AquiTron | AT-WFM

Water Flow Monitor

INSTALLATION & OPERATION INSTRUCTIONS

aquilar
leak detection solutions

AT-WFM
Water Flow Monitor

Table of contents

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

Please read the instructions carefully before attempting to install and connect the AT-WFM unit.

A. GENERAL INFORMATION

The AquiTron AT-WFM water monitoring system that has been specifically designed to help achieve the requirements of BREEAM 2018 (BRE Environmental Assessment Method). The AT- WFM system will allow designers, M&E contractors and developers to achieve the one of the two WAT 03 Credits available to reduce the impact of water leaks that may otherwise go undetected. (To obtain the second available WAT 03 credit Please see our product AT-OFC). The AT-WFM system is designed to monitor water flowing through a pulse water meter. If the volume of water exceeds the pre-set limit (customer adjustable) the system will alert the customer and, if an optional valve is fitted, can isolate the mains water, therefore limiting the amount of water lost to a leak and subsequent damage.

INSTALLATION ITEMS (NOT SUPPLIED)

- Wall fasteners for surface mounting (four screws)

TOOLS REQUIRED

- Drill or hole punch for electrical / conduit entries
- Phillips (cross-head) screwdriver
- Flat-head screwdriver

STORAGE

Keep the module in a dry place prior to installation to avoid possible damage to internal components.

B. PRODUCT INFORMATION

THE AT-WFM IS SUITABLE FOR INTERNAL USE ONLY

POWER SUPPLY
100/240Vac, 50/60Hz, 0.15A

POWER CONSUMPTION
5 Watts Maximum

RELAYS
Number: 1 volt-free relay contact
Type: SPDT
Rating: 3 A at 250Vac/24 Vdc

TEMPERATURE
Operating: 5°C to 85°C

ENCLOSURE
White ABS. 177 mm x 114 mm x 65 mm (L x H x D)

TOUCHSCREEN
Resistive 4.3 inch TFT. Resolution: 480 x 272 pixels. Screen size: 95 x 54 mm.

***When using Aquilar supplied water meters or valves only. Actual rates dependent on model used. Please see relevant data sheets.**

TYPES OF WATER METER
To ensure compatibility with the AT-WFM it is strongly recommended to use the Aquilar range of water meters. Third party meters must be capable of supplying a dedicated volt free pulse for volumes of 1/10/100 litre(s).

PULSE OUTPUT
Two channel

TYPES OF VALVE
Compatible with AquiTron AT-V-XX, AT-BV-XX, AT-VP-XX, AT-V-B-XX valve ranges.

MAXIMUM OPERATING PRESSURE*
16 Bar

MINIMUM FLOW RATES*
AT-WFM will detect any flow rate greater than 0.15m³/h.

***AT-V-XX Flanged Butterfly Valve and AT-BV-XX Ball Valve require additional equipment: AT-RU1 Relay Unit**

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

MAXIMUM PULSE CIRCUIT LENGTH

500 metres maximum. For circuit lengths (over 50m) cable should be grounded to prevent interference. Connect ground at controller end only.

NUMBER OF CHANNELS

2 Maximum, can be used single channel

CONNECTION TO MODULE

Via the SPDT volt free relay output

APPROVALS

- EMC Directive 2014/30/EU:
- BS EN61000-6 3:2007+A1:2011
- BS EN IEC 61000-6 1:2019
- UKCA CE

COMPONENT LAYOUT

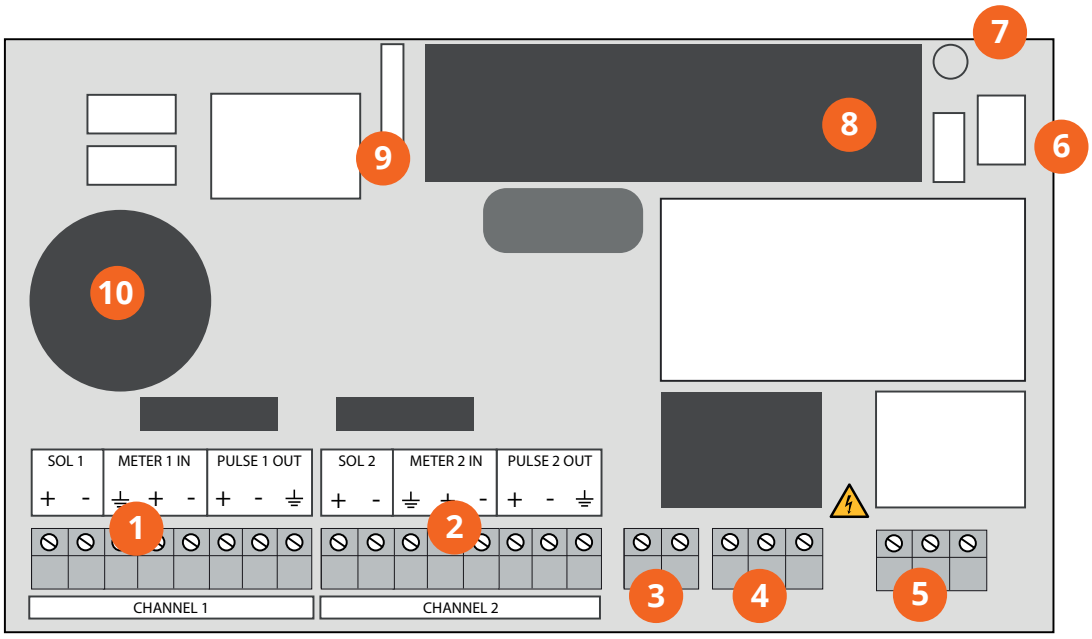


Figure 1 - Component View

1. Channel 1 terminals
2. Channel 2 terminals
3. External Trigger Input terminals
4. Volt Free Relay terminals
5. Mains power in terminals
6. Battery Connector
7. Power LED
8. Back-up battery
9. Serial Connector
10. Buzzer

C. FITTING THE MODULE

The unit should be installed in a dry area with easy access. **This controller is not suitable for external use.**

Before installation the front section should be removed and stored somewhere safe.
To remove carefully unplug the interface board as shown in fig A. Before doing so make sure that the AT-WFM is switched off and the battery is disconnected.

Using the pre-drilled holes use suitable fixings to secure the base unit to a flat surface. If the base is distorted the front cover may not fit correctly.

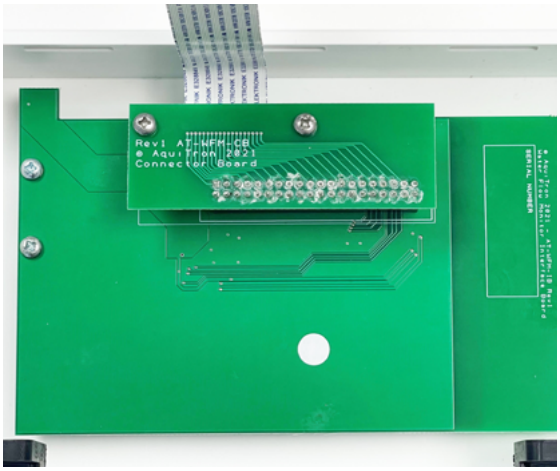
Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

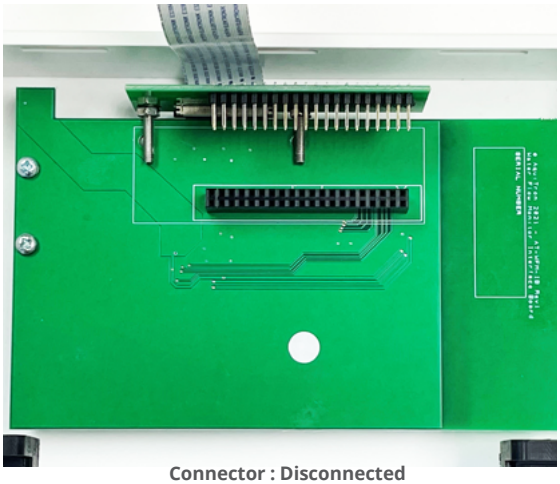
It is recommended mains power is provided from an adjacent un-switched fused spur. This must be fused correctly. Fuse rating should be 3 amps.

