

INSTALLER MANUAL

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MICRODAVE

**Programming and setting SW for
CMH9000DAVE
with peripheral product
MESDAVE RS**



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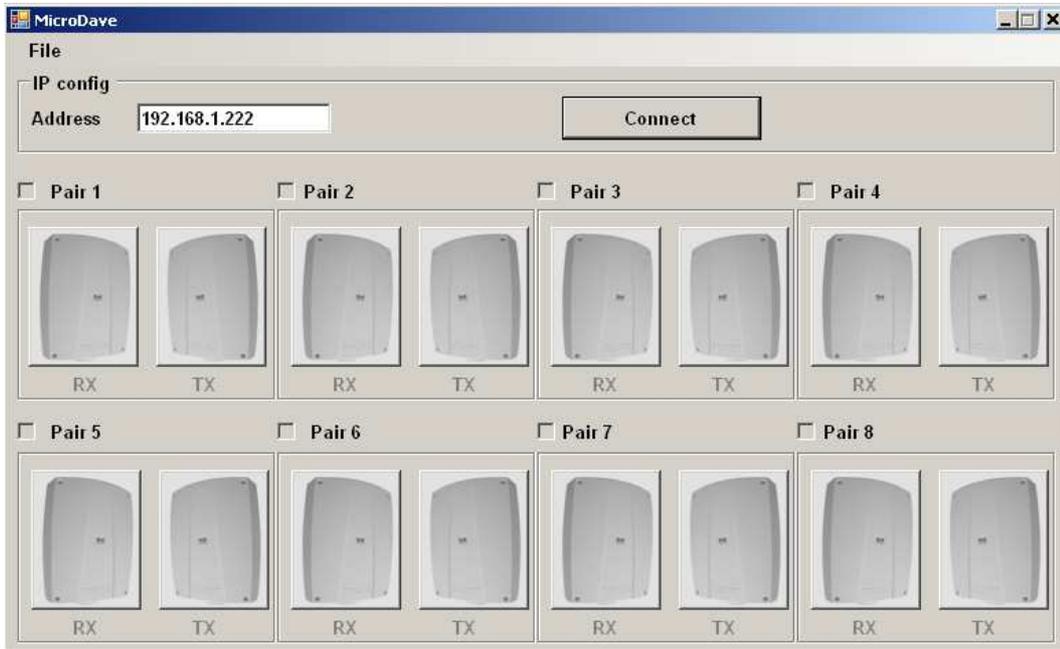
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INTRODUCTION

MicroDave Software combined with the product CMH9000DAVE enables to programming and diagnostic MW Barriers DAVE series.

Each set is able to connect up to 8 pairs of DAVE RS MW. The limit of each system is represented by the pairs number and/or the length of the RS485 line , 1Km branch.



Before opening the SW (MicroDAVE), it need to configure the CMH9000DAVE board as indicated below.

Each single head connected through the serial RS485 port must have a device with different address selected (see instruction manual CMH9000DAVE).

The first four dip switches (1,2,3,4) present on main board of Receiver and Transmitter head are use to select the board address in binary code.

The address of peripheral board connected are from 1 to 8 and must be same for Tx and Rx of same sector, it is recommended to start from address 1 and sequentially the other.

Setting of CMH900DAVE

Before start with MW DAVE setting, it's necessary to provide the functional correct parameters on each CMH9000DAVE present and connect in field installation.

CMH9000DAVE can be configured opening a browser page (<http://www.192.168.1.222>).

The default address is: **192.168.1.222**

Installer Password (access to CMH9000DAVE)

As show on the below picture, an installer password need for change the parameters of card:



Default password are:

User name (Nome utente): **admin**
 Password: **sicurit**

Change Password

Proceed to change the installer password to ensure security of data programmed.

Password change

The following page will be displayed on the PC monitor :



CMH9000D Ethernet to serial processor

- Overview
- Network configuration
- Mode configuration
- Output configuration
- COM0 setup
- COM1 setup
- Password change

Password change

This page allows to change the password for **admin** login.

