



Installation & Operation Instructions for Plasson MK2 Regulators / Reducers









Housing

Maagan Michael, D.N. Menashe, 3780500, Israel Tel: +972-73-2413001, Fax: +972-73-2333711 info@plassonlivestock.com

Mechanical Installation

Please follow the same instructions for both Regulators and WOD Reducers.

Connecting the regulator to the nipple line:





4) Suspension of the regulator to be connected to the lower hole.
* Mid line is suspended from one point, similar to the line head.



1) Mount the SS connector (02205479) to the regulator using 2 screws & bolts (02209018, 02205721). Ensure screws and nuts are firmly tightened.

2) Mount the external connector (02205035) to the regulator.



3) Connect the regulator to the nipple line by inserting the 30mm (1.2 inch) PVC pipe end into the external connector. Then slide the aluminum profile into the SS connector slot and tighten firmly using the screws & nuts (02209018, 02205721).



5) Anti-perch system to be connected to the hole far from the regulator (As shown) (to connect Anti-perch system use the Anti-perch kit Cat. No. 02205992)

6) Connecting the MK2 to existing Plasson nipple line use a 25 mm PVC pipe as an adaptor (Cat. No. 02205984). The photo shows the difference while connecting to new system (on the left) and an existing system (on the right).



The wired auto flushing system is connected and managed through the house controller or Plasson stand-alone flushing controller (Cat. 02205686). Required voltage is 24V. Electric valves should be wired using 2x1mm cross section cables. Smaller cross section cables will cause voltage loss and failures in system operation. To ensure good flushing pressure and no voltage loss, it is recommended to wire each electric valve or max. 2 valves to each relay in the controller.

Wiring Example:



Wireless - Auto Flushing System

- General -

System description

Plasson Flush Control is an independent wireless system, not connected to the house controller. The system is designed for automatic high pressure flushing of nipple lines via a smart phone application.

Each line head regulator includes a wireless unit operated by a battery. The unit is communicating via Bluetooth connection with a central wall unit which is connected to power supply 110-220V.

Programing of the flushing plan is done through a smart phone using a simple user friendly application. The flushing plan is made in advance for the entire growth cycle and can be updated at any time. Manual operation is also available. There is no need for cellular signal.

Flushing of lines should be executed one line at a time to guarantee high pressure and efficient cleaning.



Wireless - Auto Flushing System

- Installations -

1) 02205957 Flush Control Wall Unit Set

Install the Wall Unit on the wall or ceiling as close as possible to the line head regulators. Electric components, such as frequency converters, with electric discharge can interrupt the signal, thus should be installed as far as possible from the unit.

Max. distance of wall unit from line head regulators – 20m.

In cases of very wide houses or where the nipple system design creates a larger distance between the wall unit and the regulators – 2 wall units should be applied. Should the smart phone detect 2 wall units within its range the user will be asked to choose the one to be programmed each time.

Wiring:

Power supply: 110-220V, safety switch 4-6amp.

Optional wiring:

2 Dry contact for other systems -

• N.O. contact will shut once flushing is operated. Can be used for stopping the water counter during flushing.

• Dry contact for Errors – N.O. contact will shut once system is in error mode (communication error / battery error or any other error defined in the system error list).



2) 02205956 Flush Control Regulator Unit Set

This unit is not wired to a power supply but running by a battery – type CR123A only (02206748). Life expectancy 2-3 years.



Wiring:

The regulator is supplied with the electric valve integrated inside it. Two wires are exposed – Green & Black. Polarity will affect the system, therefore - Green wire should connect to the binding close to the box wall and the Black wire to the other (see drawing).

The battery should be mounted as per the signs in the battery bed (+/-).

Optional wiring:

Temperature sensor should be wired as per the drawing above. Polarity will not affect the system, therefore wiring is random.

First time operation: LETS GET STARTED !

For first time operation please follow these instructions:

- a. Confirm the central wall unit is connected to power supply.
- **b**. Confirm batteries (CR123A model only) are properly mounted in all line head regulator units.
- **c.** Download the Flush Control App to your smart phone from google play \ APP store "Plasson Flush Control".
- **d.** Activate Bluetooth in your smart phone.
- e. Open the App and confirm it is active.
- All system functions are available from the main screen. Choosing a function will open its menu and further options.



Configuration

1

one system.

unit itself.

or regulator unit).

Use this menu for initial setting of the system.

- 1. To change the APP language go to the Configuration menu.
- 2. At the bottom tap on "Tap to Select Language", select the language from the list.
- 3. Close the Application and open it again, it will open with the selected language.



3

Regulator units:

Type the house number (the Wall unit that controls it). Type the Regulator number. Type SAVE

🗭 🖾 🖾 12:30

Configure Devices

< ⇒ SAVE Tap to Select Language

House Number

Device Number

Example:

"Flush Valve [1-1]", "Flush Valve [1-2]",

4

Wall Unit:



Setup Day

Z

Use this menu to set the growth day.

- The system has a real time clock so growth day and time are always updated. This date is updated each time your update the growth day (set day)

- To update the growth day at the beginning of the cycle or for any other reason, press the "Setup Day" menu – enter the day – then press "save".

