

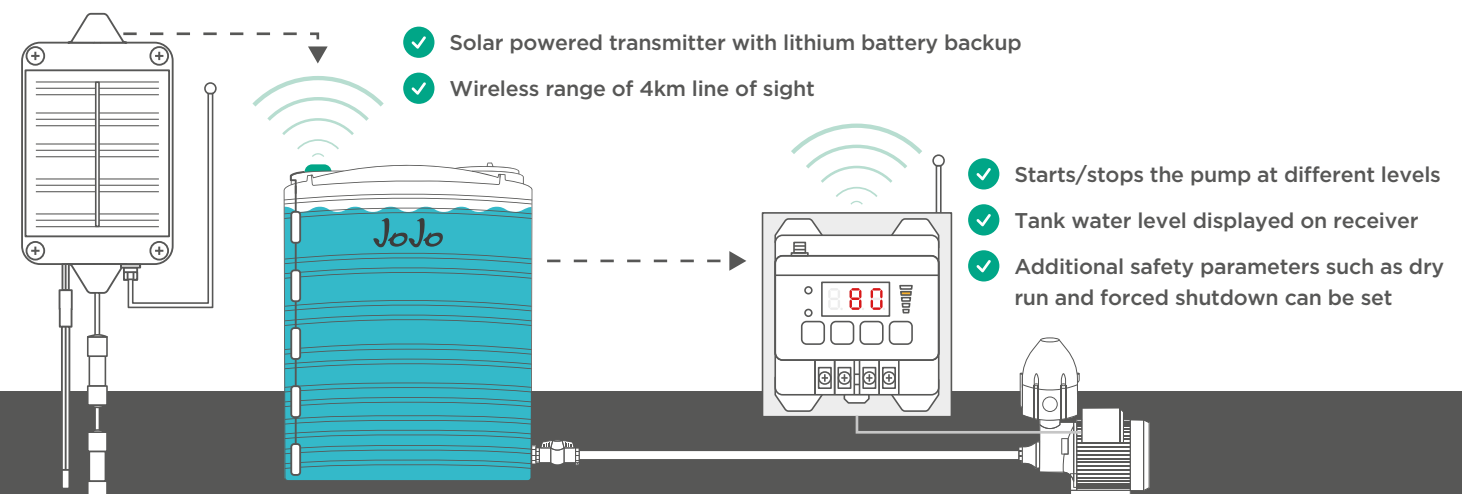
May 2024

Remote Tank Pump Controller

Instructions for use

The JoJo Remote Tank Pump Controller is the reliable and convenient way to remotely monitor and control the water levels inside your tank.

APPLICATIONS			SUITED FOR
1. Booster Pumps	2. Borehole Pumps	3. Solenoid Valves	<ul style="list-style-type: none"> • Direct connection to 220V AC Pumps of up to 3kW • Connection to 220/440V contactor for unlimited kW



