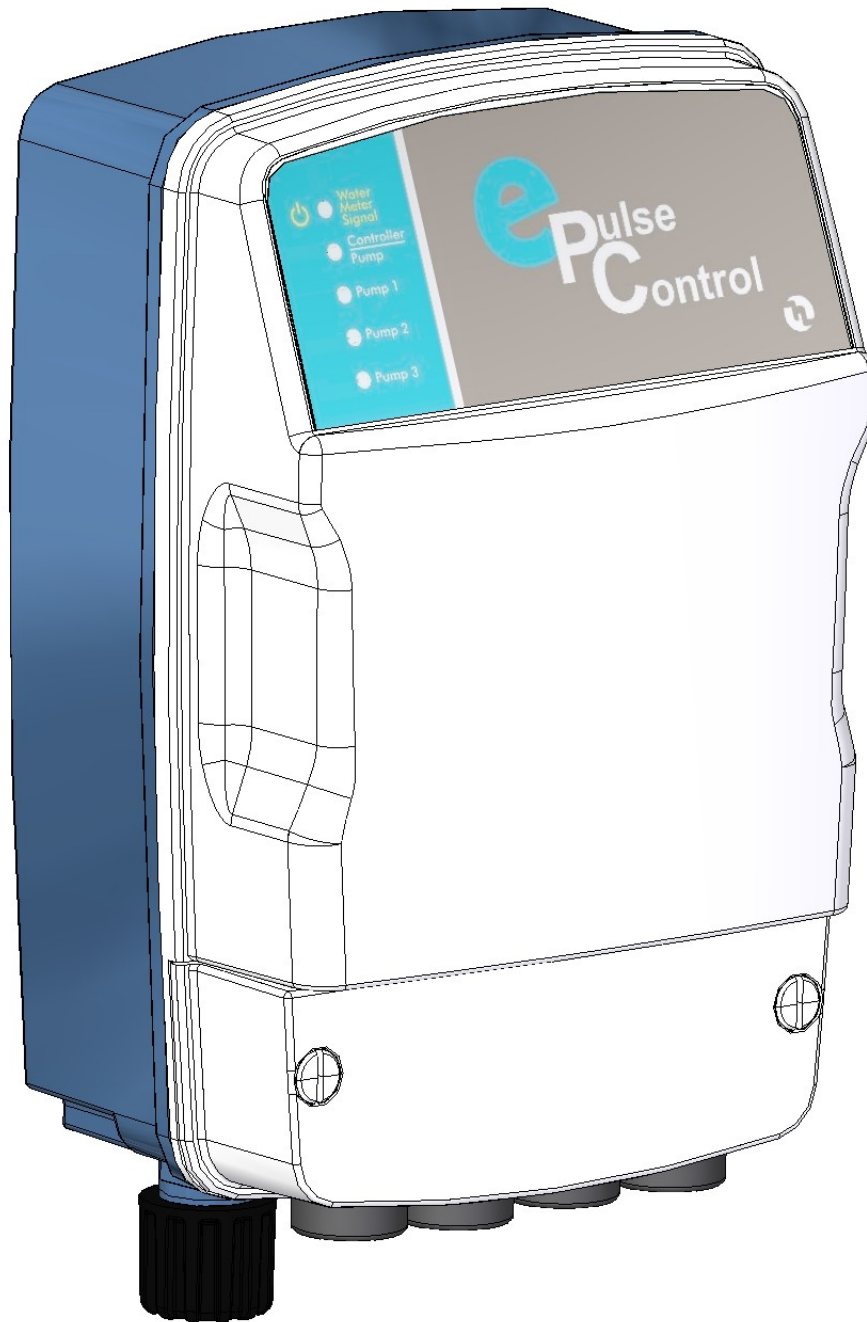


Water Meter Signal Splitter

OPERATING INSTRUCTIONS AND MAINTENANCE





ETATRON

AMERICA

SAFETY STANDARDS	4
Symbols used in the manual.....	4
Warnings and Risks.....	4
Shipping to the factory for repairs and/or maintenance	5
GENERAL REGULATION.....	5
Proper use of the equipment	5
Shipping and handling.....	5
Assembly	5
Dismantlement.....	5
Warranty	5
WATER METER SIGNAL SPLITTER eMP.....	6
Operating principle	6
Technical features.....	6
Reference Standards	6
Overall dimensions	6
INSTALLATION	7
Introduction.....	7
Water meter signal splitter installation	7
Typical installation	7
Electrical connections	8
OPERATING INSTRUCTIONS	9
Front Panel.....	9
LED description	9
MAINTENANCE.....	10
Ordinary.....	10
Extraordinary.....	10
TROUBLESHOOTING.....	10

Symbols used in the manual

		
<p>PROHIBITED Precedes information that is inherent to safety. It flags something that is not to be done.</p>	<p>WARNING Precedes a text that is very important for the protection of the health of exposed persons or for the machine itself.</p>	<p>INFORMATION NOTICE Precedes information concerning the use of the equipment.</p>

Warnings and Risks

Carefully read the warnings listed below as they provide important information regarding safe installation, use and maintenance. Store this manual carefully for future reference.