Manual

Use this menu to initiate flushing manually for a desired duration.

- Press "Manual".

- enter the duration required (Min : Sec)
- press "Start". The system will start flushing
- line by line in sequence as per their No. given.
- After flushing of the last line the system will go back to its active automatic plan.



This is where programming the automatic flushing plans is done. Up to 5 different plans can be applied for the same cycle.

Press "Programs" and follow these actions to setup an automatic plan:

🗭 🖾 🖬 12:31

Cycle Day

00 [:] 20

14:36

00:00



Min Time Between Flush(HH:MM) 11:00 00:00 0

1. The Wall unit programmed and the program No. are shown in the screen title.

2. Enter "Start Day" – the growth day this plan will start.

3. Enter "**End Day**" – the growth day this plan will end. In the following plan the start day will appear automatically.

4. Week Days (**DOW**)

Or

5. Cycle Day.

Set the flushing schedule either by week days or cycle days.

Week days - choose the days of the week for the system to flush.

Cycle Day – mark the tick box and enter your desired cycle days (0-99) - the system will flush every so many days entered. Example: Cycle day =3 - system will flush everv 3 davs.

6. Enter the **water temperature** (°C)

required to initiate flushing. This function requires at least one Temperature sensor installed in the nipple lines. The system will flush once the water temp. exceeds the mentioned value.

7. Enter the "Minimal Time Between Flush (HH:MM)". This value will determine the minimal time gaps between flushes. During this time no flushing will take place - not by time and nor by temperature. This is to avoid multiple flushing initiated by the temp. sensor in hot days.

8. Enter the flush "Duration" for the plan. This will be the flush duration of one line. The value will apply for all flushing in the plan set by either time or Temp.

9. Enter the desired "Times" for flushing to be executed (HH:MM). 6 flushing per day are available. If "Times" value 00:00 (24 hours clock) or 12:00 AM (AM/PM clock) is entered no flushing will be executed .

To finish the programming scroll down and press "Save". Now the plan is saved in the Wall unit.

It is recommended to program a plan / plans from day 1 until the end of the cycle. You can always edit and change all parameters.

Status

This menu presents the system status. Next flush time, system errors, Battery life and communication between units.

1. Flush Control Ver. X.X – the flush control application, the software is updated via the online stores (the software is free to download).

Date & Time - The date and time of the system will be the same as the one from which the phone was connected to the system (updated automatically).
 Wall Unit [X] - the wall unit that connected to the user phone.

4. Act Plan & Day – the actual program plan according to the growth day.

5. Water temperature **()** – the temperature sensor reading, the actual temperature of each line will be display near the battery icon and the maximum temperature will be display near icon (if no temperature sensor is connected -128 is displayed).

6. Next Flush - Displays the next flushing time. During flushing cycle, it will display the next line that will be flush.

7. Current Valves Status – list of all valves, which connected to the wall unit.

8. Battery status - there are four battery status display - full, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$

9. Signal strength – show the signal strength between Wall Unit and End Unit. When signal lost, X is displayed.

10. The electric coil is disconnected (the electric valve wires are not connected to the End Unit card)



Problem Action Notes Configuration mode Check if Bluetooth is activated in your smart cannot detect any unit. phone Make sure smart phone is within system range - max. 20m. Press RESCAN for new scan. Regulator / Reducer is Check if the regulator and the red flushing Green wire should connect to always in Flush mode valve are mechanically Ok. the binding close to the box Check if red flushing valve is not in manual wall and the Black wire to the flush position. other. Check if the solenoid supplied is suitable for wireless flushing – should have Green and Black wires. Check if wiring of the regulator Bluetooth unit was done correctly. Replace the battery. Replace the Regulator unit. Confirm the max. distance from wall unit Status screen shows communication error to the regulator Bluetooth units does not exceed max. range - 20m. 3 Replace the battery. Go through pairing instructions Open the regulator Bluetooth and check Status screen shows coil To cancel the alarm go to disconnected. wires connections configuration mode - open Replace the electric valve coil the wall unit menu and press "refresh valve list" Status screen shows coil Open the regulator Bluetooth and check disconnected wires connections. Replace the electric valve coil Status screen shows time "Refresh valve list" in configuration menu to open solenoid is too Replace the battery long Check if system is programmed for If the flushing water temp. is System is executing flushing constantly and temperature flushing. higher than flush temperature not stopping Check if *Minimal Time Between Flush* is not value, flushing will not reduce set to a short time. the temp. in the nipple lines. In such case the system will Set correct temperature for flushing. Set correct Minimal Time Between Flush. repeat the flushing again. Setting Time Between Flush will resolve the problem. Check if system is set to flush according Possibly the system initiated System is not flushing to temperature, and if the Minimal Time flushing according to according to the time programmed Between Flush value is too long. temperature, just before the programmed time for flushing. As result the preset Minimal Time Between Flushes may delay the next flushing.