It is recommended not to apply power until all connections are complete.
Once all connections are in place the front panel should be plugged in and the front panel attached.

Note: Do not allow the front panel to hang from the ribbon cable. Take care not to trap or damage the ribbon cable when installing the front panel.



Connector : Plugged In



Connector : Disconnected

Figure A - Interface board

D. WIRING

AT-WM should be installed by a competent installer, in-line with current IEE regulations, using sound engineering practice and in recommendations laid down by the HVCA.

E. PLUMBING INSTALLATION

The diagrams will serve as a visual aid, but it is recommended that a competent plumber carries out the assembly and installation of any included water meters and solenoid valves in line with the manufacturer's instructions. Direction of flow is essential for correct operation. Connect the pipe to the water meter / valve according to markings on the valve body. Apply pipe compound sparingly to male threads only. Ensure compound does not enter valve or meter. Avoid undue strain on pipework by proper support and alignment. Type PN16 mating flanges will be required on some models over 50mm.

Never hold the water meter or solenoid body when tightening.

F. HELPFUL HINTS

We recommend that meters and valves attached to the AT-WFM are installed with a maintenance by-pass and strainers to prevent debris entering them. They can be fitted vertically or horizontally. Note the direction of the flow arrows marked on the water meter and valve to ensure they are fitted correctly. Do not overtighten plastic fittings. Observe rules on distance from pipe elbows to meters to ensure correct flow through the water meter.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AquiTron

AT-WFM
Water Flow Monitor

G. MAINTENANCE

Clean periodically depending on conditions. Keep the medium flowing through the water meter / valve free from dirt. While in service, the Solenoid Valve should be operated at least once a month to ensure proper cleaning and closing. We strongly recommend a strainer is fitted prior to any meters or valves to prevent debris fouling the mechanism.

H. CONNECTION

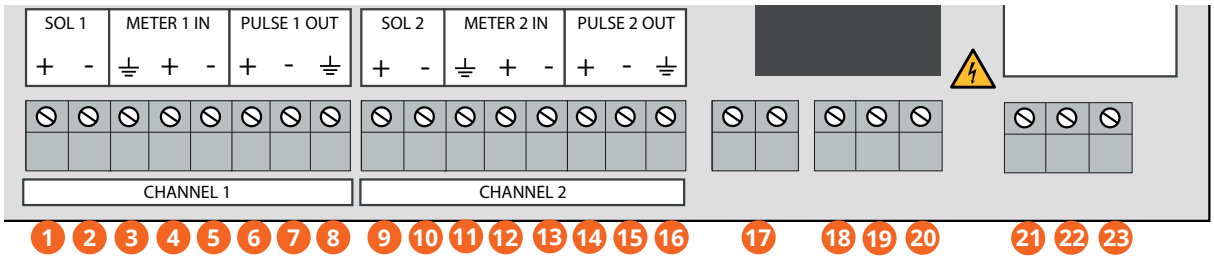


Figure 2 - Connection Layout

1. 6Vdc Solenoid Valve Ch1 + ve Connection
2. 6Vdc Solenoid Valve Ch1 - ve Connection
3. Pulse Ground Connection
4. Meter 1 (Ext) Pulse +ve Connection
5. Meter 1 (Ext) Pulse -ve Connection
6. Pulse Output to BMS Ch1 (Ext) +ve
7. Pulse Output to BMS Ch1 (Ext) -ve
8. Pulse Out Ground Connection
9. 6Vdc Solenoid Valve Ch2 +ve Connection
10. 6Vdc Solenoid Valve Ch2 -ve Connection
11. Pulse Ground Connection
12. Meter 2 (Ext) Pulse + ve Connection
13. Meter 2 (Ext) Pulse -ve Connection
14. Pulse Output to BMS Ch2 (Ext) +ve
15. Pulse Output to BMS Ch2 (Ext) -ve
16. Pulse Out Ground Connection
17. External Volt Free Trigger Input
18. Normally Closed - Volt Free Relay Output
19. Common - Volt Free Relay Output
20. Normally Open - Volt Free Relay Output
21. Live - Mains Input Connection
22. Earth - Mains Input Connection
23. Neutral - Mains Input Connection

If the unit is to be used as single channel unit (only one water meter) use indicated channel 1 connections. Using wiring instructions above, connect each accessory to the controller. See relevant section for further connection details.

The Input connection can be made to an intruder alarm for automatic switching between high and low volume periods when the alarm is activated. This should be a volt free contact.

H1. POWER & BATTERY CONNECTION

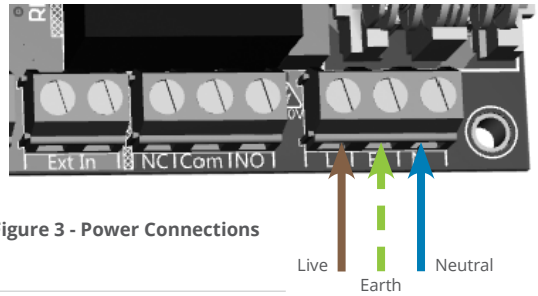


Figure 3 - Power Connections

It is recommended to use an un-switched fused spur to provide local isolation of the AT-WFM.

Power supply should be 100-240Vac 50/60Hz.

Note: This unit must be earthed.

IMPORTANT : All wiring should only be done by a qualified electrician

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

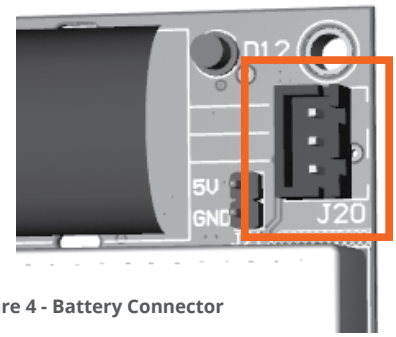


Figure 4 - Battery Connector

The battery back-up should be enabled by plugging the battery pack into the unit (connector J20)

Important Note: Do not plug in battery until unit has fully started up. Plugging a battery in during the boot up process can cause damage to the controller.

H2. VOLT FREE RELAY CONNECTIONS

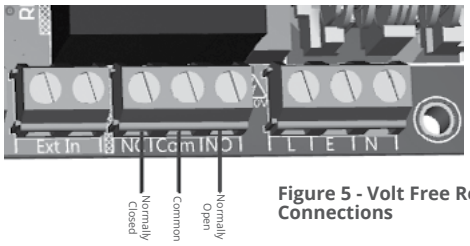


Figure 5 - Volt Free Relay Connections

Volt Free Relay Output

Note: This output is volt free, no power is provided from these terminals.

The AT-WFM is equipped with a single SPDT volt free relay for control of accessories. This relay output operates when the unit goes into alarm. It can switch a maximum resistive load of 3amps @ 230Vac/24Vdc.

The relay allows for control of equipment requiring a normally open or closed volt free contact, such as BMS. Or can be used to control remote accessories such as AT-SD3 speech diallers or AT-BCN-A beacons, third party valves etc.

H3. EXTERNAL TRIGGER INPUT

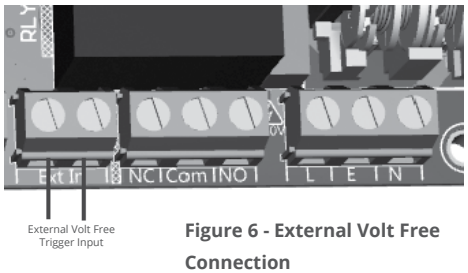


Figure 6 - External Volt Free Connection

This input allows the controller to be put in and out of high and low volume settings by external equipment such as a key switch or alarm system. i.e intruder alarm for entry / exit setting.

