USER'S MANUAL
DETECTION CENTRAL OF GAS AND WATER LEAKAGE
"ERAG"

CONVENTIONS:
Functions will be referred between "-", keys between (-), sensors between {-}, visual indicators [-] and sound signals between {{-}}.

INDICATORS
[NET] – visual indicator of functioning with net tension.
[BAT] – visual indicator of functioning with battery's tension when intermittent.
- visual indicator of the battery's tension inferior to 11,5V, when permanently switched on.
[CLOSE WATER] – visual indicator of the electrovalve "closing" water.
[CLOSE GAS] - visual indicator of the electrovalve "closing" gas.
[OPEN WATER] – visual indicator of the electrovalve "open" water.
[TEST] – visual indicator of test.

SENSORS
{WATER DETECTOR} – detection sensor of water leakage;
{GAS DETECTOR} – detection sensor of gas leakage;

KEYS
(CLOSE WATER) – key to close the water electrovalve and to switch off the sound signal.
(CLOSE GAS) - key to close the gas electrovalve and to switch off the sound signal.
(OPEN WATER) – key to open the water electrovalve;
(TEST) – key to perform a visual test of all indicators.

1.0 - SPECIFICATIONS

· Detection of water leakage;
· Detection of gas leakage;
· Open and closing of the water electrovalve;
· Closing of the gas electrovalve;
· Sound alarm;
· Auxiliary contacts "Open Colector";
· Dry contacts NA and NF water, gas and water and gas.
· Auxiliary power supply in case of energy breakdown of the net.
· Permanent charge of the battery;

2.0 – TECHNICAL CARACHTERISTICS

* *CENTRAL OF DETECTION*
- Tension of the power supply 220/230VAC.

- Power supply of 12VDC for sensors.
- Auxiliary contacts “Open Colector” – 100mA.
- Dry contacts for water alarm, gas and water and gas.
- Dim. 6 modules – DIN.

* *BATTERY*
- Tension of out put 12V.
- Out put current 3 A.
- Dim. 6 modules – DIN.

3.0 - **MANUTENTION**

- Make regularly a “TEST”.
- In case of damage contact authorized reseller.
- Every six months test the battery.
- Every six months test and clean sensors.

4.0 - **PRECAUTIONS**

- Do not use abrasive cleaners.
- Do not apply liquids directly.

5.0 - **CONNECT FOR 1ST TIME**

When the detection central is connected for the 1st time, it will be executed the next procedure by the following order:

· {{BIP}} – One time,
· [BAT LED] – blinks 3 times,
· [NET LED] – blinks 3 times,
· [OPEN WATER] – blinks 3 times,
· [CLOSE WATER] – blinks 3 times,
· {{BIP}} – one time, closing of the water electrovalve,
· [CLOSE WATER] – remains blinking,
· [CLOSE GAS] – blinks 3 times,
· {{BIP}} – one time, closing of the gas electrovalve,
· [CLOSE GAS] – remains blinking,
· [TEST] – blinks 3 times,
· {{BIP}} – 3 times,

Note: [CLOSE WATER] and [CLOSE GAS] remain intermittent.

6.0 - **NORMAL FUNCTION**

Open electrovalves:

· Press (CLOSE WATER) key,
· The [CLOSE WATER] led turns off,
· Press (OPEN WATER) key,

· The [OPEN WATER] led turns on, water electrovalve is open,
· Press (CLOSE GAS) key,
· The [CLOSE GAS] led turns off,
· Open the gas electrovalve manually,

Close electrovalves:

· Press (CLOSE WATER) key,
· The [CLOSE WATER] led turns on,
· Press (CLOSE GAS) key,
· The [CLOSE GAS] led turns on,

7.0 – DETECTION OF WATER LEAKAGE

- When the {WATER DETECTOR} sensor is activated, the water electrovalve close,
- The [CLOSE WATER] led keeps blinking intermittently,
- {{BIP}} sound signal shoots,

To open central again:

· Press (CLOSE WATER) key,
· The [CLOSE WATER] led turns off,
· {{BIP}} sound signal is cancelled.

Note: If the {WATER DETECTOR}, after opening the central again, keeps detecting water, the [CLOSE WATER] led will remain continuingly turn on while this situation proceeds.

8.0 - DETECTION OF GAS LEAKAGE

- When the {GAS DETECTOR} sensor is activated, the gas electrovalve close,
- [CLOSE GAS] led keeps blinking intermittently,
- {{BIP}} shoots sound signal,

To open central again:

· Press (CLOSE GAS) key,
· The [CLOSE GAS] led turns off,
· {{BIP}} sound signal is cancelled.

Note: If the {GAS DETECTOR}, after opening the central again, keeps detecting gas, the [CLOSE GAS] led will remain continuingly turn on while this situation proceeds.