Line Head - Complete sets

|--|

	Pressure Indicator			
WOD Line Head	Wireless	60	02209974 - WOD Line Head Wireless Flushing (60) MK2 Com	
		80	02209978 - WOD Line Head Wireless Flushing (80) MK2 Com	
		Detach	02209523 - WOD Line Head Wireless Flush Detachable Sight Tube MK2 Com	
		Threaded	02209524 - WOD Line Head Wireless Flush Threaded Sight Tube MK2 Com	
	Auto	60	02205497 - WOD Line Head W/Auto Flush (60) MK2 Com	
		80	02205944 - WOD Line Head W/Auto Flush (80) MK2 Com	
		Detach	02209525 - WOD Line Head W/ Auto Flush Detachable Sight Tube MK2 Com	
		Threaded	02209526 - WOD Line Head W/ Auto Flush Threaded Sight Tube MK2 Com	
	Manual	60	02205493 - WOD Line Head (60) MK2 Com	
		80	02205940 - WOD Line Head (80) MK2 Com	
		Detach	02209527 - WOD Line Head Detachable Sight Tube MK2 Com	
		Threaded	02209528 - WOD Line Head Threaded Sight Tube MK2 Com	
Line Head	Wireless	60	02209973 - Line Head Wireless Flushing (60) MK2 Com	
		80	02209976 - Line Head Wireless Flushing (80) MK2 Com	
		Detach	02207055 - Line Head Wireless Flush Detachable Sight Tube MK2 Com.	
		Threaded	02207057 - Line Head Wireless Flush Thread Sight Tube MK2 Com.	
	Auto	60	02205495 - Line Head W/Auto Flush (60) MK2 Com	
		80	02205942 - Line Head W/Auto Flush (80) MK2 Com	
		Detach	02207051 - Line Head W/Auto Flush Detachable Sight Tube MK2 Com.	
		Threaded	02207053 - Line Head W/Auto Flush Thread Sight Tube MK2 Com.	
	Manual	60	02205491 - Line Head (60) MK2 Com	
		80	02205499 - Line Head (80) MK2 Com	
		Detach	02207047 - Line Head With Detachable Sight Tube MK2 Com.	
		Threaded	02207049 - Line Head With Thread Sight Tube MK2 Com.	
Line Head High Pressure	Wireless		02207034 - Line Head 0-250 Black Wireless Flushing MK2 Com	
	Auto		02207032 - Line Head 0-250 Black W/Auto Flush MK2 Com	
	Manual		02207030 - Line Head 0-250 Black MK2 Com	

	Pressure Indicator				
WOD Mid Line	Wireless	60	02209975 - WOD Mid Line Wireless Flushing (60) MK2 Com		
		80	02209979 - WOD Mid Line Wireless Flushing (80) MK2 Com		
		Detach	02209529 - WOD Mid Line Wireless Flush Detachable Sight Tube MK2		
		Threaded	02209530 - WOD Mid Line Wireless Flush Threaded Sight Tube MK2		
	Auto Manual	60	02205498 - WOD Mid Line W/Auto Flush (60) MK2 Com		
		80	02205945 - WOD Mid Line W/Auto Flush (80) MK2 Com		
		Detach	02209531 - WOD Mid Line W/ Auto Flush Detachable Sight Tube MK2		
		Threaded	02209532 - WOD Mid Line W/ Auto Flush Threaded Sight Tube MK2 Com		
		60	02205494 - WOD Mid Line (60) MK2 Com		
		80	02205941 - WOD Mid Line (80) MK2 Com		
		Detach	02209533 - WOD Mid Line Detachable Sight Tube MK2 Com		
		Threaded	02209534 - WOD Mid Line Threaded Sight Tube MK2 Com		
Mid Line		60	02209982 - Mid Line Wireless Flushing (60) MK2 Com		
	Wireless	80	02209977 - Mid Line Wireless Flushing (80) MK2 Com		
		Detach	02207056 - Mid Line Wireless Flush Detachable Sight Tube MK2		
		Threaded	02207058 - Mid Line Wireless Flush Thread Sight Tube MK2		
	Auto	60	02205496 - Mid Line W/Auto Flush (60) MK2 Com		
		80	02205943 - Mid Line W/Auto Flush (80) MK2 Com		
		Detach	02207052 - Mid Line W/Auto Flush Detachable Sight Tube MK2		
		Threaded	02207054 - Mid Line W/Auto Flush Thread Sight Tube MK2		
	Manual	60	02205492 - Mid Line (60) MK2 Com		
		80	02205939 - Mid Line (80) MK2 Com		
		Detach	02207048 - Mid Line With Detachable Sight Tube MK2 Com.		
		Threaded	02207050 - Mid Line With Thread Sight Tube MK2 Com.		
Mid Line High Pressure	Wireless		02207035 - Mid Line 0-250 Black Wireless Flushing MK2 Com		
	Auto		02207033 - Mid Line 0-250 Black W/Auto Flush MK2 Com		
	Manual		02207031 - Mid Line 0-250 Black MK2 Com		





Maagan Michael, D.N. Menashe, 3780500, Israel | Tel: +972-73-2413001, Fax: +972-73-2333711 info@plassonlivestock.com | www.plassonlivestock.com