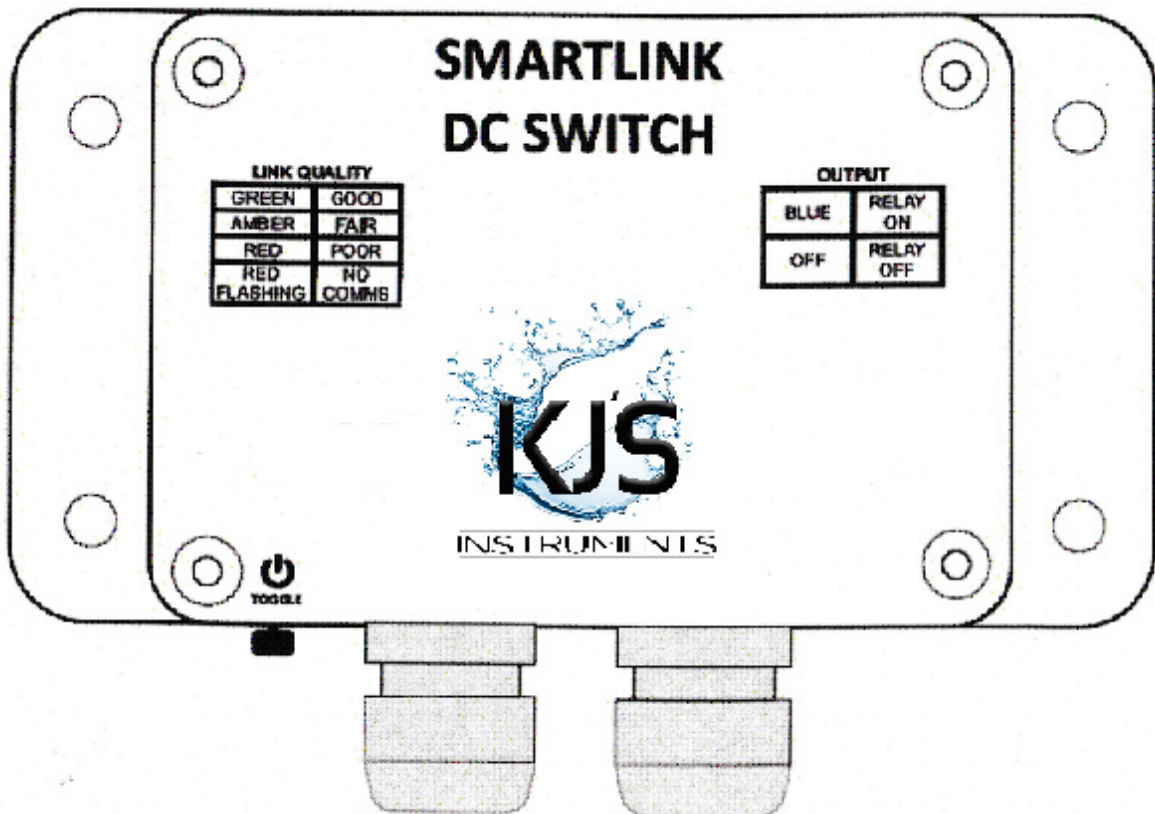


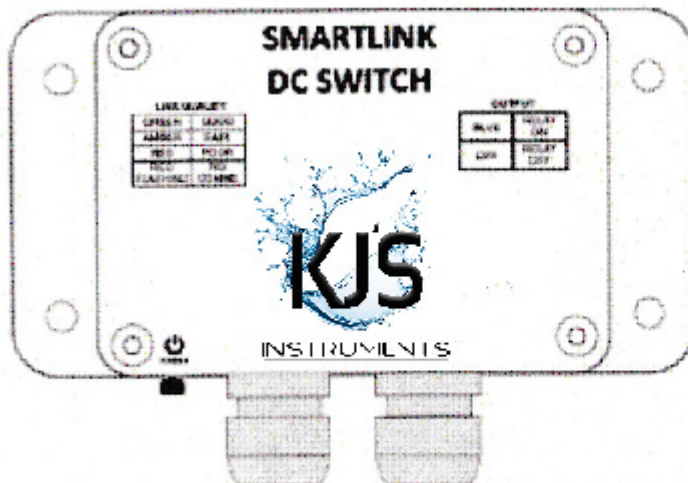
INSTRUMENTS

# KJs SmartLink DC Wireless Relay

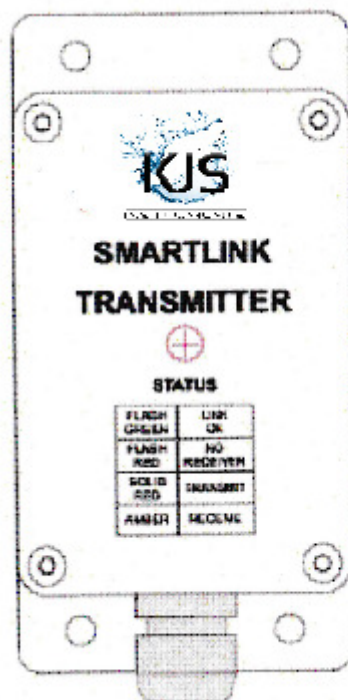


## Intro

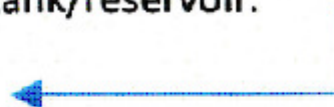
The Smartlink Wireless Relay is composed of two units that come pre-paired and ready to plug and play. The system comes as a pair of devices, the transmitter and receiver units.



This is the DC powered receiver that will be wired into the control box.

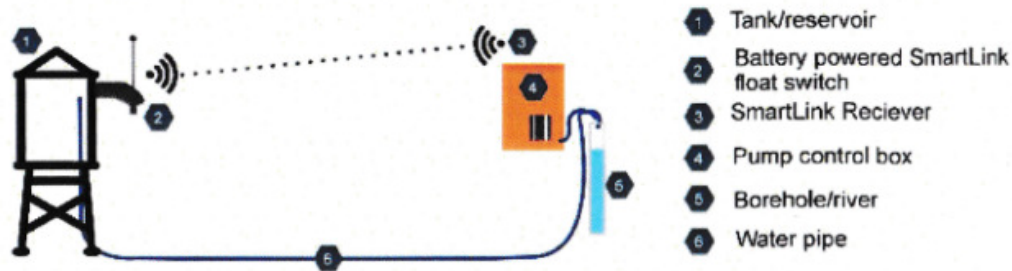


This is the battery powered transmitter that will typically be mounted near the tank/reservoir.



