

Remote Tank Pump Controller

FOR SOLAR



PUMPS

Instructions for use - May 2025

JoJo
FOR WATER FOR LIFE

WHAT'S IN THE BOX?

1. Transmitter complete with:

- A** Solar panel
- B** 3 Volt lithium battery

2. Water level sensors

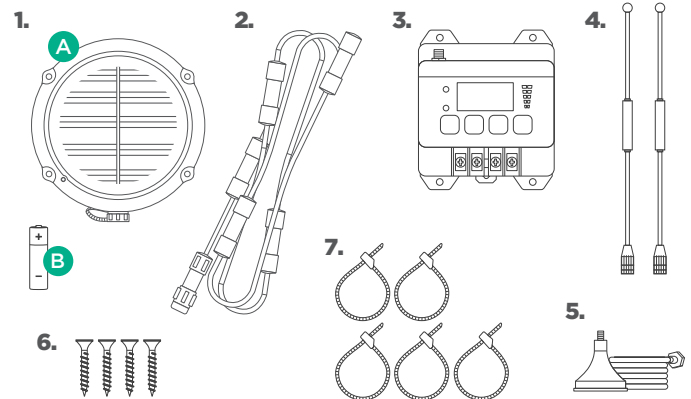
3. DC controller with LED display

4. 2x antennas

5. 1x antenna wire with magnetic base

6. 4x 3.5mm self-tapping screws

7. 5x cable ties



INSTALLATION GUIDELINES

AT THE TANK: TRANSMITTER AND WATER LEVEL SENSORS

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.

PRE-INSTALLATION

- 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 (1) should be mounted on the tank's roof, while the water level sensors (2) will be suspended inside the tank via the overflow.
- The water level sensors (2) come in a length of 5000mm and can be shortened by using cable ties (7) 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.

INSTALLATION

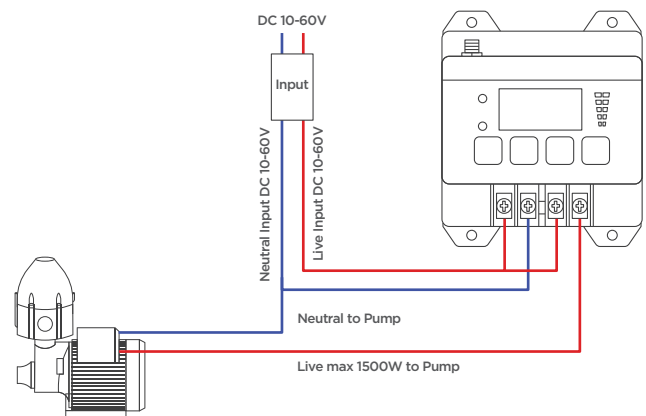
- 01** Adjust the water level sensors (2) to the desired length.
- 02** Remove the blue protective cap from the transmitter (1) and insert the water level sensor (2) plug into the transmitter. Secure it by tightening the blue nut.
- 03** Screw one of the provided antennas (4) onto the transmitter (1).
- 04** Next, insert the water level sensors (2) into the tank through the overflow and suspend it vertically inside the tank.
- 05** 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 the four self-tapping screws (6) provided. **Note:** For optimal sun exposure, it's recommended to install the transmitter facing north.
- 06** Switch on the transmitter (1) using the power switch. Once turned on, a red light will flash approximately every 15 seconds, indicating that transmission has started.

AT THE PUMP: DC CONTROLLER

Ideal location: The controller requires a DC input 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 1500W, larger pumps will require a separate contactor.

INSTALLATION

- 01** Install the controller (3) on the DIN rail close to the pump and wire it as indicated below. **Important:** The output is normally open dry contact. **Note:** we recommend making use of a certified electrician to install the controller and make the connections to your pump.



- 02** Screw the remaining antenna (4) onto its magnetic base (5), then screw it onto the controller (3) and position it on top of the waterproof housing/DB box.

OPERATING INSTRUCTIONS

DEFAULT SETTINGS

- 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.

TO CHANGE SETTINGS

- 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

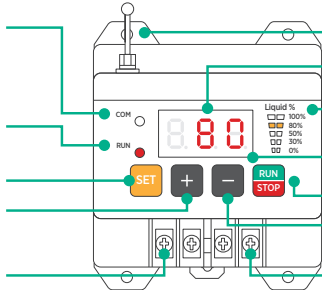
Flashes every 15 seconds when communicating

Indicates when the pump is on

Set button

Increases values

DC 10-60V input



Antenna

LED display

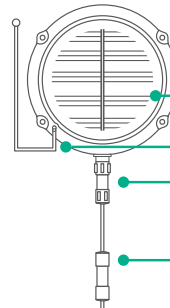
Water level indicator

Flashing decimal indicates auto mode

Manual on/off

Decrease values

Output to pump



*Example of shortened water sensor wire

Solar panel

Antenna

Water level sensor plug

Water level sensors

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.			

1-YEAR QUALITY WARRANTY

Please read this document in conjunction with the South African Consumer Protection Act 68 of 2008 (CPA).

JoJo warrants the Remote Tank Pump Controller (herein after referred to as 'the device') to the original end user/purchaser to be free of defective materials and workmanship under normal use for a period of 12-months from the date of purchase from authorized retailers and distributors.

To be eligible for warranty replacement, the device must be returned to the point of purchase during and up to the expiry date of the warranty period. Proof of date of purchase is required.

- 01** Liability in terms of this warranty shall be limited to replacement of the device. Liability for all and any other losses and/or subsequent damages suffered are expressly excluded.
- 02** This warranty does not obligate JoJo to bear any cost of removal, installation, transportation, or other charges which may arise in connection with a warranty claim.
- 03** The warranty shall not apply to repairs or service necessitated by normal wear and tear or for lack of reasonable and proper maintenance.

This warranty does not apply if in the sole judgement of JoJo the device or any other components have been;

- a. Tampered with, disassembled, repaired or altered (except as may be pre-authorised by JoJo in writing);
- b. Subjected to misapplication, misuse, neglect or accident;
- c. Damaged as a result of water exposure, including but not limited to water leaks, spills or submersion;
- d. Damaged as a result of power surges or fluctuations in electrical supply.

Important: This is the exclusive warranty given by us and no other warranty or guarantees, expressed or implied shall be of any force or effect.

Claim process

Within 12 months; should the device not operate as specified, or cease to do so within 12 months after being purchased, the return procedure is as follows:

- Return the device to the place of purchase together with the proof of payment (to confirm that it is within the 12-month warranty period).
- The device will be sent to the nearest JoJo factory for an evaluation.
- Upon verification of the defect and eligibility of warranty coverage, a replacement unit will be provided to the original end user/purchaser at no additional cost.