A volt free normally open input is required. If enabled in software closing this contact will place the AT-WFM unit into low volume mode. See section L3. for set up information.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

H4. WATER METER CONNECTION

Connect the pulse output of the water meter to the AT-WFM as shown above. The connections are not polarity sensitive. If the cable on the meter requires extending the connection should be made using a shielded 2 core cable.

Minimum cable size should be 1.0mm² for runs of up to 100m, for runs above this we recommend a minimum cable size of 1.5mm². For cable runs above 50m or runs adjacent to mains cabling the shield of the pulse cable should be grounded at the controller end only using one of the indicated ground terminals to prevent interference.

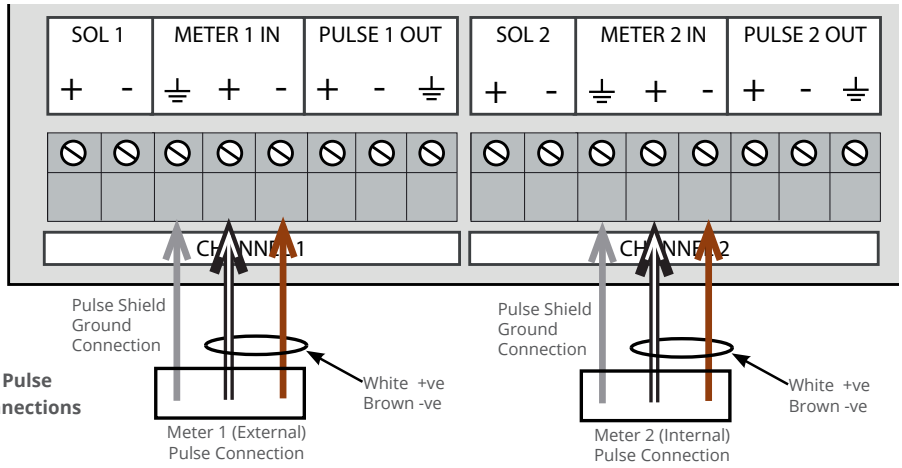


Figure 7 - Pulse Input connections

Note: Meters connected to the AT-WFM should provide dedicated volt free pulse for volumes of 1/10/100 litre(s).

H5. SOLENOID VALVE CONNECTION

The AT-WFM can directly control two AT-V-P-xx or AT-V-B-xx solenoid valves only. The valves should be connected as shown above.

The valve should be connected to the same channel as the water meter. If two channels are being used with only one valve (standard BREEAM setup) the valve should be connected to channel 2 (internal).

If using AT-V-xx or AT-BV-xx butterfly or ball valves an AT-RU1 valve controller must be used. Please see the connection diagram below.

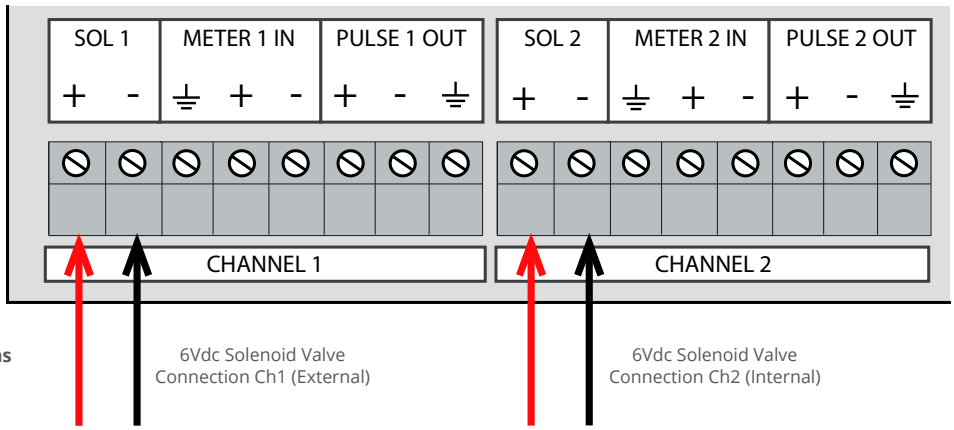


Figure 8 - Solenoid Vavle Connections

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

AT-RU1 RELAY UNIT CONNECTIONS

Power Connections to Relay (Mains), 230Vac supply L = Live, N = Neutral, E = Earth

Power Connections to Relay (Relay Valve), 230Vac supply L1= Live Close, L2= Live Open, N = Neutral, E = Earth

Control Connections from AT-WFM Controller 1= Solenoid +, 2= Solenoid -
NOTE: Wiring should only be done by a qualified electrician

Third party valves are not recommended for use with this controller. They can be controlled via the volt free relay output. See section H2.