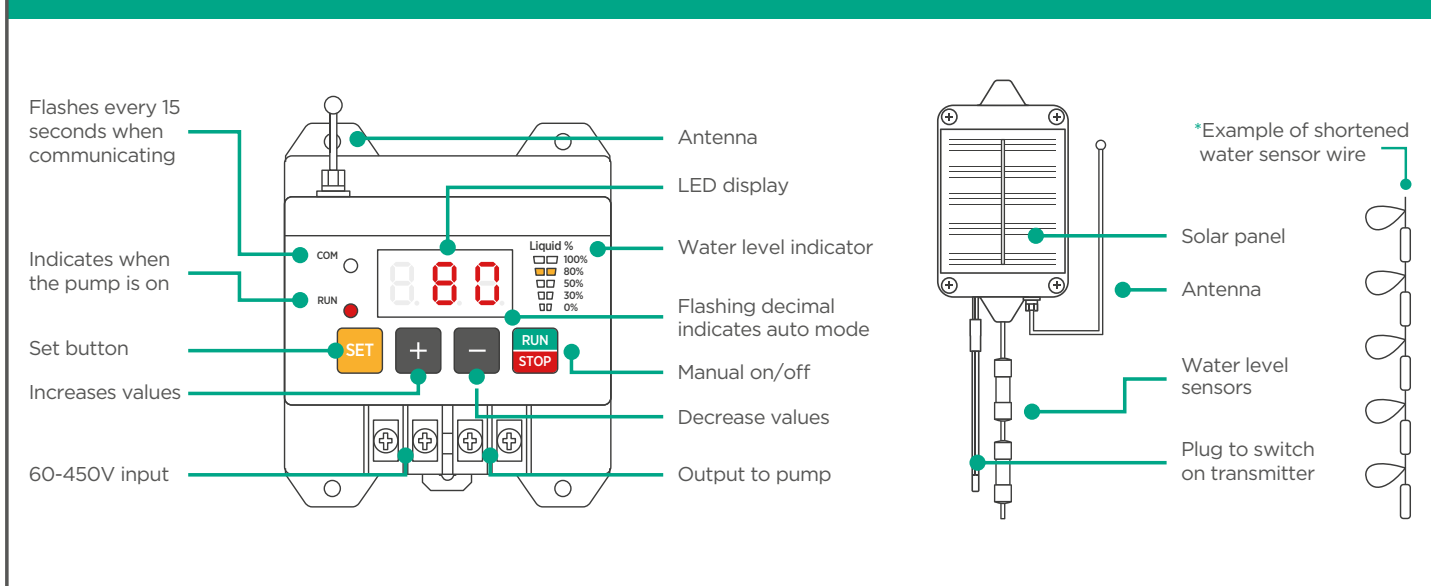
A wireless pump controller with a solar-powered water level sensor that enables you to remotely control your pump.

<p>Transmitter installed at your tank</p>	<p>Wireless range of 4km</p>	<p>Includes water level sensors</p>	+	<p>Receiver installed at your pump</p>	<p>Automatic pump switch</p>	<p>Permits setup of safety parameters</p>
	<p>Solar powered</p>	<p>Lithium battery backup</p>			<p>Displays tank level</p>	<p>Updates every 2 minutes</p>

OPERATING INSTRUCTIONS

DEFAULT SETTINGS		TO CHANGE SETTINGS
<ul style="list-style-type: none"> The pump will switch on at 0% (F.00) and off at 100% (F.01). Communication protection (F.08) is activated and will show an error message (Er.8) if there's a loss of communication with the transmitter for longer than 2 minutes. Dry Run Protection (F.05) and Forced Shutdown (F.07) is not enabled by default. 	<ul style="list-style-type: none"> To change the settings press "SET". It will display FUNCTION F.00 to F.09. Select the function you want to change by pressing "+" or "-" (refer to function table for detail). Press "RUN/STOP" to select the desired function, then change the values with "+" or "-". Once done press "RUN/STOP" to save the setting. 	
IMPORTANT		
Automatic and Manual modes are indicated as follows: Automatic = flashing red decimal point and Manual = solid red decimal point. To enter into/out of automatic/manual mode, press "Run/Stop".		
ERROR CODES		
Er.1: Dry run, will reset after F.02 period set.	Er.7: Forced shutdown, press "SET" to reset.	Er.8: Communication lost, check your transmitter.