Once the packaging has been removed, check the equipment, and if in doubt do not use the equipment and consult with qualified personnel. The packaging materials (such as plastic bags, polystyrene, etc..) must not be left within reach of children as they are potential sources of danger.

Before connecting the equipment, make sure that the data on the plate corresponds to that of the power distribution network. The nameplate data is shown on the adhesive label attached to the equipment.

PLEASE NOTE:

- The equipment is made to the highest quality. Its durability, electrical and mechanical reliability will be enhanced if it is correctly used and undergoes regular maintenance.
- Equipment is supplied with grounding power cord and attached plug, to reduce the risk of electrical shock, connect only to a properly grounded receptacle install only on a circuit protected by a ground fault circuit interrupter (GFCI).
- The electrical installation must comply with the rules in force in the country where it is installed. The use of any electrical device requires compliance with some basic rules. In particular:
 - do not touch the equipment with wet or damp hands or feet;
 - do not handle the equipment with bare feet
 - do not leave the unit exposed to the elements (rain, sun, etc.). Protect equipment chemicals from freezing temperatures;
 - do not allow the equipment to be used, serviced or cleaned by children or by people without adequate training and without supervision.



WARNING:

- Any intervention or repair within the equipment must be carried out by qualified and authorized personnel. We disclaim all responsibility as a result of non-observance of this rule.
- This equipment must NOT be used by: children, people with impaired physical, sensory or mental capabilities, inexperienced personnel, unless they are supervised or instructed on the appropriate use of the unit by a person responsible for their safety.
- In case of failure and / or malfunction of the equipment, turn it off and do not tamper with it. For any repairs please contact our service centers and request the use of original spare parts. Failure to comply with the above may compromise the safety of the equipment.
- If you decide to no longer use an installed equipment it is recommended to make it inoperative by disconnecting it from the power supply and emptying the equipment body.
- In case of failure and/or malfunction of the equipment, turn it off and do not attempt to repair it. For any repairs please contact our after-sales service centers and request the use of original spare parts. Failure to comply with these conditions may compromise the proper operation of the equipment.



- In the event of damage to the equipment power cable, ask for it to be replaced by our service centers or qualified personnel to prevent risks for the people who use it;

EXPLOSION HAZARD:

- This equipment is not explosion-proof. Do NOT install and do NOT use in an explosive or potentially explosive environment.

Shipping to the factory for repairs and/or maintenance



The material to be sent to the factory for maintenance should be disassembled and packed carefully; all the parts in contact with the chemical must be emptied and rinsed to ensure the safety of the operators while transporting and handling the material in the laboratory. In the event of failure to comply with the instructions given, we reserve the right to reject the equipment and to return it at your expense; damage caused by the chemical to the material will be included in the repair estimate.

GENERAL REGULATION



Proper use of the equipment

The equipment must only be used for the purpose which it was expressly manufactured, i.e to dose liquids. Any other use is considered improper and therefore dangerous. The equipment is not foreseen for use in any applications not taken into consideration during the design stage. For further clarifications, the customer must contact our offices where the user will receive information about the type of the equipment in his possession and its correct use. The manufacturer cannot be considered responsible for any damage derived from improper, erroneous and unreasonable use.

Shipping and handling

Shipping must be performed in the same orientation as indicated on the packaging. Shipping using any means, even if delivered free to the customer, is considered at the purchaser's risk. Claims for missing material must be made within 10 days from goods receipt. Claims for defective material must be made within 30 days from goods receipt. Restitution of equipments must be agreed beforehand with authorized personnel or with the authorized distributor.

Assembly

All the equipments we produce are normally supplied fully assembled. For better clarification, consult the appendix at the end of this manual where exploded assembly drawings and views of the equipments are available together with all components and their nomenclature, for the user to have complete details of the equipment components. These drawings are indispensable when searching for malfunctioning or defective parts.

Dismantlement

To dismantle the equipment or before performing equipment maintenance, proceed as follows:

- Make sure the equipment is electrically deactivated (both poles) by disconnecting the conductors from the power supply using the omnipolar switch which must have a minimum distance of 3mm between its contacts.