CAUTION: Incorrect settings may cause the board to lose network connectivity. Recovery options will be provided on the next page.

Fill the following fields in order to change the admin password:

Actual password:	<input type="text"/>
New password:	<input type="text"/>
Retype password:	<input type="text"/>
	<input type="button" value="Save"/>

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Digit the actual password and then the new one with confirmation (digitated code two times). Press the button **Save** to store the displayed data on the PC screen.

IP Address

The address of each board must be configure according to the LAN connection.

Select the button:

Network configuration

The following page will be displayed on the PC screen:



The screenshot shows a web interface for configuring the board. At the top left is the SICURIT ALARMITALIA logo. A red header bar contains the text "CMH9000D Ethernet to serial processor". On the left is a vertical navigation menu with red buttons: Overview, Network configuration (selected), Mode configuration, Output configuration, COM0 setup, COM1 setup, and Password change. The main content area has the title "Board Configuration" and a sub-header "This page allows the configuration of the board's network settings." Below this is a red-bordered box with a "CAUTION" message: "Incorrect settings may cause the board to lose network connectivity. Recovery options will be provided on the next page." Underneath, it says "Enter the new settings for the board below:" followed by a form with three input fields: "IP Address:" (192.168.1.227), "Gateway:" (192.168.1.1), and "Subnet Mask:" (255.255.255.0). A "Save Config" button is at the bottom of the form.

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Be careful when you change the configuration address because an incorrect configuration or a wrong number address will result a failed communication with the peripheral CMH9000DAVE.

If you lose your password, it will be possible to reset the board to a default configuration. You need to proceed as specify in apposite section of the installer manual CMH9000DAVE.

The data displayed on the PC monitor can be store on the board by press the button: **SAVE.**

To set the parameters for a correct working of the CMH9000DAVE , proceed as indicate in the next paragraph.

Communication Port

Completed the configuration of communication data and security code above mentioned, it needs to set the board according to the installation typology.

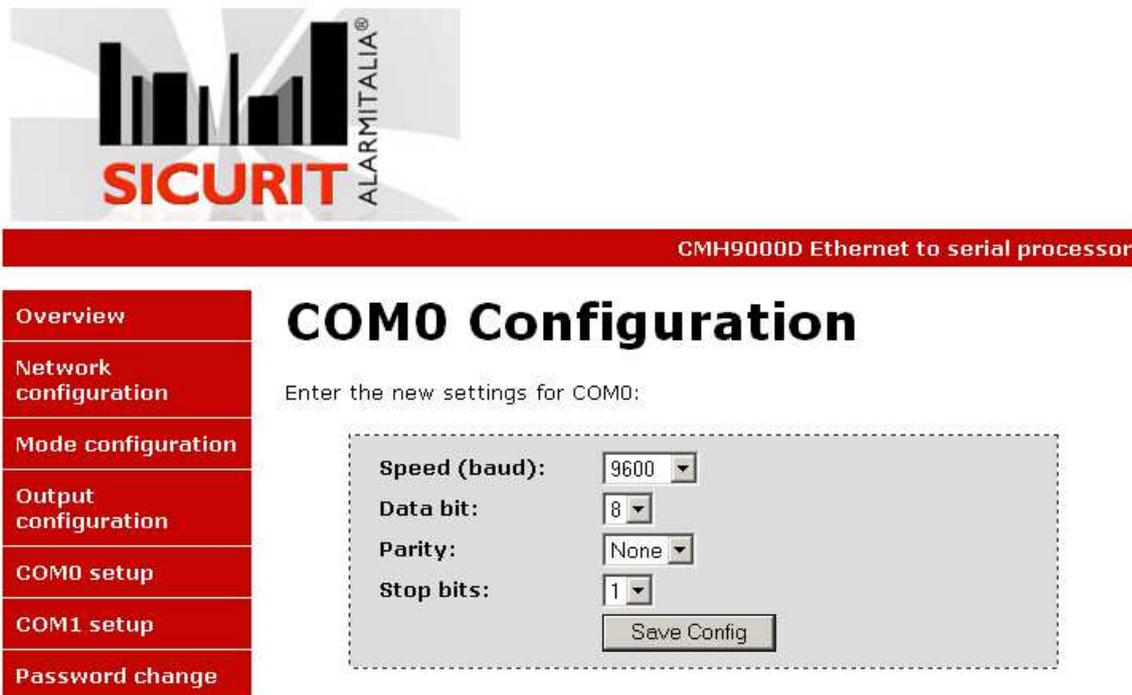
CMH9000DAVE has on board two serial communication ports:

COM0

Select

COM0 setup

The following page will be displayed on PC screen:



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This port must be select as RS485 serial line communication. The sequence of logical dip switch setting is showed in the next table.

The CMH8OUT expander (8 open collector outputs) can be connected to this port. Using a CMH8OUT the installer can know the status of the MW events available connected to the same CMH9000DAVE.

DIP	1	2	3	4	5	6
RS 485	Off	ON	off	ON	Off	ON

This table is also printed on the top layer of CMH9000DAVE board.

The communication bus (RS485) must be realized using an appropriate electrical pair twisted cable (f.e.: 24AWG 120Ohm impedance, ref. Belden 9841 or equivalent).

Set the following parameters on this RS485 port:

Speed: **9600**
Data bit: **8**
Parity: **None**
Stop bits: **1**

The data displayed on the PC monitor can be stored on the board by pressing the button:
SAVE.

COM1

Select

COM1 setup

The following page will be displayed on PC screen:



CMH9000D Ethernet to serial processor

Overview

Network
configuration

Mode configuration

Output
configuration

COM0 setup

COM1 setup

Password change

COM1 Configuration

Enter the new settings for COM1:

Speed (baud):	<input type="text" value="4800"/>
Data bit:	<input type="text" value="9"/>
Parity:	<input type="text" value="None"/>
Stop bits:	<input type="text" value="1"/>
<input type="button" value="Save Config"/>	

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For this port doesn't need to be set any dip switch on hardware.

This serial line is optoisolated and it is the port where the MW DAVE RS must be connected.

Maximum total length of line RS485 cable can't be more than 1,2Km.

The communication bus (RS485) must be realize using an appropriate electrical pair twisted cable (i.e.: 24AWG 120Ohm impedance, ref. Belden 9841 or equivalent).

The typology of cabling connection of the serial line can not be in stellar way.

Set the following parameters on this RS485 port:

Speed: **4800**

Data bit: **9**

Parity: **None**

Stop bits: **1**

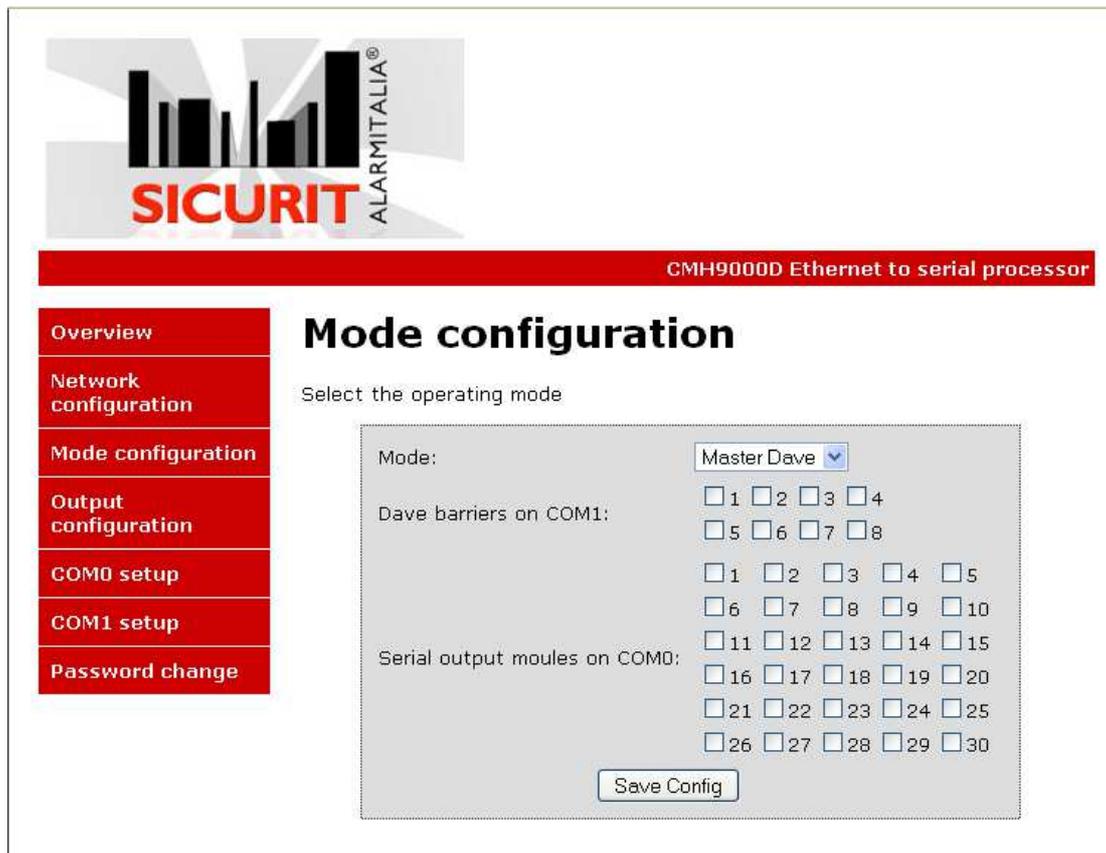
The data displayed on the PC monitor can be store on the board by press the button: **SAVE.**

Communication parameter

Select

Mode configuration

The following page will be displayed on PC screen:



Select the mode:

Master Dave.

On page are available the selectable addresses for MW DAVE RS (**Dave barriers on COM1**) and for CMH8OUT, mark only the boards really connected on this serial line (see the appropriate hardware address selectable on the specific paragraph on DAVE RS Installer manual).

Then proceed to select (mark it) only the CMH8OUT boards that are connected to COM0 and used for this branch of the installation. Remember to set the dips correct for function of RS485, as describe in installation manual.

The data displayed on the PC monitor can be store on the board by press the button: **SAVE.**

Output Configuration

The outputs can be set as a status signal associated to the following events:

MW Offline:	Lost communication with the board MW DAVE RS
Fault:	Indicate trouble on 12V power voltage of MW
Tamper:	24h surveillance
Error:	Generic Fault
Alarm:	MW Alarm

Caution: an installation certificated sometimes require in order to be logged at certain level, alarm and tamper signal directly connected on relay contact.