# Smartlink Setup

Below is a typical setup for tank level control using the Smartlink.



## Step by Step installation guide

### Install Receiver

The receiver can be configured in two different relay modes:

#### 1. Dry Contact Mode:

The relays power source is isolated from the receivers input power. This would be used if the relay is powering a 230v AC device. **REMOVE the LINK** for this mode.

#### 2. Live Contact Mode

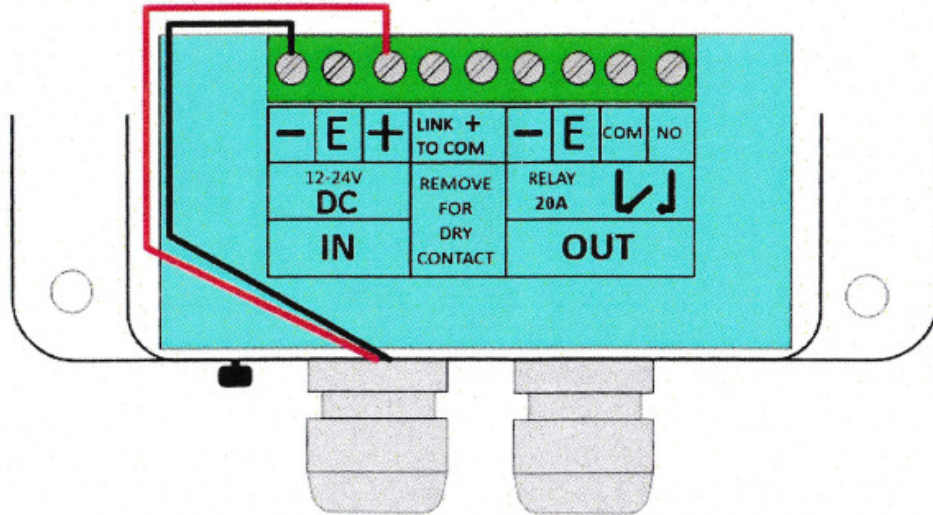
The Input power is bridged to the output of the relay via the LINK. This will be used when your load on the relay needs 12v-24v DC. Ensure that your power supply can supply enough current for the receiver and the load.