Please pay particular attention to this last point and we recommend the user to consult the enclosed drawings and chapter "RISKS" before starting any operations.

Warranty

2 years. For warranty contact ETATRON AMERICA.



WATER METER SIGNAL SPLITTER eMP

Operating principle

This equipment receives a reed input signal from a water meter counter and divides it into four equal and synchronous reed output signals. It is possible to connect proportional dosing pumps and controller with analog inputs.

Technical features



- Equipment manufactured according to CE regulation
- Anti acid plastic casing
- Front panel protected by adhesive film resistant to atmospheric agents and UV rays
- Power supply: extended range 90 – 260 Volt 50-60 Hz
- Prewired with 125 V nema 5-15P plug
- IP65 protection level
- Environmental conditions: closed environment, altitude up to 2000 m, ambient temperature from 41°F to 104°F, maximum relative humidity 80% up to a maximum of 88°F (linear decrease down to 50% at 104°F).
- Classification with respect to protection against indirect contacts: CLASS I (the equipment is supplied with an electrical protection conductor).
- Galvanically isolated outputs

Reference Standards

The water meter signal splitter is in accordance with the following directives:

- 2006/95/CE: "low tension"
- 2004/108/CE: "electromagnetic compatibility"

Overall dimensions

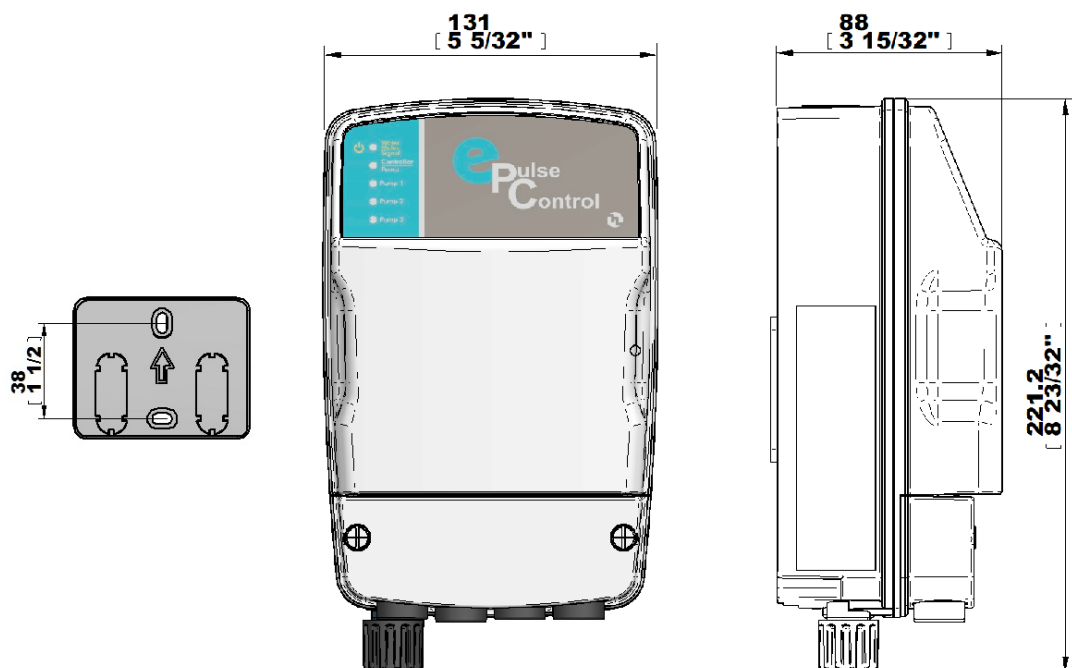


Fig. 1 – Dimensions and plate for wall mounting.



Introduction

This section describes steps for installing the equipment and wiring. Please read this instruction before starting any activity.

Follow these guidelines when installing the equipment:

- Make sure the equipment is powered off and any other related equipment before starting any activity.
- In case of any unusual events or warning signs, stop immediately. Start again only when you are absolutely sure that any possible problem has been solved.
- Do not install the equipment in hazardous environments such as at risk of fire or explosion.
- Avoid risk of electrical type and or fluid leakage. Never use a damaged or defective equipment.

Water meter signal splitter installation

Install the equipment away from heat sources, in a dry place and at a maximum ambient temperature of 104°F. Locate the equipment at maximum distance of 20 meters (cable length) from water meter and other 20 meters from pumps and controller.

