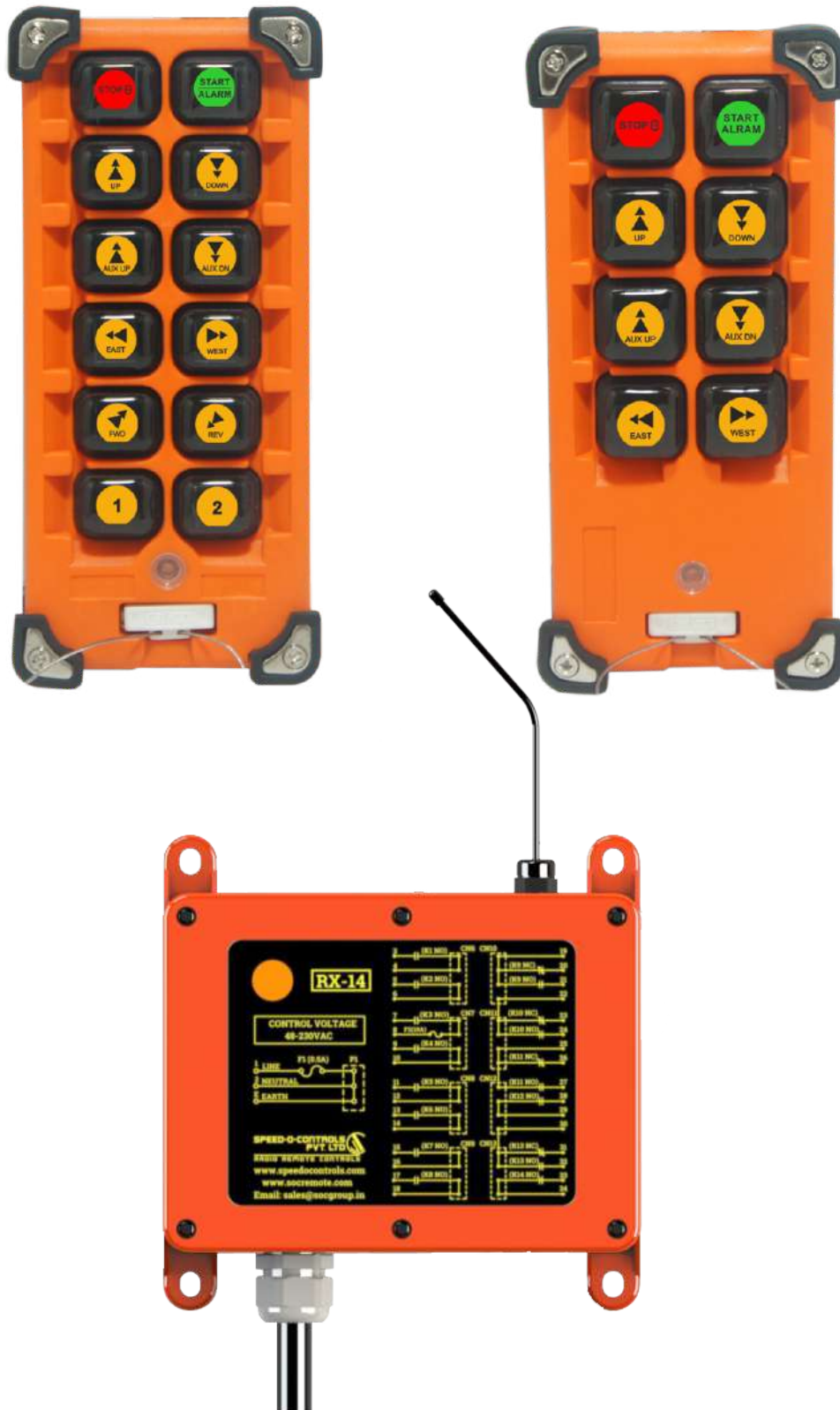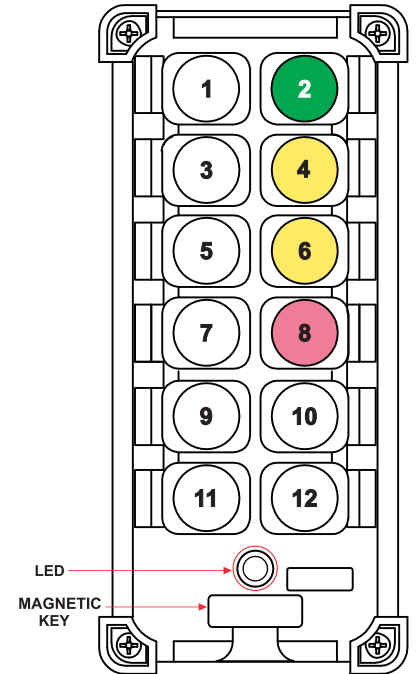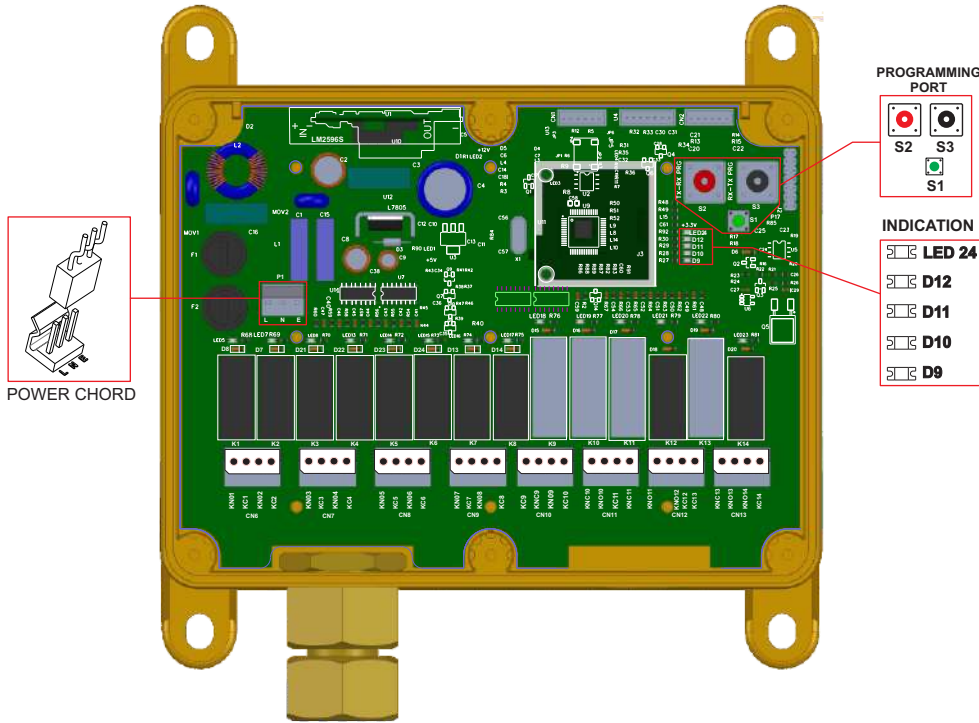# IMPACT