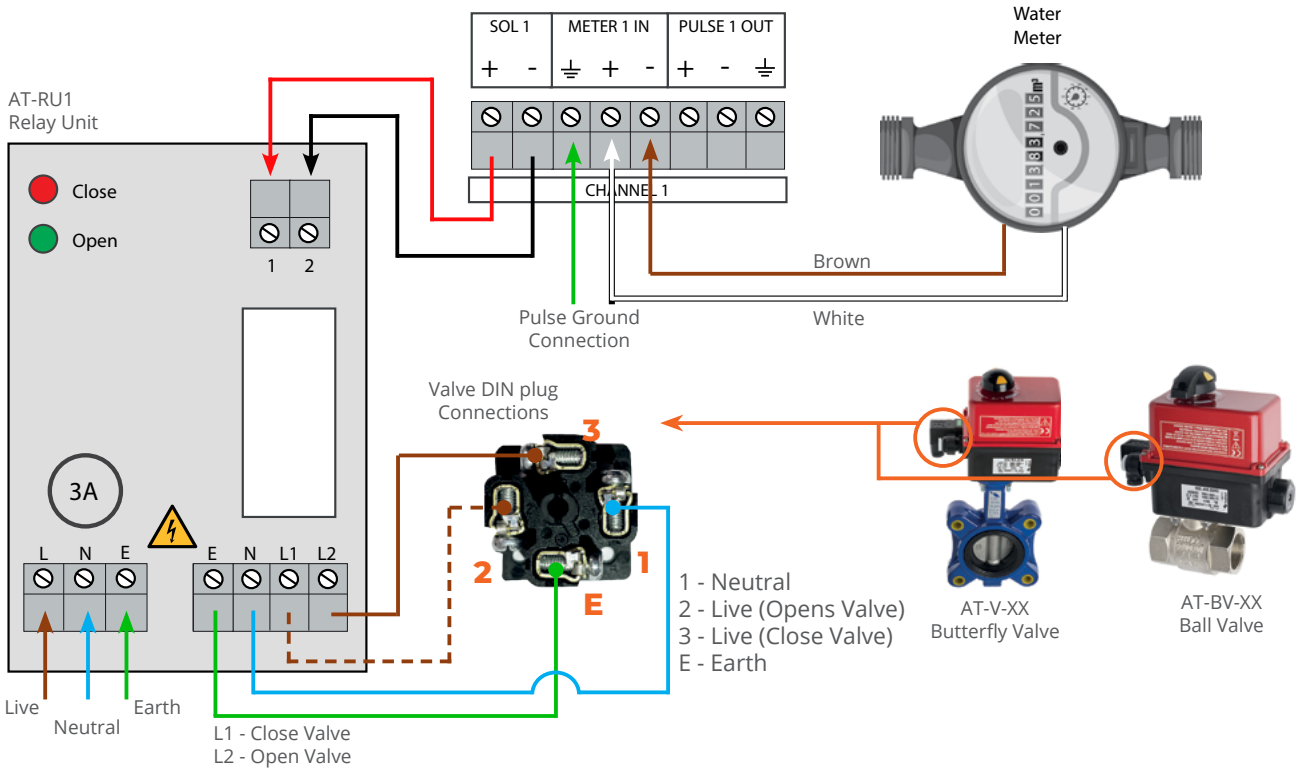


Figure 8 - AT-RU1 Connections

IMPORTANT : All wiring should only be done by a qualified electrician

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

H6. PULSE OUTPUT CONNECTION

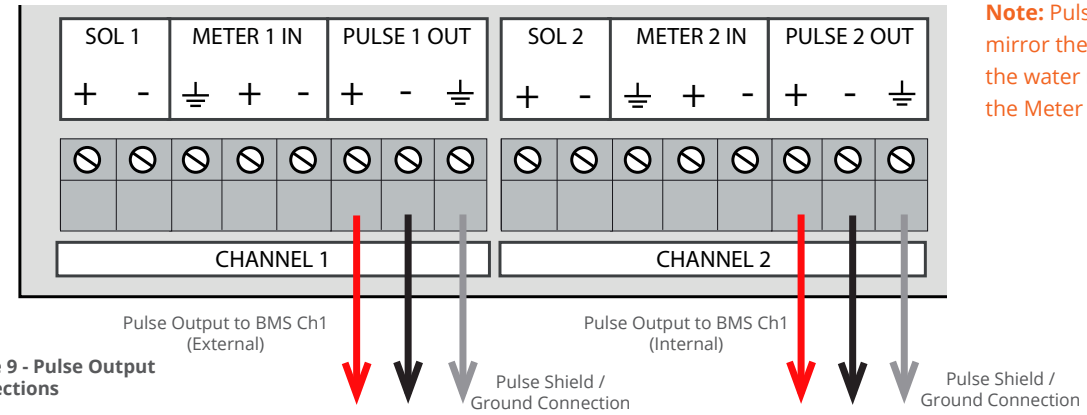


Figure 9 - Pulse Output Connections

Note: Pulse outputs provided mirror the pulses received from the water meters connected to the Meter In connection(s).

The AT-WFM is equipped with an onbard two channel pulse splitter. This enable the unit to give real time flow volume information to external equipment such as a BMS. A two core shielded cable should be used with the shield grounded at the AT-WFM in the relevant ground terminal as shown above.

I. HOME SCREEN

When first turning on the AT-WFM it will boot up to the home screen. From his screen you have an overview of the system status and settings. The information available is listed below.

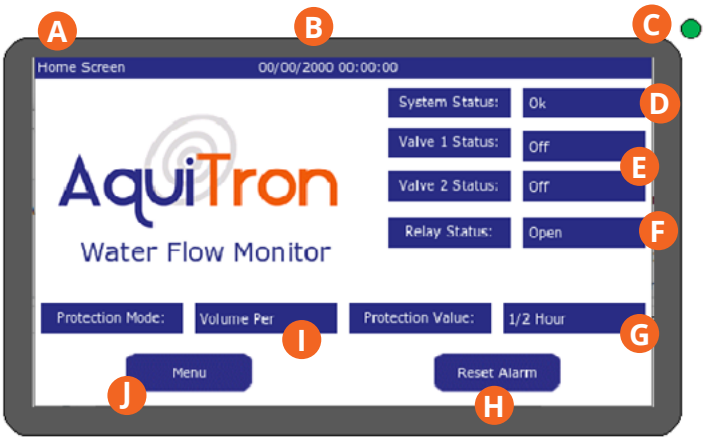


Figure 10 - Home Screen

A. Displays current screen
B. Displays date and time
C. Status LED:
   - Green – System on and no alarm present
   - Red – System is in alarm
   - Blue – System is in manual override
   - (Pulsing LED in any of the above colours indicates unit is running on battery power)
D. Displays system status:
   - Ok – System is monitoring and no alarms present
   - Leak – System has detected a leak and is in alarm
E. Displays valve status: Open or closed
F. Displays volt free relay status: On or Off
G. Displays protection value: Options for what is displayed here will depend on protection mode selected.
H. Reset Alarm button
I. Displays protection mode
J. Menu button

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AquiTron

AT-WFM
Water Flow Monitor

J. SETTING THE AT-WFM

The AT-WFM requires settings to be adjusted to suit the conditions of the application it is to be fitted to. For correct operation it is essential the information entered into the unit is as accurate as possible.

Once all connections have been made power should be applied to the AT-WFM. To ensure power is being received check the red mains LED is lit on the main PCB.

The status LED on the front of the AT-WFM should be green to indicate it is monitoring and no alarms are present.

K. MENU SCREEN

Home>>Menu

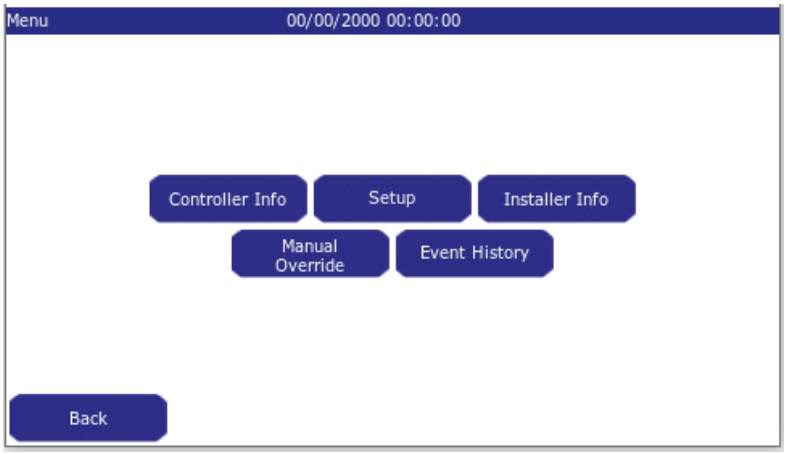


Figure 11 - Main Menu

The menu screen has six buttons for navigating around the AT-WFM.

Note: On all screens pressing the 'Back' button will take you to the previous screen.

K1. CONTROLLER INFO

Home>>Menu>>Controller Info

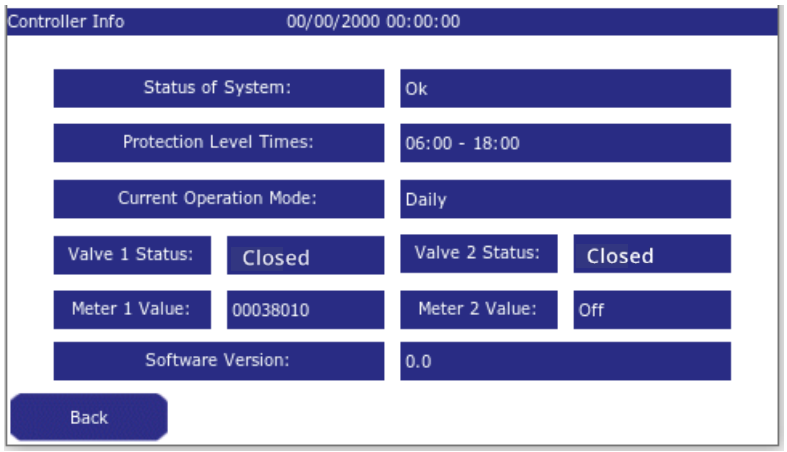


Figure 12 - AT-WFM Controller Information Screen

The Controller Info screen gives live detailed information on the systems current setup and status

Status of System: Displays if the system is 'Ok', in 'Leak' alarm or has an 'Error'.

Protection Level Times: This displays the current high volume 'Building occupied' period see section L2B.

Current Operation Mode: Displays selected mode for high volume period see section L3.