Typical full installation

In the following figure is an example of complete installation with three pumps and one controller. You can connect any type of proportional dosing pump (for example e128 or eMP pump) and any type of controller with at least an analog input

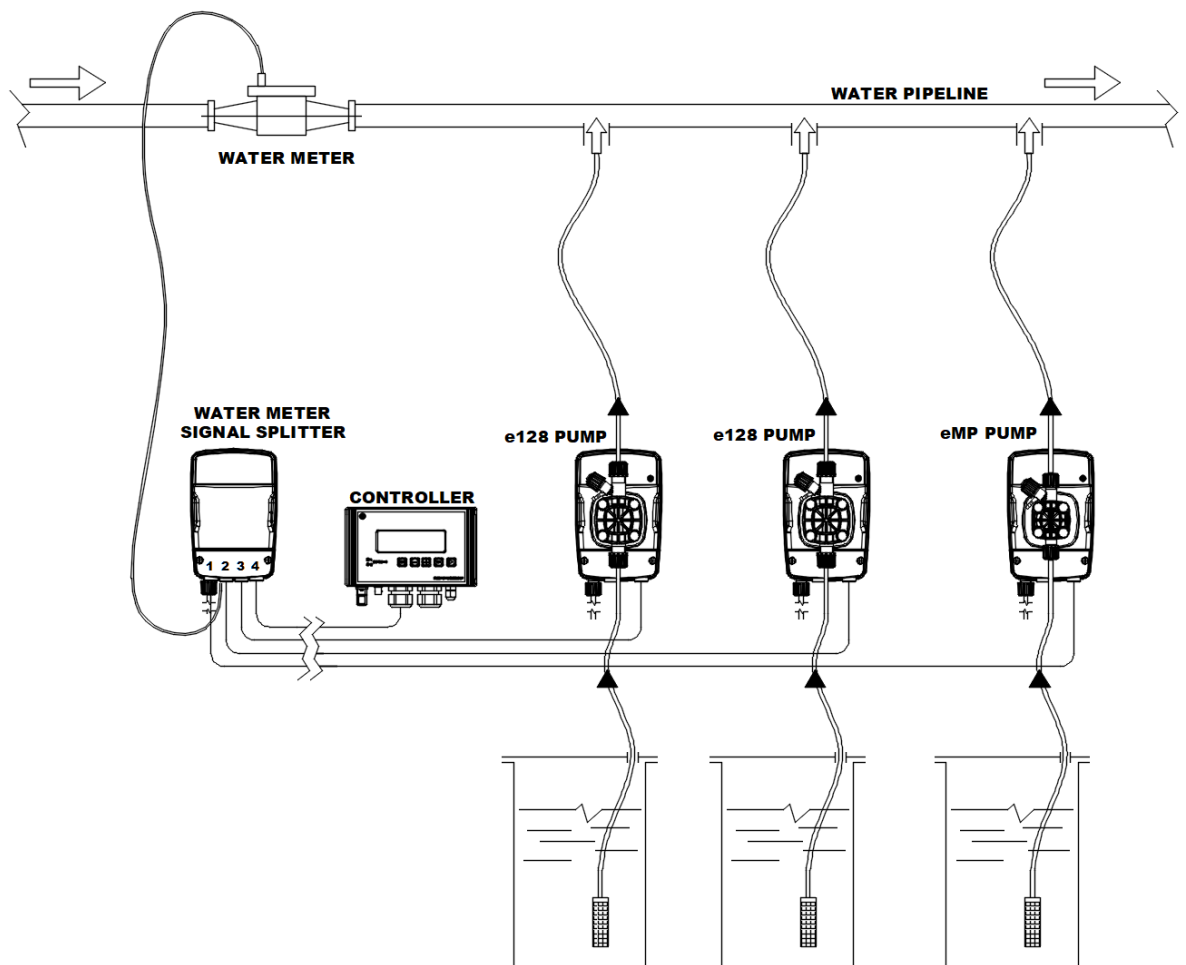


Fig. 3 – Typical full installation

Electrical connections

The following figure describes the electrical connections.

