



# **ANAND SYSTEMS-** **Radio Remote Control**

## **1. Description:**

The anand system transmitter is designed to transmit command instructions for controlling industrial cranes, hoists and machines.  
12 control commands plus the integrated emergency button are available to the operator.

The radio remote control system consists of the transmitter, internal alkaline batteries, and a receiver. The transmitter housing with integrated antenna is made of impact resistant plastic.

## **1. General Safety Instructions:**

Radio controls facilitate and increase the operating efficiency of cranes and machines. Nevertheless, the operator must thoroughly understand and be in a position to properly use a radio control system

- Read the operating instructions manual carefully and thoroughly before working with the transmitter for the first time.
- The operator undertakes to strictly adhere to the instructions and proceedings described in this manual, as well as to follow the general rules and regulations for worker safety and accident prevention. Ignoring any such instructions or regulations could pose a fatal threat to the operator or others.
- Keep this manual on location and readily available at all times.
- Anyone who is under the influence of drugs, alcohol or medication that has a detrimental effect on a person's reactions may at no time commission, operate, maintain or repair the transmitter.
- Before switching on the transmitter ensure that no-one is or can be endangered by the initiated operation.
- With the first signs of any malfunction related to the operative safety and reliability of the device the operator must immediately shut down or not activate the transmitter. For the purpose of the present manual "shut down" implies :
  - switching OFF the transmitter,
  - storing the transmitter in a safe place and ensuring no unauthorized access,
  - de-energizing the receiver,
  - unplugging the connection cable on the receiver.
- Defects must be repaired and sources of interference must be removed immediately.

# Operating Instructions

## Radio Remote Control

[www.anandcontrol.in](http://www.anandcontrol.in) / [www.cranescada.com](http://www.cranescada.com)



- Use the transmitter cautiously and properly, in particular when using a transmitter to radio control a machine or crane for the first time.
- **Make sure the power to the receiver is OFF, while opening the receiver cover for maintenance or for any other reasons.**

## 2. Operator Safety Instructions:

- Before beginning crane operation, position yourself so that you have a clear and complete overview of the working radius of the crane or machine.
- To operate, hold the transmitter securely in your hand.
- In case of an emergency or any disturbances within the working range of the crane or machine, switch the transmitter off immediately by pressing the Emergency STOP pushbutton. Should the transmitter show signs of technical failure or breakdown, disconnect the radio control system immediately.
- Switch the transmitter OFF during breaks and after finishing work to avoid any mis-operation of crane or machine by unintended activation of the operator controls.
  - These precautions are particularly important whenever changing your position or climbing over an obstacle.
- Never leave an activated transmitter unattended. The operator undertakes to follow and comply with the authoritative regulations for worker safety and accident prevention.
- Transmitter should never be mechanically blocked on or off. When not in use, the operator should turn the transmitter off. A secure storage space should be provided for the transmitter unit, and the transmitter unit should always be placed there when not in use. This precaution will help prevent unauthorized people from operating the material handling equipment.

## 3. Operation:

### Switching ON the Transmitter

1. Before commissioning the transmitter or initial operation, be sure that the transmitter is fully charged (3.1V DC). The battery supplies the necessary working voltage (1.8 - 3.1 V DC).
2. Press the START push button to the 1<sup>st</sup> step and release it.
3. The green light flash will appear, i.e the transmitter is operable.

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## Important Information:

After switching ON the transmitter **and** before operating the crane or machine you must always:

- test the operativeness of the STOP pushbutton.

A radio connection to the receiver is established when the red LED on the receiver is illuminated (see radio status panel of the receiver), i.e. the radio system is ready to operate and the control commands may be activated by the transmitter.

## Receiver Status Indications:

TYPE	DISPLAY TYPE	INDICATION
1	BIG RED LIGHT ON	START BUTTON PRESSED
2	GREEN LIGHT FLASHING	SIGNAL IS RECEIVING (RELAY ACTIVATION)
3	BIG RED LIGHT OFF	STOP BUTTON PRESSED





**Receiver Power Indications:**

TYPE	DISPLAY TYPE (SMALL RED LED)	INDICATION
1	On	Power to receiver
2	Off	No power to receiver

**Switching OFF the transmitter**

To switch off the transmitter completely follow these instructions:

- Press the STOP pushbutton to the 1<sup>st</sup> step .

**Transmitter:**





### 3.1 Changing Batteries:

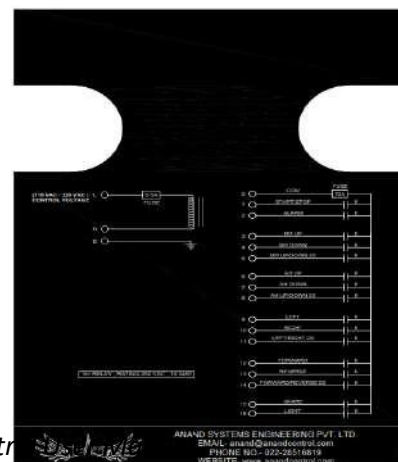
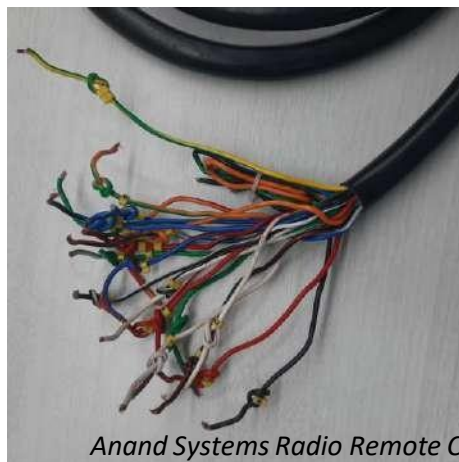
Change transmitter batteries (“AA” alkaline battery x 2 ) by unscrewing the battery Cover located on the backside of the transmitter. During battery installation make sure the batteries are installed correctly , with “+” to “+” charge and “-“ to “-“ charge. Also make sure the screw is tightened after battery installation to avoid water, moisture,dirt, grease, and other liquid penetration. Always replace both batteries at the same time. Never replace on single battery.



### 4. Wiring Connections:

Wiring should be done according to the numbers and letters provide on each wire.

- For 85-285 VAC power supply, wire #L corresponds to Line (85-285 VAC LINE) and wire #N corresponds to NEUTRAL . Wire #E is for EARTHING/GROUND. EARTHING is mandatory for Anand System Radio Remote Controls.
- Wire #0 is set to be common supply upto 24 VDC or upto 250 VAC. It will become a latched output on any relays on receiver that are selected by transmitter.





## 5. Maintenance:

The following points, should be taken into consideration :

- Ensure that the STOP pushbutton works smoothly. Mortar residue and contaminants of any kind can reduce or fully block the switch function.
- Never use a high-pressure cleaner or steam jet cleaner to "clean" the transmitter. Use a soft brush or cloth only .

## 1. In the Event of a Fault



### **Warning :**

Never operate a crane or machine with a faulty or defective radio control system.

1. Never try to repair the transmitter electronics . Opening the transmitter housing terminates the manufacturer guarantee.
2. Send any defective or faulty equipment to you local distributor or to the manufacturer. They are experts and have the necessary know-how and OEM spare parts.
3. Always send both transmitter and receiver and enclose a detailed description of the problem.
4. Do not forget to enclose your address and telephone number so that we can get in touch with you quickly if necessary.