Valve Status (1&2): Displays whether valves are enabled and if so whether currently open or closed see section

Meter Value (1&2): Displays if meter is enabled, and if so current live meter reading see section L4.

Software Version: Displays version number for currently installed software

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AquiTron

AT-WFM
Water Flow Monitor

K2. INSTALLER INFO
Home>>Menu>>Installer Info

Figure 13 -Installer Information Screen

This screen displays the installer contact information. By default it has Aquilar contact details loaded. These details can be changed to show the details of the installation / commissioning / current maintenance company. See section L7.

K3. MANUAL OVERRIDE
Home Screen>>Menu>>Manual Override

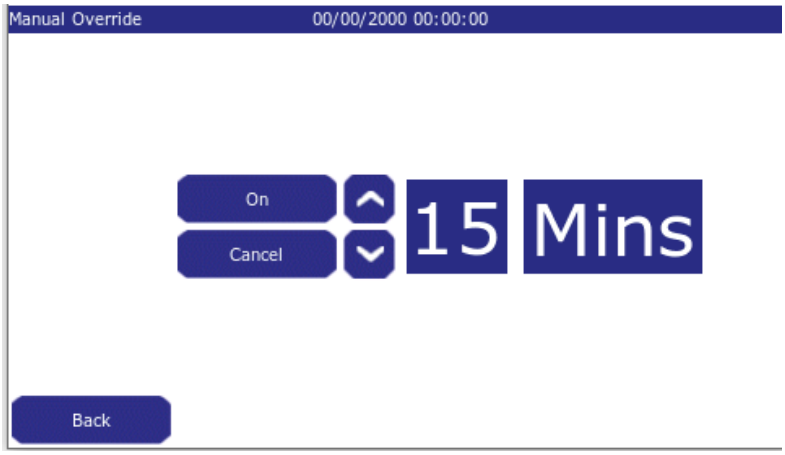


Figure 14 -Manual Override Screen

Note: Caution should be taken before enabling the manual override as this means the system will not go into alarm for the selected time period and your building will not be protected.

Pressing the on button enables the override. There are four pre-set override time periods available. 15, 30, 45 and 60 minutes. These are selected by using the up or down arrow.

Once a time period is selected the status LED will change to blue and a countdown begins and runs for the selected time period. Once this has reached zero the status LED will return to green and the system will automatically go back to normal operation.

Manual Override can be cancelled at any time by pressing the cancel button. The system will then revert back to normal operation as per the programmed parameters.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AquiTron

AT-WFM
Water Flow Monitor

K4. EVENT HISTORY

Home Screen>>Menu>>Event History

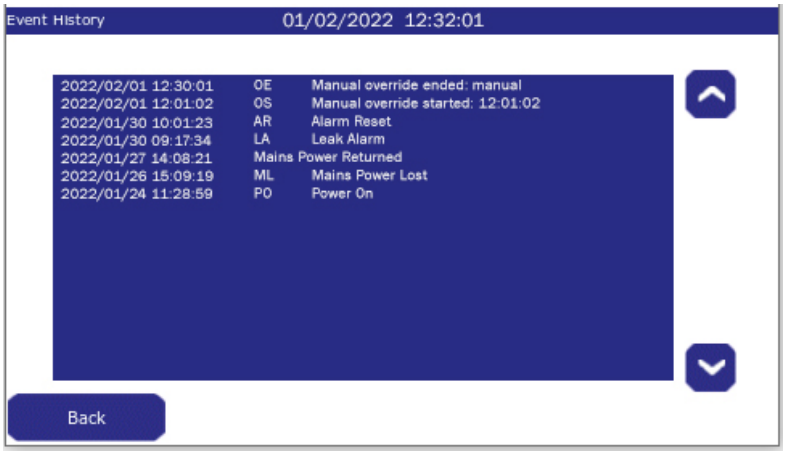


Figure 15 - Event History Screen

The events history contains information on any alarms and programming/setup changes. The system will retain the last 1000 events. Once this is full the oldest events will drop off the list as new ones are recorded.

All events recorded have a date and time stamp and are ordered according to this. With the most recent events listed first at the top of the list.

Use the arrows beside the events screen to scroll through to older events.

Important Note: For accurate recording of events, the date and time must be set up accurately on the system during commissioning (see section L1.)

L. SETUP (FOR AUTHORISED USERS ONLY)

Home Screen>>Menu>>Setup>>Password>>Enter

To prevent unauthorised tampering with settings, pressing the setup button in the menu screen will ask you to input a password before entering into the setup menu.

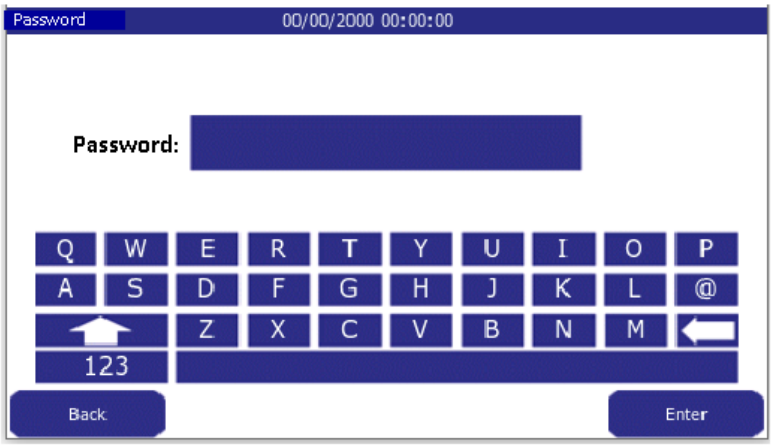


Figure 16 - Setup - Password Screen

Using the on screen keyboard input AT-WFM then press enter. **DEFAULT PASSWORD : ATWFM** *Use Capitals*

This will open the setup menu.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

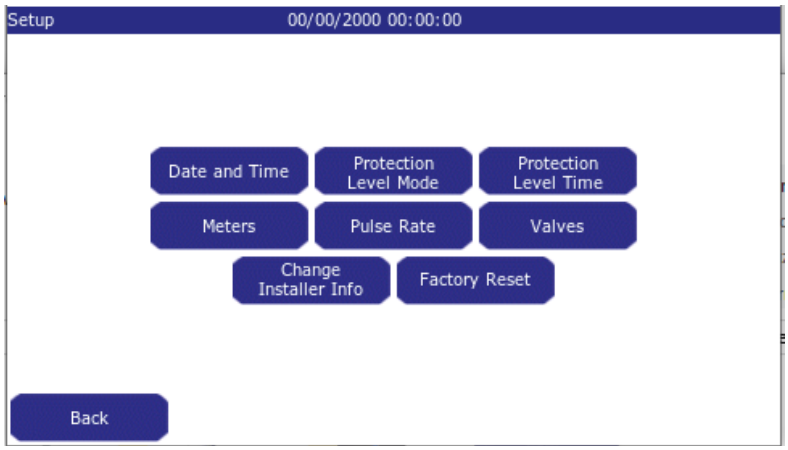


Figure 17 - Main Setup

From this page you can access the screens necessary to setup the AT-WFM controller.

