AMELEC
SIGNAL CONDITIONING

AGS1135 Water Usage Monitor / Controller

- 2 year warranty as standard
- British Design & Manufacture

TYPICAL APPLICATION
- Water well usage Monitor / Controller

TECHNICAL SPECIFICATION

FUNCTION
Monitors the water usage, turns off the pump and activates 24Vac output for the solenoid if the daily allowance limit is reached within 24hr period. Internal programmable clock reset the system to start the cycle again every 24th hr.

INPUT
Volt free contacts from flow meter.
Other voltage pulses or analogue input available on request.

PUMP OUTPUT
240Vac (16A max) Mains LIVE normally active and de-activated on Trip.

SOLENOID OUTPUT
Switched 24Vac (100mA max) normally de-activated and activated on Trip.

OVERIDE
Optional solenoid override available via Fixed 24Vac.

CONTROLS
P3: Internal 15 turn potentiometer to set allowance limit. Adjustment range 10 to 100% of input range.

INDICATOR
Power ON: 5MM GREEN.
Trip: 5MM LED, Red = ON
Pulse = 5MM LED, Green

PERFORMANCE
Accuracy: < 1%
Trip settability: better than ±1%
Trip repeatability: better than ±1%
Resolution: FS =4000 pulse
Power consumption: <4VA

PROTECTION
Isolation 1000V RMS.
Inputs/24Vac/Supply/Earth
Internal Fuse.
Input over range up to typically 200%.
Flow count - 5 sec backup on loss of supply
Clock - 30 days battery backup

DISPLAY
3.5 digit LCD display, normally showing total flow, Set limit can be viewed by pressing the push button in the same scale.

24Hr TIMER/CLOCK
Time factory programmed to UK GMT time.
Alarm 1 is factory programmed to 00:00 Hr. The flow count will be reset to zero every midnight.
30 days battery backup .

ENVIROMENTAL CONDITION
Storage temperature: - 40 to +70 ℃
Operating Ambient: -15 to +55 ℃
Relative Humidity: 5 to 95% RH

MOUNTING AND FIXING
Dimension: 160W x 212H x 115D.
Fixing Centre - 145mm

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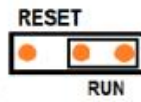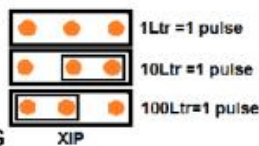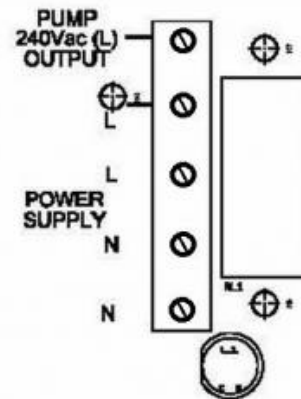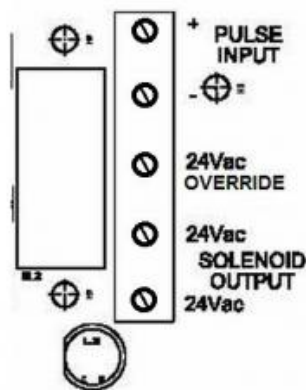# AGS1135 Water Usage Monitor / Controller

If requested this product will be supplied fully calibrated and setup to your requirement, so no site calibration or setup is required. However if you need to make any adjustment please follow the instruction carefully on this page.

SAFETY NOTE:
1. **High dangerous** voltages connected, therefore should only be installed by a qualified person.
2. Connect the equipment according to current IEE regulations and separate all Wiring according to IEC1010.
3. Make sure all screw terminals are tight before you switch the equipment on.
4. Don't touch any circuitry after you have connected the equipment to mains.
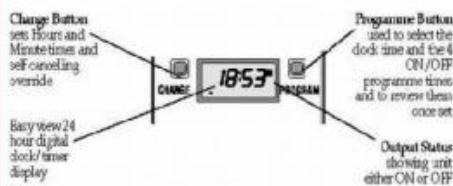
The equipment is designed for Pollution-Degree 2 environments only. This means you must install it in a clean, dry environment.