DIAGRAM



FUNCTION CODE	FUNCTION	SCOPE	INCREMENTS	DEFAULT VALUE	UNIT
F.00	Water level at which the pump must start.	1-80	1	1	Percentages
Important: Do not set to 0%, if set to 0% the pump will not switch on.					
F.01	Water level at which the pump must stop.	30-100	1	90	Percentages
Important: Do not set to 0%, if set to 0% the pump will not switch on.					
Note: F.00 and F.01 will only trigger on next step of percentages 0,30,50,80 and 100. E.g. if F.00 is set to 35%, it will only switch on at 30%, similarly if F.01 is set to 90%, it will only stop the pump at 100%.					
F.02	Dry run recovery time.	0-999	1	60 See F.05	Minutes
F.03	Forced down time.	0-999	1	60 See F.07	Minutes
F.04	Dry run protection time.	0-999	1	15 See F.05	Minutes
Either Dry Run or Forced Downtime can be enabled, but not both at the same time.					
F.05	Dry run protection enabled.	0: Off, 1: On.	1	0	Er. 1
If the water level does not increase to the next percentage level within the time set in F.04 then the pump will switch off for the recovery period set in F.02.					
F.07	Forced shutdown enabled.	0: Off, 1: On.	1	0	Er. 7
If the pump runs for the time period set in F.03 without reaching the Stop level, Er. 7 will display and the pump will switch off. If this occurs you will need to reset it by pressing the "SET" button.					
F.08	Communication protection enabled.	0: Off, 1: On.	1	0	Er. 8
If no communication is received from the transmitter within 2 minutes, Er. 8 will display.					
F.09	Drainage pump function.	0: Off, 1: On.	1	0	n/a
Note: F.06 and D.00 to D.09 are not yet in use.					
Reverse logic, will start the pump on the programmed high percentage and switch it off on the programmed low percentage.					

WHAT'S IN THE BOX?

1. Transmitter complete with:		3. 2x antennas complete with:	
A Solar panel	C Plug to switch on transmitter	E Antenna	F Antenna wire with magnetic base
B Water level sensors	D Integrated lithium battery	4. 7x 3.5mm self-tapping screws	
2. Receiver with LED display		5. 1x 32mm washer	6. 5x cable ties

1.

2.

3.

4.

5.

6.

*The battery comes pre-installed and acts as a backup on cloudy days with little or no sunlight. Once charged, it can power the transmitter for up to 14 days and has an expected lifespan of 10 years.

INSTALLATION GUIDELINES

AT THE TANK: TRANSMITTER AND WATER LEVEL SENSOR	AT THE PUMP: RECEIVER
<p>Ideal location: For optimal results it is recommended to install the water level sensor via your tank overflow. This prevents unnecessary drilling in your tank and ensures the sensors are not exposed to incoming water flow or splashing during tank filling.</p>	<p>Ideal location: The receiver needs electricity to operate and should be installed indoors or inside a waterproof housing because it's not waterproof. Important: The control unit can handle a maximum of 3000W. Larger pumps will need a separate contactor.</p>
<p>PRE-INSTALLATION</p> <ul style="list-style-type: none"> Before installing this device, measure the height from the base of your tank to the overflow. Keep in mind that the transmitter with the solar panel (A) should be mounted on the tank's roof, while the water level sensor (B) will be suspended inside the tank via the overflow. The water level sensor (B) comes in a length of 5000mm and can be shortened by using cable ties (6) to loop the wire between each of the sensors (refer to the diagram on page 2 for reference). Note: When shortening the wire, do so equally between each sensor. This is important to maintain accuracy. 	<p>INSTALLATION</p> <p>01 Install the receiver (2) on the DIN rail close to the pump and wire it as indicated below. Note: we recommend making use of a certified electrician to install the receiver and make the connections to your pump.</p>
<p>INSTALLATION</p> <p>01 After adjusting the water level sensor (B) to the desired length, insert it into the tank through the overflow and suspend it vertically inside the tank.</p> <p>02 Screw one of the antennas (E) onto its magnetic base (F), then screw it into the transmitter (1).</p> <p>03 Make sure the transmitter (1) is upright, with the solar panel facing upward and directly exposed to sunlight. Mount it onto the roof of your tank using two of the provided self-tapping screws (4). Note: For optimal sun exposure, it's recommended to install the transmitter facing north.</p> <p>04 Secure the antenna by attaching the 32mm washer (5) to the top of the tank with one of the self-tapping screws (4). Ensure that the screw is flush with the washer then place the antenna's magnetic base on top of it.</p> <p>05 Insert the plug (C) to activate the transmitter. Once inserted, transmission will begin, indicated by a flashing red light approximately every 15 seconds.</p>	<p>02 Screw the remaining antenna (E) onto its magnetic base (F), then screw it onto the receiver (2) and position it on top of the waterproof housing/DB box.</p>