

# InjectRite Proportional Peristaltic Pump

**User Guide** 







# 1. Technical Details

Feature	Pump				
i cature	EU Version	USA Version			
Dosage Rate	0.2, 0.25, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0	1:256, 200, 128, 100, 64, 50			
Power Plug	220V	110V			
Water Meter Input*	1 pulse per 1 liter	1 pulse per 0.1 or 1gallon			
Tube Material	Santoprene				
Pump Tube	3/8" BSPT	3/8"NPT			
Max. Injection	12 L/H	3.16 GPH			
Operation Trigger	Dry pulse (from water meter)				
Dimensions (LxHxW)	185 (7.28) x125(4.92) x145(5.7)				

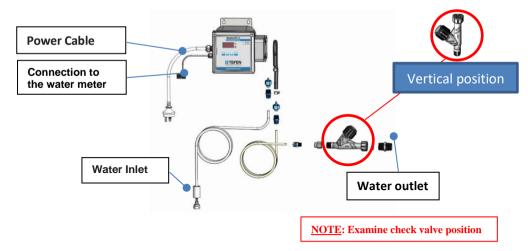
<sup>\*</sup>Using the right water meter is essential for the successful operation of the pump.

### Maximum Mainline Water Flow Rate per Dosage Rate

Choosing the Dosing Ratio				Choosing the Dosing Percentage					age				
Ratio	Injected Volume gpm				Dosage %	Injected Volume I/h							
1:50	0.00176	0.00881	0.04403				2%	0.40	2.00	10.00			
1:64	0.00137	0.00687	0.03434				1.75%	0.35	1.75	8.75			
1:100	0.00088	0.00440	0.02201	0.04403			1.5%	0.30	1.50	7.50			
1:128	0.00069	0.00343	0.01717	0.03434			1.25%	0.25	1.25	6.25			
1:200	0.00044	0.00220	0.01101	0.02201	0.03302	0.04403	1%	0.20	1.00	5.00	10.00		
1:256	0.00034	0.00172	0.00859	0.01717	0.02576	0.03434	0.75%	0.15	0.75	3.75	7.50		
	0.08806	0.44029	2.20143	4.40287	6.60430	8.80574	0.5%	0.10	0.50	2.50	5.00	7.50	10.00
	Flow Rate - gpm				0.25%	0.05	0.25	1.25	2.50	3.75	5.00		
							0.2%	0.04	0.20	1.00	2.00	3.00	4.00
								20	100	500	1000	1500	2000
										Flow Ra	ate - I/h		



# 2. Assembly Instructions



- 2.1. Install the pump
- 2.2. Attach the 2 core cables, outside the pump, to the water meter output, by cables color code
- 2.3. Connect the pump outlet to the water system. Ensure that the pump is installed after a pressure regulator, and that the line's counter pressure does not exceed 2.5 bar (36 psi).
- 2.4. Insert the suction tube into the additive tank. Make sure the tube is fully immersed inside the liquid, but floats above the bottom of the tank.
- 2.5. Insert the pump's power plug into the socket. Now the blue display and the bottom red LED are on (constantly), indicating proper functioning.
- 2.6. Set the water meter input:
  - 261 Press: MODF + + -
  - 2.6.2. Water meter options:



Display	Input units
U1	Pulse / 1 Gallon
U01	Pulse / 0.1 Gallon
Eu	Pulse / 1 Litter

2.6.3. Switching between options by pressing: MODE + - + -

#### Set the dosage rate as follow:

- 2.6.4. Press *M*ode
- 2.6.5. Change the dosage rate by pressing the / + buttons.
- 2.6.6. Set the required rate by pressing *Mode* again
- 2.7. Open the line's water flow and press (constantly) on *Prime*, until the suction tube is filled with additive.
- 2.8. Now the pump is operating automatically, according to the water flow rate. When the mainline valve is closed, the pump will stop.
- Every time the water meter sends an input signal, the top LED blinks green and the pump should work
- 2.10. Pump displays:
  - 2.10.1, XXX Flow rate
  - 2.10.2. GHP- Gallon per Hour (1:xx)
  - 2.10.3. L-H Litter per Hour (%)



# 3. Troubleshooting

- 3.1. The pump is equipped with an error detection feature. When encountering an error, the top LED blinks red, and an error message is displayed.
- 3.2. Common Errors and Solutions:

Error	Display	Possible Cause	Solution	
No signal from water meter	Top LED blinks red, and <i>Er.1</i> is displayed.	No water flow	The pump will reactivate automatically when water flow returns.	
		Water meter cable is not connected.	Recheck connection between the water meter and the pump's input cable.	
		Water meter cable malfunction	Replace water meter cable.	
Mainline water overflow	Top LED blinks red, and <i>Er.2</i> is displayed.	Flow rate exceeds the maximum allowed. The pump will operate in full capacity, with inaccurate dosage rate.	Reduce the water flow rate below the threshold. Or, reduce the dosage rate and keep the same water flow.	
No suction	-	Pump suction failure	Make sure the counter pressure is below 3 bar (43 psi).	
		Suction occurs, but additive returns to tank.	Check the foot valve at the end of the suction tube. Try to wash and clean it.	
Abrasion in pump tube	_	Tube wear and tear	Replace the pump tube with 3 simple steps:  • Unfasten the 2 screws holding the clear cover.  • Replace the tube and attach fittings.  • Fasten the screws.	
Pump does not work.	Display and LED are on.	Pump is on <i>Off</i> mode  – water flow without additive injection.	Change <b>Off</b> to one of the dosage rates.	
	Display is on, <b>Prime</b> is working.	Water meter cable is disconnected.	Reconnect the cable, and wait 60 seconds. Check if the top LED blinks green.	



## 4. PCB Connectors

A deep switch connects the dry pulse from the water meter to the control water system.

**WM1, CM1** – Connectors for dry pulse signals from the water meter into the pump

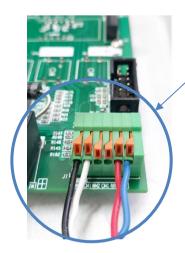
WM1-black CM1- white

RR1, RR2 - connectors for dry pulse signals from the pump into the controller/ or to the second pump, to the WM1. CM1 connectors

RR1- red RR2- blue

In order to send signals from the water meter, the pump must be connected to the power supply.



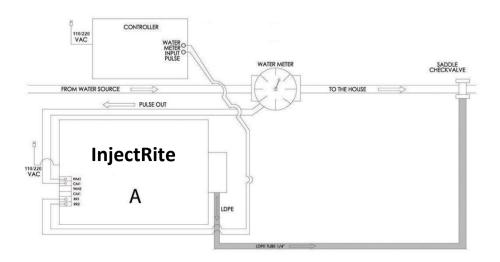




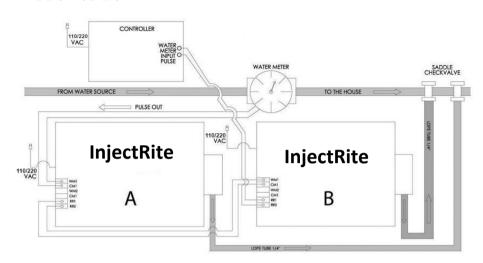
NOTE: Only qualified electrician certificates may change the wiring of the pump



## Single Installation



#### Parallel Installation





#### Maintenance:

#	Period	Maintenance Action	
1	Week	Cleaning the suction filter	
2	1 month	Add grease on the suction tube	
3	6 months	Tight the connectors	
4		The rollers working properly	
5	As need	Replace the suction tube	

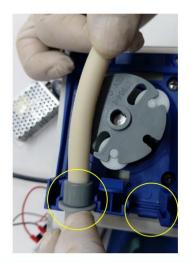
## Suction tube replacement instructions

Open the head cover





2. Remove the old squeeze tube and insert a new tube





Grease the squeeze tube – and place it – verify the gray fitting is place at the niche

Close the head cover





# **Spare Parts**

No.	Photo	SKU	Description
1	The state of the s	36600000003	Squeeze Tube Kit
2	<b>8 8</b>	3800000311	Pump mounting plate 81.63
3		38000000312	Rinse Pump head kit 81.118.16
4		3800000313	Motor & Gearbox
5	文. 位	3800000314	10-32 X 1/2 SS PHIL SCREW 25.85.2
6		3660000001	Suction & Injection Kit



# **Limited Warranty**

#### Merchandise Return Policy

No merchandise may be returned for credit without written authorization from TEFEN. A Return Merchandise Authorization (RMA) number must be requested and issued prior to the return of any product.

#### **Product Warranty**

TEFEN products are warranted against defects in material and workmanship under normal use and service, for a period of one year from date of purchase. This limited warranty does not apply to any products that have a normal life shorter than one year, or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as o-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty extends only to the original buyer of TEFEN products. This warranty does not cover products that are altered or repaired without prior approval from TEFEN. Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, FOB factory. TEFEN assumes no liability for damages. All returns must have an RMA number (See "Merchandise Return Policy" above).