L1. DATE AND TIME
Menu>>Setup>>Password>>Date and Time

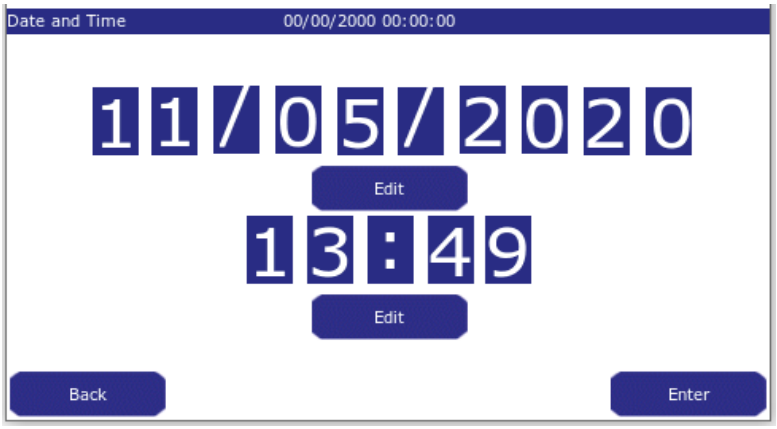
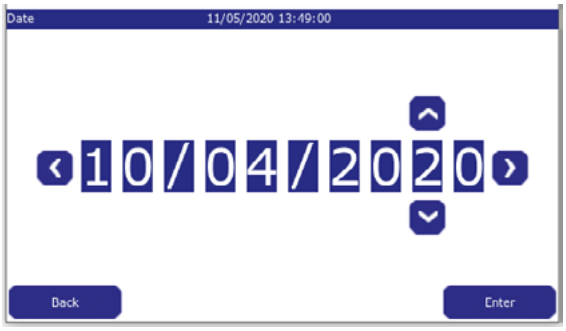
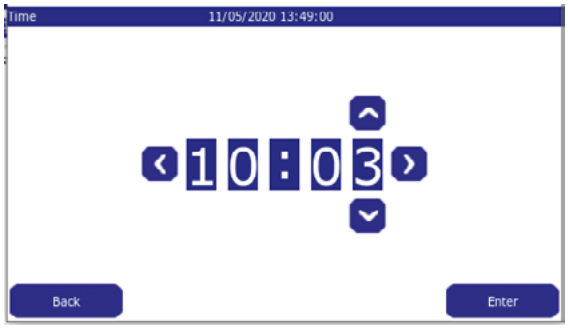


Figure 18 - Date / Time Setup Screen

Important Note: For correct operation of the system it is essential the date and time are correctly entered here.

To adjust the date and time press the edit button under the value you wish to adjust.





Use the side arrows to select the value you wish to adjust, then the up and down arrows to select the required value. Only true values can be selected. Press enter to return to the time and date screen then enter to save the values and return to the setup menu.

Note: The AT-WFM system has a real time clock that will retain the correct time and date in the event of power loss.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

L2. PROTECTION LEVEL MODE

Menu>>Setup>>Password>>Protection Level Mode

Protection Level mode is the measurement used to monitor the flow through the pulse meters. There are three modes available:

- Volume per
- Timed
- Crosscheck

The other settings available on this screen will change according to the mode selected.

L2.A VOLUME PER

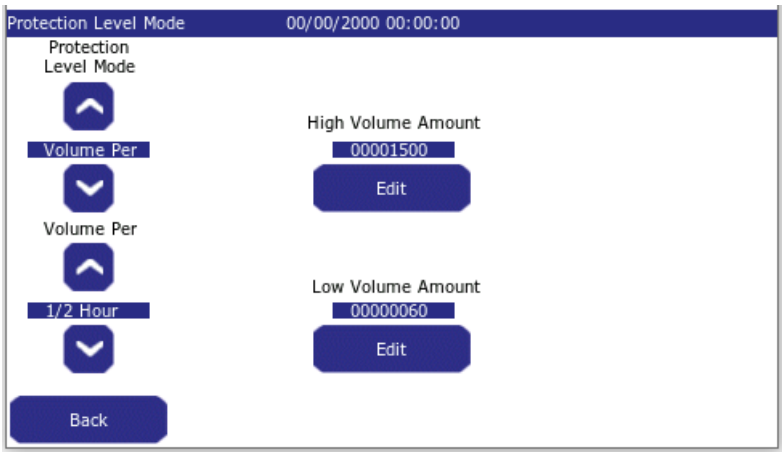


Figure 19 - Protection Level - VOLUME MODE

Default setting is 'Volume Per'. In this mode the system will allow a set amount (volume) of water through the pulse meter during a defined period. e.g. 1500ltr water volume allowed in any half hour period.

In this setting there are three further options for defining that period:

- ½ Hour
- Hour
- Day

By combining these values you increase or decrease the 'sensitivity' of the systems measurement of flow volume.

To edit the flow volume, press the edit button under the high or low volume value you wish to adjust to enter the value edit screen. Then use the arrows to select and adjust values, then press enter to save and return to the screen above. (See section L3. on adjusting high low volume times).

In the example shown in Fig.19 above the system will allow 1500ltr per half hour during high volume periods, and 60ltr per half hour during low volume periods. Any water use above this level will put the system into alarm.

L2.B TIMED

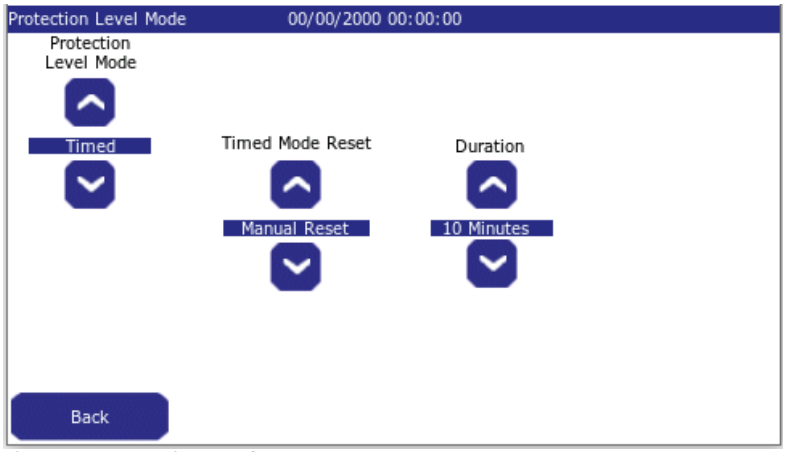


Figure 20 - Protection Level - TIMED MODE

Timed **does not measure volume.** Instead it will allow water flow for defined periods of time. Periods available are:

- 10 minutes
- 15 minutes
- 30 minutes
- 60 minutes

Any **uninterrupted** flow above this user defined time will put the AT-WFM into alarm. In the example in fig.20 the unit is set for 10 minutes. If the water flows for 11 minutes the system will go into alarm. If the water runs for 9 minutes, stops, then flows for another 9 minutes, stops, etc the system will not go into alarm.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

There are two reset options available:

Manual Reset – The Reset button must be pressed to stop the alarm and reset the controller

Automatic Reset – The controller will automatically reset as soon as the water flow stops

Note: A flow switch can be used in place of pulse water meters on this setting if required.

L2.C CROSSCHECK

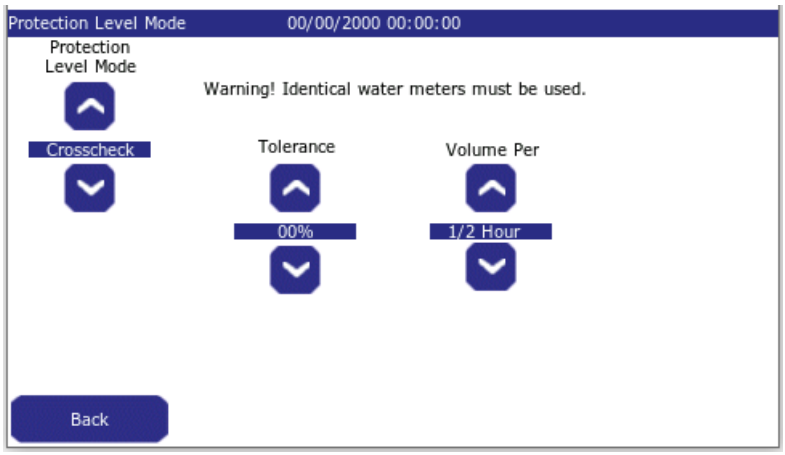


Figure 21 - Protection Level - CROSSCHECK MODE

Crosscheck gives the AT-WFM flexibility to be used in applications where a comparison of two meters is required, e.g. a block of flats with heat interface units, especially useful if flats are left unoccupied for long periods. The flow and return into each flat can be monitored. If more water goes in than comes out then the water loss will be noted by the AT-WFM and an alarm generated.

