lanyard

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