Wiring

INPUT SCALING XIP

1Ltr =1 pulse
10Ltr =1 pulse
100Ltr =1 pulse

RESET

To reset   RUN

CLOCK / TIMER

Change Button sets Hours and Minute times and self cancelling override

Programme Button used to select the clock time and the 4 ON/OFF programme times and to review these once set

Easy view 24 hour digital clock/timer display

Output Status showing unit either ON or OFF

18:53

Battery
This product has a factory fitted rechargeable battery. If the time controller is left with its mains power switched off for more than 1 month the display may go blank. In this case switch mains on, wait 30 minutes, and apply reset - see 1 before programming.

Programming
Only two setting buttons are required, Change and Program. In normal use the Change button is used to switch ON or OFF overriding the timeswitch until the next programmed OFF or ON time. During programming the Change button is used to set the hours and minutes. The Program button is only used when setting or adjusting the clock time or the 4 programmed ON/OFF times, although it can also be used to review the ON/OFF times once they have been set. Each time the Program button is pressed the display will flash either the hours or minutes in turn, starting with the clock then the first ON time, first OFF time, second ON time etc. Wherever the hours or minutes are flashing they may be set using the Change button. Once set the Program button is pressed again to proceed to the next stage.

Normal Operating Mode
In normal operation the PanelMaster will display the correct time with the colon flashing. The output status will be shown by either ON or OFF on the display.

16:35 off

1 To Reset Display
To clear programmes from memory and reset the time controller press and hold down both buttons until the display goes blank. Release buttons and display will fill with its complete range of characters and then clear to show clock and hour digit flashing.

0:00

You are now in the clock setting mode at the beginning of the programme sequence

Programming sequence

Setting clock	→	Programme 3 ON
Programme 1 ON	⋮	Programme 3 OFF
Programme 1 OFF	⋮	Programme 4 ON
Programme 2 ON	⋮	Programme 4 OFF
Programme 2 OFF	⋯⋯	Operating Mode

Note: Button pauses greater than 1 minute during programming will result in automatic return to the operating mode.
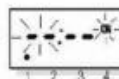
2 Setting Clock (after reset)
i **Hour Setting** - Press the <Change> button to advance the hour setting. Note: For rapid hour selections press and hold down <Charge> button.

0:00

ii **Minute Setting** - Press the <Program> button once to select the minutes - display shows clock symbol and minute digits flashing. Press the <Change> button to advance the minutes setting. Note: For rapid minute selections press and hold down <Charge> button. (Note: 16 hrs shown as example of hrs set)

16:00

iii Press <Program> button once - clock is now set and display shows ready for the first ON programme time with ON and hours digits flashing.
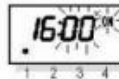
3. To Set Programme ON/OFF Times (after clock setting)
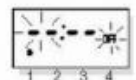**Programme 1 ON time**
i Press <Charge> button to advance the hour setting.

ii Press <Program> button once to select minute time- display shows minute digits and ON flashing. Press <Charge> button to advance minute setting. (Note: 16 hrs shown as example of hours set).

16:00 ON

iii Press <Program> button once - the first ON time is now set and display shows ready for the first OFF programme time.

iv Now set the hrs and minutes as before.

v Repeat steps i to iv to set the remainder of the 3 ON/OFF times as required. Note: Any unused ON/OFF programme should be skipped until the display shows normal operating mode. Do not programme 0's into unused programmes

IMPORTANT After setting a clock time which falls within a programmed ON period, the unit will not switch ON. Use the Charge button to switch unit ON. After this the unit will operate normally to the programmes set.

4. Programme Review
To last review the set programmes or for quick exit to normal operating mode press and hold the <Program> button.

5. Initiating Programme Mode
This can be initiated any time during the normal operating mode. Press <Program> button and the Clock symbol, hrs and minutes symbols on the display will flash - this is review mode. If any change to programmes is required press <Change> button to initiate programme mode and then follow steps 2 and 3.

6. Cancelling Programmes
Any ON/OFF programme can be cancelled by clearing its ON and OFF time. Follow step 5 and when into the ON or OFF programme to be cancelled press the <Change> button until the hour digits show --; then press the <Program> button to clear the programme. The display will show the hour and minute digits and ON or OFF flashing.

Self Cancelling Override
To change the output status from ON to OFF or vice versa during normal operation press the <Change> button. The output status will change and indicate override is in operation by flashing.