1.0 – TEST TO THE DETECTION CENTRAL

This permits testing the good functioning of all warners and keys.

Initiate test:

- Press (TEST) key
- [TEST] led will keep intermittent while the duration of the test,
- {{BIP}} – 3 times,
- [LED BAT] – blinks 3 times,
- [LED NET] – blinks 3 times,
- {{BIP}} – one time,

- Press (OPEN WATER) key,
  - {{BIP}} – One time,
  - [OPEN WATER] – blinks 3 times,

- Pres (CLOSE WATER) key,
  - {{BIP}} – One time,
  - [CLOSE WATER] – blinks 3 times,

- Press (CLOSE GAS) key,
  - {{BIP}} – One time,
  - [CLOSE GAS] – blinks 3 times,

Quit test:

- Press (TEST) key,
- After 30 seconds without pressing any key,

Please contact our technical services if the test doesn't work like it was describe.

2.0 – BATTERY TEST

Initiate test:

- Turn off power supply circuit breaker from the detection central,
- Wait 5 minutes,
- When the test is over if the visual indicator [BAT] is intermittent the battery is in good state.
- When the test is over if the visual indicator [BAT] is continuingly switch on the battery should be replaced.

Turn on circuit breaker

1.0 – TECHNICAL TEST

Initiate test:

· Press and hold (TEST) key,
· {{BIP}} at 5 seconds,
· Hold and press (TEST) key and press [ARM WATER] key,
· [TEST] led will remain intermittent while the test is running,
· [CLOSE WATER] is turn on if the {WATER DETECTOR} is detecting,
· [CLOSE WATER] is turn off if the {WATER DETECTOR} isn't detecting,
· [CLOSE GAS] is turn on if the {GAS DETECTOR} is detecting,
· [CLOSE GAS] is turn off if the {GAS DETECTOR} isn't detecting,
· [OPEN WATER] is turn on if the entry WATER. "A" is active,
· [OPEN WATER] is turn off if the entry WATER. "A" is inactive,
· Press (CLOSE WATER), the contacts NC, NA of the WATER and NC, NA of GENERAL will be moved for 5 seconds.
· Press (CLOSE GAS), the contacts NC, NA of the GAS and NC, NA of GENERAL will be moved for 5 seconds.
· Pressing (OPEN WATER), it will be activated the "B" output of ENERGY for 5 seconds,
· Pressing again (OPEN WATER), it will be activated the "R" output of ENERGY for 5 seconds.

Quit test:

· Press (TEST) key,
· After 250 seconds without pressing any key,

2.0 SENSORS

13.0 - ENTRYS

WATER:

· "A" – Entry for active water sensors. Connection between "A" and "M", and turning on the power supply (+) and (-) of gas.
· "D" – To switch off the water electrovalve Ev.A. without setting the alarm. Connection between "D" and "M". (ex: used to switch off the electrovalve remotely).
· "M" – Mass.
· "S" – entry for passive water sensors. Connection between "S" and "M".

GAS:

· "D" – To switch off the gas electrovalve Ev.G. without setting the alarm. Connection between "D" and "N". (Ex: used to switch off the electrovalve remotely).
· "C" – Entry of the gas sensor. Switch on to the terminal "C" of the sensor.
· "N" – Entry of the gas sensor. Switch on the terminal "N" of the sensor.
· (+) – Connect to the positive terminal of the sensor.
· (-) – Connect on to the negative terminal of the sensor.

BAT:

· (+) – Connect to the positive terminal of the battery.
· (-) – Connect to the negative terminal of the battery.

1.0 – **OUTPUTS**

GENERAL:

This output always turns on when the GAS and WATER outputs are activated.
· "C" – Common.
· "NA" – Dry contact normally open.
· "NF" – Dry contact normally closed.

GAS:

This output always turns on when the {GAS DETECTOR} is activated.
· "C" – Common.
· "NA" – Dry contact normally open.
· "NF" – Dry contact normally closed.

WATER:

This output always turns on when the {WATER DETECTOR} is activated.
· "C" – Common.
· "NA" – Dry contact normally open.
· "NF" – Dry contact normally closed.

ENERGY:

· "C" – Common.
· "B" – Output open collector (100mA 24V – Conduct when the tension of the battery is inferior a 11,5 Volts)
· "R" – Output open collector (100mA 24V – Conduct when there's no tension of the net)

Ev.A.:

· (+) – Connect to the red wire of the water electrovalve.
· (-) – Connect to the black wire of the water electrovalve.

Ev.G.:

· (+) – Connect to the gas electrovalve.
· (-) – Connect to the gas electrovalve.

ATTENTION: THIS CENTRAL WAS DEVELOPPED NOT TO SUBSTITUTE ANY TYPE OF CARE OR VERIFICATION OF THE REGULAR SECURITY, BUT TO COMPLEMENT IT.