**NB: Warning, Remove LINK Bridge when applying external power to the relay, damage to the unit will occur if you put high voltage into the receiver with LINK bridge installed.**



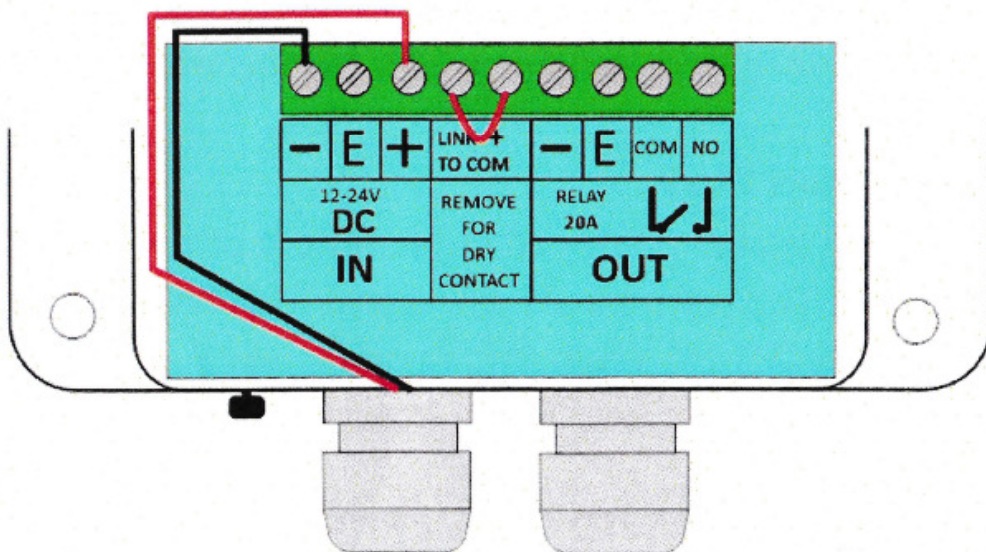
## Dry Contact Mode

The input power will be wired into the (DC IN) terminals labelled (-) negative and (+) positive. Please ensure **polarities** are correct. The receiver supports 12v to 24c DC.



## Live Contact Mode

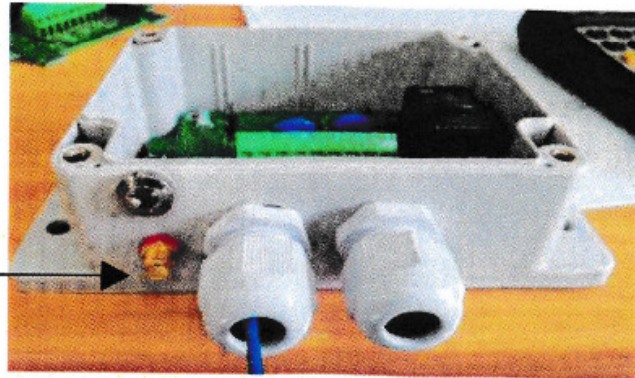
In this mode we install the **LINK** between terminal 4 & 5. This will bridge the DC IN (+) power with the (COM) terminal on the relay.



## Antenna Connection

The Smartlink comes with an external antenna. Screw the antenna onto the receivers connection in the bottom left corner, below the button trigger.