Radio Remote Control

SPEED-O-CONTROLS
PVT. LTD.
RADIO REMOTE CONTROLS

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.

POWER CHORD
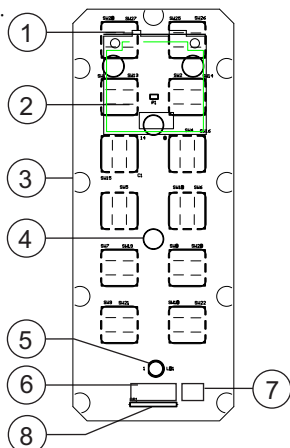
PROGRAMMING PORT

S2   S3

S1

INDICATION

LED 24
D12
D11
D10
D9

LED

MAGNETIC KEY

TRANSMITTER

Technical Data

	RECEIVER	TRANSMITTER
RF Sensitivity	-117dBm at 0.6kBaud	-
RF Power Output	10 mW	-
Number of Relays	10 + 2 (Start/Alarm)	-
Relays	Resistive load: 5A at 250VAC	-
Power Requirements	110 VAC / 230 VAC	-
Fastening	By means of Nuts & Bolts	-
Current Consumption	-	18 mA (Unidirectional)
Standby Consumption	-	1 mA
Battery Capacity & Type	-	2 nos, AA size Alkaline, 3.0V
Dimensions (mm)	186 (H) x 186 (B) x 83 (W)	165 (H) X 75 (W) X 50 (B)
Weight	Approx 0.8 Kg	500 gms (without battery)
Modulation	Frequency Modulation	
Operating Freq.	433-434 MHz	
Channel Spacing	25 KHz	
Operating Temp.	-20 C to +70 C	
Operating Range	100 meters	
Protection Rating	IP 65	

Pairing RX TO TX

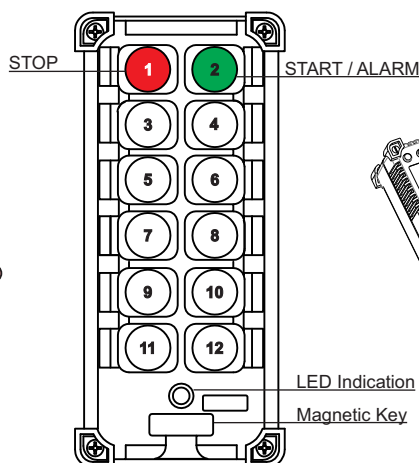| STEP	ACTION	INDICATION
STEP 1: Transmitter into pairing mode	• Remove battery & Magnetic Key Press 4 + 6 Push Buttons on transmitter simultaneously & insert battery	• The transmitter Red and Green LED shall blink alternately 3 Times • Tx LED shall start blinking RED.
STEP 2: Receiver into pairing mode.	• Switch off receiver Power / Press Reset (remove power chord). OR • Keep S3 pressed & switch on receiver power / release reset	• D 9 Red LED glows constantly. • D 10 Green LED starts blinking fast. • Wait until D 10 glows constantly.
Step 3: Transmitter Confirmation	• When D 10 glows constantly, press 8 button in transmitter & release the switch S3 in receiver.	• Tx LED shall blink Green. • Rx LED D9 shall stop blinking. • Rx LED D10 shall Glow constantly • Rx LED D12 shall Blink fast
Step 4: Receiver Confirmation	• Release Transmitter 8 Button. • Press Receiver S2 Button for confirmation.	• Tx LED shall blink Red Twice and Green once in Loop. • Pairing is complete.
Step 5: Reset the system.	• Remove Transmitter Battery and Reinsert • Remove Receiver Power and reconnect.	• Tx battery sequence should start. • Rx D10 should glow constantly and D12 should blink.