There are two adjustment in this section that affect the sensitivity of alarm conditions, tolerance and volume per.

Tolerance is measured in percentage and allows a differential of up to 20% between channel pulse inputs. Options are:

- 0%
- 10%
- 20%

Volume per specifies the period of measurement. Options are:

- ½ hour
- Hour
- Day

e.g.1. Select tolerance 10% and volume per ½ hour. This means each half hour if the pulse input of each channel varies by more than 10% the system will go into alarm. On this setting an expected 100ltr measurement could vary by up to 20ltrs per half hour before an alarm would be given. Total of 480ltrs per 24 hour period.

e.g.2. Select tolerance 20% and volume per Day. This allows up to 20% difference in channel pulse inputs in any 24 hour period. On this setting an expected 100ltr measurement would only allow 40ltrs difference over a 24hr period.

Important Note: Selecting 0% tolerance requires the pulse inputs to be matched at all times.

Important Note: For effective operation identical pulse Meters with high accuracy **must** be used. Contact Aquilar for details on our range of suitable water meters.

AT-WFM
Water Flow Monitor

L3. PROTECTION LEVEL TIME

Menu>>Setup>>Password>>Protection Level Time

In this screen you set the start and end times required for high volume level. Any time outside of the parameters input here are considered low volume level by the controller, and will be measured as such according to the volume levels in put in section H2. Volume per.

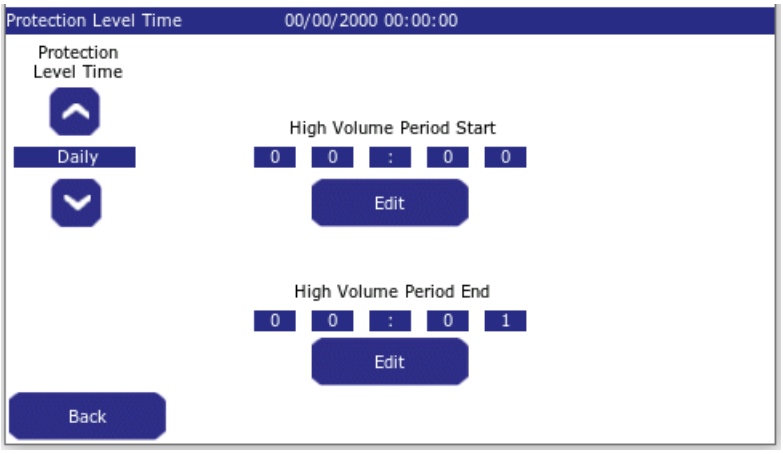


Figure 22 - Protection Level Time

Time select options are:

- **Daily – Times are the same for all days**
- **Weekly – Different times can be set for each day (each day must be set individually)**
- **Week/End – Times are set for week days and weekends separately**
- **Ext Input – High and low volume times are triggered via an external input such as a key switch or alarm system *i.e intruder alarm for entry / exit setting.* Trigger inputs must be a normally open volt free contact (See section H.2, closing to trigger into low volume. (See section H.3 for connection information)**

The general rule for the high volume times is to set this higher value for when the building is occupied. Eg. For an office you may want to set the **high volume (building is occupied)** period to start at 8.00 and end at 18.00. In this example in the time between 6pm and 8am the controller will be using the **low volume (building is unoccupied)** setting.

In all options press the edit button under the value you wish to adjust to enter the edit screen, then use the arrows to select and enter the value, press enter to save.

L4. METERS

Menu>>Setup>>Password>>Meters

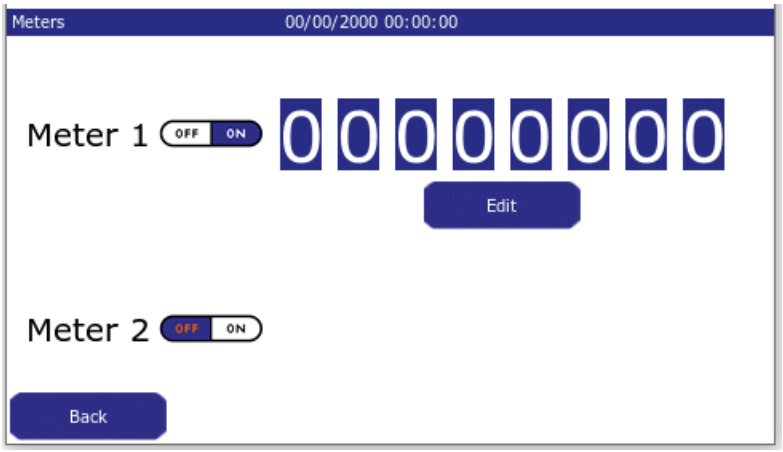


Figure 23 - Meters Pulse Screen

The meter (pulse inputs) are enabled on this screen. The example in fig.23 shows meter 1 enabled (on) and meter 2 off. If two pulse meters are being used both should be enabled here.

To enable, or disable, a meter simply press the on/off button on the screen.

The meter values shown on the meter dials should be entered using the edit buttons. This will ensure the meter readings match the controller readings to make meter reading possible from one position, at the AT-WFM.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AT-WFM
Water Flow Monitor

L5. PULSE RATE

Menu>>Setup>>Password>>Pulse Rate

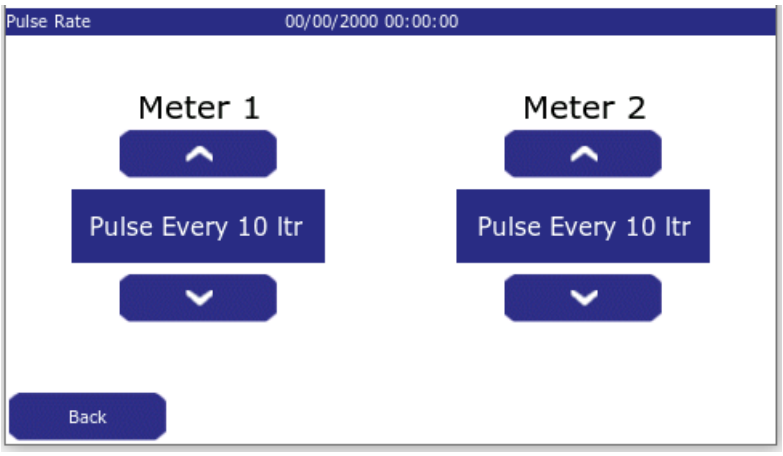


Figure 23 - Meters Pulse Rate Setup

Pulse rates for the water meters connected to the system are selected here. Options available are pulse every: 1, 10, 100 litres. It is important that the pulse selected should match the output from the meter fitted. If not the system will not be able to accurately measure water volume.

Please contact Aquilar if you require a suitable pulse meter.

Note: If this screen is blank it is because no meters have been enabled. (See section H4)

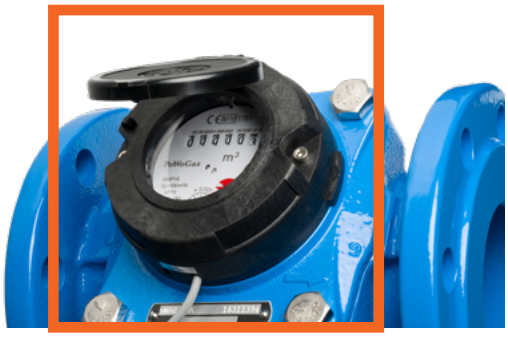


Figure 23.a - Typical Cyble

Fig 23.a shows a typical pulse transmitter, this is where a pulse is taken to be connected to the AT-WFM control panel.