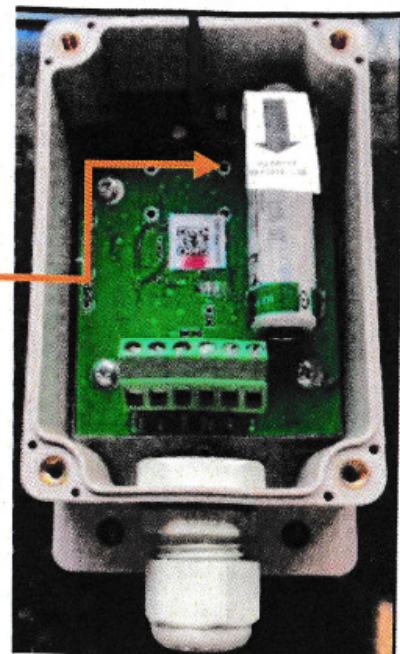
### SMA Antenna Connection



- Ensure that the antenna is NOT inside any metal box and is installed vertically as high as possible with the best line of sight to the transmitter unit.

## Install Transmitter

1. Unscrew the 4 screws on top of the lid using a Phillips screwdriver.
2. Pull out the white battery tab between the battery and metal terminal clip.
3. You should see the led flash every few seconds, if not twist the battery to ensure it is making proper contact.
4. Connect the float switch





## Install the float switch

There are two operations that can be achieved with the float switch:

### Filling using the float switch

1. Connect the COM wire to the (GND) terminal and NO wire to the (IN1) terminal.
2. **NC** wire is **not used** and must be kept insulated.
3. Pump will begin to fill and when the water reached the level that makes the float switch float upwards the pump will stop. As the float switch falls it will start pumping again.

### Emptying using the float switch

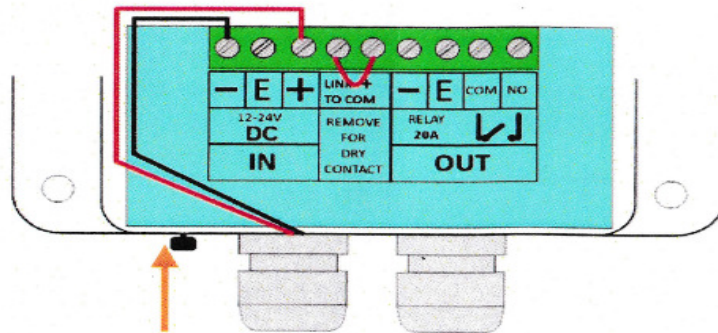
1. Connect the COM wire to the (GND) terminal and NC wire to the (IN1) terminal.
2. **NO** wire is **not used** and must be kept insulated.
3. Pump will stop filling the water tank until raises to a certain level (full) will begin filling when it drops low level (empty)

## Mounting the Transmitter

1. Tighten the 4 screws on the lid ensuring that it has made a uniform seal. Do not over tighten the screws.
2. Mount the unit vertically so that the cable gland points downwards alongside the tank/reservoir.
3. Aim the face of the transmitter in the direction of the receiver, make sure there are no objects in the way that can obstruct the signal. The higher the transmitter is mounted the better.

## Toggle Button

The relay state can be manually toggled using the push button in the bottom left of the receiver. Once clicked this will trigger the relay on and a secondary click will trigger it off again. Please note that when the transmitter sends its signal it will override the state which the toggle button was in.



TOGGLE RELAY BUTTON

## Indications and Controls

TRANSMITTER		
STATUS INDICATOR		OPERATION
Status lamp flashes GREEN	— — —	The transmitter did get a reply from the receiver
Status lamp flashes RED	- - -	The transmitter did not get a reply from the receiver

RECEIVER		
STATUS INDICATOR		OPERATION
Relay lamp is solid BLUE	—	The relay is on
Relay lamp is off		The relay is off
Status lamp flashes RED	- - -	No signal from the transmitter
Status lamp solid RED	—	Poor signal from the transmitter
Status lamp solid AMBER	—	Low signal from transmitter
Status lamp solid GREEN	—	Good signal from transmitter



## Technical Details

Transmitter	
Dimensions	86x54x32mm
IP Rating	IP 65
Battery	2600mAh (1 Year life Span)
Connectivity	Long Range Wireless
Operating Temperatures	-10°C to 50°C
Receiver	
Dimensions	115x90x55mm
IP Rating	IP 65
Input Voltage Range (DC)	12v-24v DC
Relay Voltage Rating	230v AC or 30v DC
Current Rating	20A

## Contact Details

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- Email: [info@kjsinstruments.co.za](mailto:info@kjsinstruments.co.za)
  - Contact Person: Kyron Rich