The IMPACT series transmitter comes in 2 versions, featuring 8 or 12 pushbuttons.
The transmitter features 1-step and 2-step pushbuttons.
Both steps of each pushbutton can operate different the speeds of a motor,
Step 1 : Slow,
Step 2: Fast.

Transmitter, PCB board

(1) Antena
(2) Wireless RF Module
(3) Encoder PCB
(4) Fixed Holes
(5) LED Indications
   (a) Low Battery ⬤⬤⬤⬤
   (b) Error ⬤
   (C) Status ⬤⬤⬤⬤
(6) Communication terminal
(7) Battery connector
(8) EMS Magnetic Key

STOP
START / ALARM
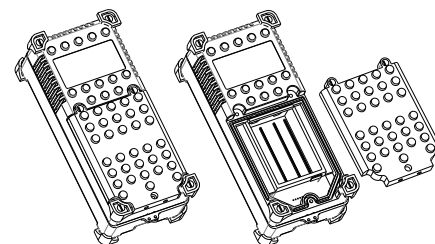LED Indication
Magnetic Key

Changing the batteries
Use Duracell Alkaline 'AA' batteries
(1.5v x 2, 1500mAH)
OR
Use NiMH Rechargeable 'AA' batteries
(1.2V x 2, 2300mAH)

Multi-control system
use up to 256 Receivers with 1 transmitter

Start / Alarm switch
The IMPACT series transmitter has an Start /
Alarm switch on the bottom-right.
The Start / Alarm switch has 2 mode:
1. Press to start
2. Press for Alarm while operating

Start the transmitter in operating mode
1. Insert MAGNETIC Key
2. Press "START" button.

Turn the transmitter off
Push the STOP button.

Range Limiting
The Range limiting function allows to reduce the maximum
distance within which the transmitting unit must remain to start up
the system and to optionally limit the radio remote control working
range. This function is widely used in automobile factories where
many stations in one area.

Procedure is as follows:-
To Change the Radio power
1. Press button 1 & button 5 and insert the battery. On this GREEN led blink 5 times.
2. To set Radio Power Press button 2. On this RED led blink 5 times.
3. To set the Radio Power 28, we need to press button 3 two times & button 4 eight times.
4. To apply the setting press button 6. This will set your Radio Power on respective value.
5. To set range of 25-30 meter set power 18, for 50 meter range set power 21, range can be set as per customer needs.(max. power 31).

To Display the Radio Power
1. Press button 2 & button 6 and insert the battery. On this RED led blink 5 times
2. To display Radio Power press button 2.
3. This will display the value of the Radio Power by blinking led. (e.g. if Radio Power is set to the value 21, then the GREEN led blink 2 times & RED led blink once)

Failure Analysis and Solution

Description	LED Signal	Failure Analysis	Solution
- GREEN LED Fast blinking on press of Start Button - Transmitter has started transmitting correctly.	🟢🟢🟢🟢	- No power - Transmitter Start button Failure	- Replace new batteries - Check for Start operation
- Green LED & Red LED alternate blinking 3 times on battery insertion - Battery insert ▭ sequence Battery detected correctly	🟢🔴🟢🔴🟢🔴	- Stain on the battery springs. - Low battery. - Damaged batteries.	- Clean the stain on battery springs. - Use Charged Batteries / New Batteries
- Green LED ON with Red LED blinking 2 times - Radio Module is Disconnected	🟢🟢🔴🔴	Radio Module is not connected	Insert the radio module correctly.
- Red LED Blinking continuously - Low Battery Indication	🔴⚪🔴⚪	LOW Battery Indication	Use Charged Batteries/ New Batteries
- Red LED ON when START is pressed - START button is pressed to begin communication	🔴	Communication unsuccessful	- Insert Magnetic Key - Release any push button other than START.
- RED LED ON continuously without pressing any button	🔴	Transmitter has entered in Programming mode	Remove and insert battery again to reset the transmitter
- Green & RED Led alternate blinking 3 times followed by Red LED blinking continuously	🟢🔴🟢🔴🟢🔴	Transmitter has entered Pairing mode	For Pairing Procedure please refer Page No.1

Note:- 1 - Use only AA Duracell Batteries for Better Performance.
     2 - For continues duty we can supply rechargeable batteries with charger.