L6. VALVES

Menu>>Setup>>Password>>Valves

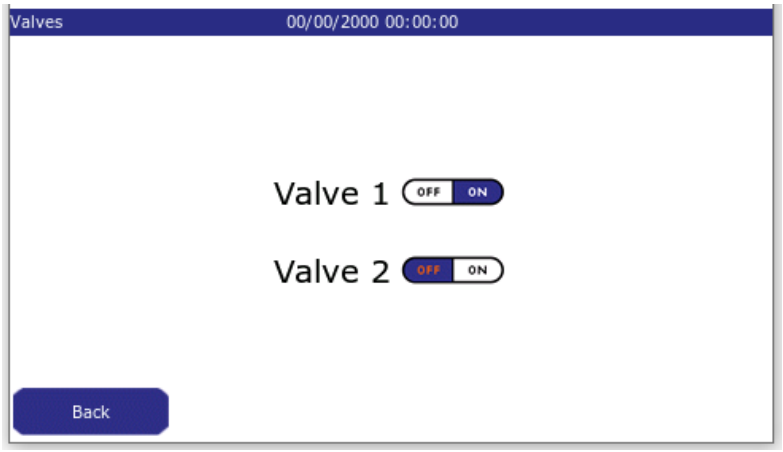


Figure 24 - Valve(s) Setup Screen

If valves are fitted they must be enabled here for the system to control them. To enable or disable use the on screen On/Off button for each valve. See section H5. For connection details.

IMPORTANT NOTE: Only use AquiTron valves on this system.

See Section B “Types Of Valves”.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR
+44 (0) 1403 216100
info@aquilar.co.uk
www.aquilar.co.uk

AquiTron

AT-WFM
Water Flow Monitor

L7. CHANGE INSTALLER INFO

Menu>>Setup>>Password>>Change Installer Info

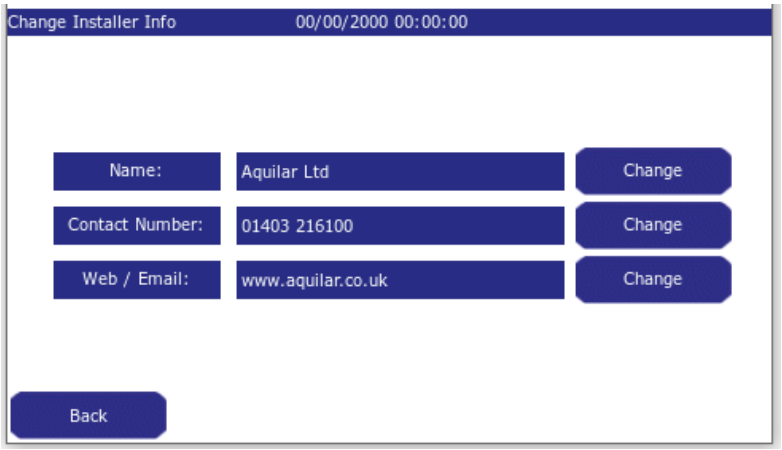


Figure 25 - Installer Information Change Screen

On this screen the installer information can be changed. By default Aquilar details are shown.

To make changes to the information shown simply press the 'Change' button next to the information you wish to adjust. This will bring up the on-screen keyboard. Type in the new information and press enter to save.

Note: Entering no information, not pressing enter, or pressing back will keep the existing information.

L8. FACTORY REST

Menu>>Setup>>Password>>Factory Reset>>Confirm

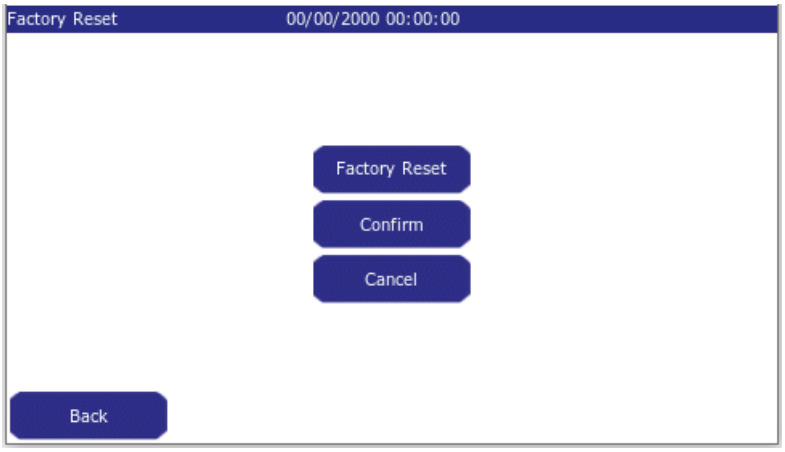


Figure 26 - Factory Reset Screen

The AT-WFM can be reset back to factory default settings. If this screen is selected you will be asked to confirm or cancel this action. To exit without resetting press cancel. To proceed press confirm.

All settings will need to be re-entered, including time and date.

Important Note: This action will revert the unit back to default settings and delete all history. It is non-reversible.

M. EVENT LOG MESSAGES

Log messages can only be viewed directly on the screen under Menu > Event History. It is possible to scroll through them by using the up and down arrows.

PO POWER ON

Device powered on

POWER OFF

Mains power lost, operating from battery

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR

+44 (0) 1403 216100

info@aquilar.co.uk

www.aquilar.co.uk

AT-WFM
Water Flow Monitor

System detected that mains power to the unit has been removed and that the system is operating from the battery. This message will not be logged if power is removed and there is no battery backup.

MAINS POWER RETURNED

Mains power returned

POWER OFF

Mains power lost, operating from battery

System detected that mains power to the unit has been removed and that the system is operating from the battery. This message will not be logged if power is removed and there is no battery backup.

MAINS POWER RETURNED

Mains power returned

System has detected that the mains power to the unit has been restored and the display has returned to normal operation. This message will not be logged if power is removed and there is no battery backup.

LA LEAK ALARM

Leak Alarm

Message to record the time when a new leak is discovered. This message will be logged every time the system goes into alarm

AR ALARM RESET

Alarm Reset

Message to record that the system has been reset.

SYSTEM FAULT

System Fault

Message will be displayed when a system fault has been detected, if problem persists please contact Aquilar.

MC PROTECTION LEVEL MODE CHANGED

Protection level mode changed to XXXX (X can be volume per, timed, crosscheck)

Logs a mode change upon exit of the Protection Level Mode screen.

TC PROTECTION LEVEL CHANGED

Protection level time changed to XXXX (X can be daily, weekly, week/weekend, Ext input)

Logs a time change upon exit of the Operating Mode screen.

VC PROTECTION VOLUME CHANGED

Protection volume XXXX changed to YYYY (X can be high or low, Y is the new volume amount)

Logs that manual override mode has started upon exit of the manual override screen.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR

+44 (0) 1403 216100

info@aquilar.co.uk

www.aquilar.co.uk

AT-WFM
Water Flow Monitor

OS MANUAL OVERRIDE STARTED

Manual override started for XXXX (X will be the time the manual override has been set for)

Logs a change to either high volume amount or low volume amount upon exit of Protection Level Mode screen whilst volume per mode is selected.

OS MANUAL OVERRIDE ENDED

Manual override ended: XXXX (X can either be timeout or manual)

Logs that manual override mode has finished by either timeout or it has been cancelled manually.

Unit 30, Lawson Hunt Industrial Park,
Broadbridge Heath, Horsham, West Sussex,
RH12 3JR

+44 (0) 1403 216100

info@aquilar.co.uk

www.aquilar.co.uk