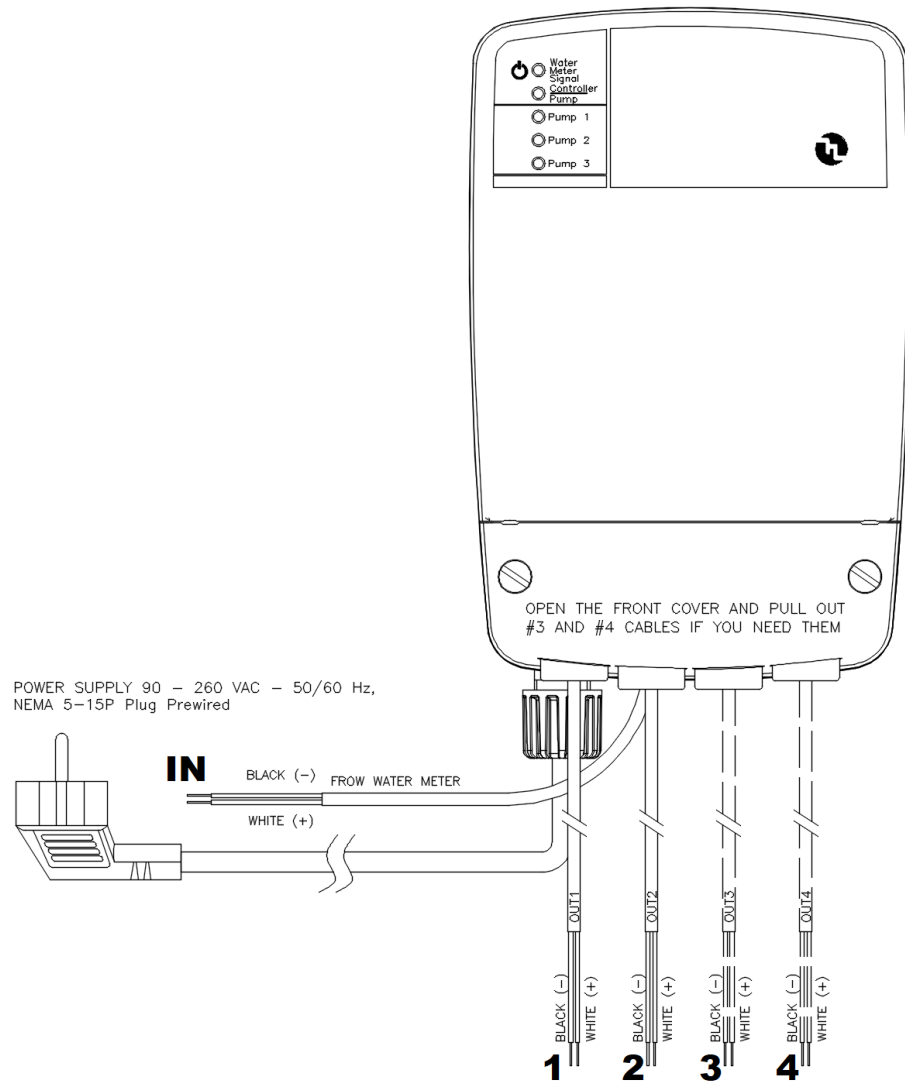


Fig. 2 – Wiring

If you open the front cover pay attention to the insulation of the cable terminals. If necessary restore it to avoid short cuts.

OPERATING INSTRUCTIONS

Front Panel



Fig.4 - Front panel

1	Power ON Led (green) and operational LED (flashing red)
2	Yellow flashing LED, output pulse to CONTROLLER
3	Yellow flashing LED, output pulse to PUMP 1
4	Yellow flashing LED, output pulse to PUMP 2
5	Yellow flashing LED, output pulse to PUMP 3

LED description



- LED 1 light up green when the equipment is power on
- LED 1 flashing RED when the equipment receives a water meter pulse
- LED 2, 3, 4 and 5 flashing YELLOW when the equipment transmits a pulse to OUT 1, 2, 3 and 4

MAINTENANCE

Ordinary



An Ordinary and accurate maintenance with a programmed check, guarantee the preservation over time and the proper functioning of the systems. Therefore, we recommend that the user follow our advice and maintenance of a service contract and assistance programmed with one of our Technical Support Centre.

Check at least every 6 months functioning of the equipment. In case of intensive use, you should increase the frequency of these controls.

Extraordinary

All components of our supplies are chosen and tested according to strict principles of selection, and then provide, for a long time, reliability and functionality in our devices.

TROUBLESHOOTING



Given the sturdiness of the system, mechanical failures do not occur. Any intervention or repair within the equipment must be carried out by qualified and authorised personnel.

In the event of maintenance and/or technical work, always make sure that the equipment is disconnected from the electrical mains and that you are wearing protective clothing and equipment (gloves and safety goggles).

FAULT	SOLUTION
The equipment is not power up	Check if the plug is properly connected Check the fuse (0,315 A) Electronic board blown due to overvoltage, no earthing, etc.: replace the board
The equipment does not transmit output pulses	Check the board, if blown replace it
The equipment does not receive input pulses	Check if the water meter works properly Check if the cable is wired properly



ETATRON

AMERICA

ETATRON AMERICA

Dilution Solutions Inc
2090 Sunnydale Blvd
Clearwater FL 33765
Telephone: 727-451-1198
FAX: 727-451-1197

WDMU00216ML1A (08 - 2017)