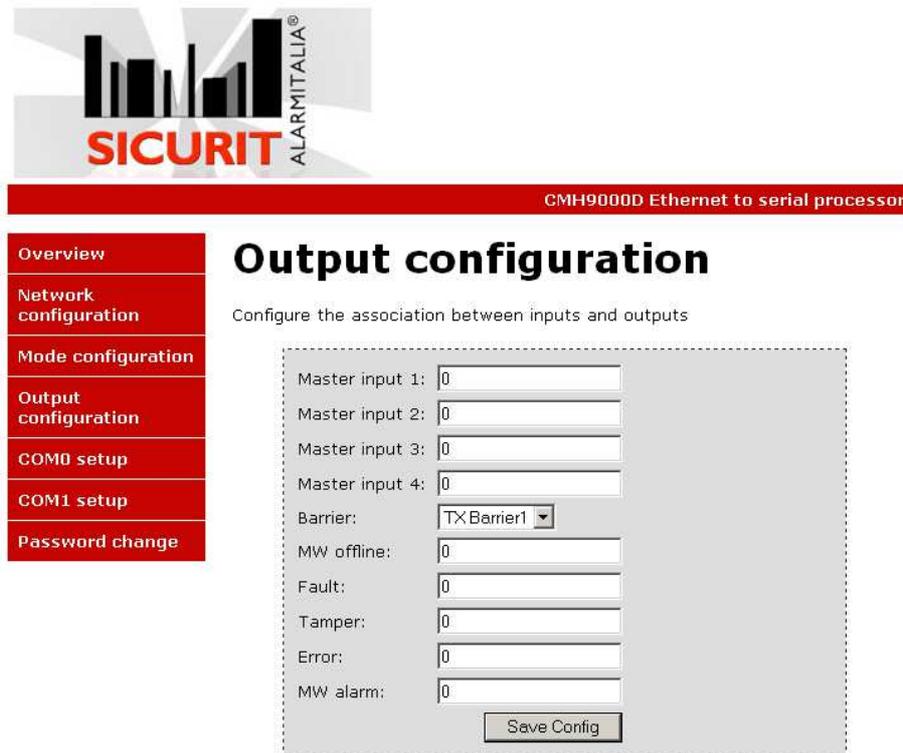
The inputs 1, 2, 3 and 4 are used to control an activation of external security equipment, and they can activated an output on CMH8OUT.

The same signal are sent over the network through SDK the Video system based on Geutebrueck product, directly interface via GeviSoft.

Select



The following page will be displayed on PC screen:



NOTE: The output numbers should be choosed using the following schema:

- 1..4 Master outputs
- 11..18 Output expansion board 1
- 21..28 Output expansion board 2
- 301..308 Output expansion board 30

Associate the Input to the relative output, following the notes below:

- 1.....4 4 outputs on board CMH9000DAVE
- 11...18 8 outputs on board CMH8OUT with address 1
- 21...28 8 outputs on board CMH8OUT with address 2
- 301..308 8 outputs on board CMH8OUT with address 30

30 CMH8OUT shall be connect to each CMH9000DAVE on port COM0.

Finally, if you want switched the output 2 of CMH8OUT with address 10, that it will give the signal of Alarm of the MW DAVE200RS with address 2, set on the page by pressing the arrow, the MW “Rx Barrier 2”, press in this text box the number 102 (10 is CMH8OUT address and 2 is the output number). Repeat sequence for the other events needed to be associate to an Output and remember that the CMH9000DAVE can drive a proper event only to the CMH8OUT connected to same board.

The data displayed on the PC monitor can be store on the board by press the button: **SAVE.**

Check Input and Output Status

This page show the status of the Input according to the next table.

In this page you can activate and deactivate the Output, press circular point (click to toggle).

Select

Overview.

The following page will be displayed on PC screen:

The screenshot shows the web interface for the CMH9000D Ethernet to serial processor. It features a navigation menu on the left with options like Overview, Network configuration, Mode configuration, Output configuration, COM0 setup, COM1 setup, and Password change. The main content area displays a 'Welcome!' message and system information: Stack Version: v5.25, Build Date: Jul 27 2011 14:57:57, Firmware Version: 1.1, and MAC: 00:04:A3:15:07:20. There are also indicators for Outputs (4 dots) and Inputs (2 2 2 2) with a '(click to toggle)' label. A footer note states: 'You are connected to CMH9000D Ethernet to serial processor web server. Using this pages you can configure all the communication parameter, choose an option from the menu on the left.' Copyright © 2011 Sicurit Alarmitalia - Milano.

Tipo	Stato
0	Stand by (1K)
1	Alarm
2	Tamper
3	Short circuit

The configuration of board CMH9000DAVE is completed.

MicroDAVE SW Installation

The product packaging has a CD with the file “setup.exe” needed to install the SW.

Run the setup file and follow the installation instruction.

Automatically the setup will create a folder MicroDAVE in:

C:\Program\Sicurit\MicroDAVE

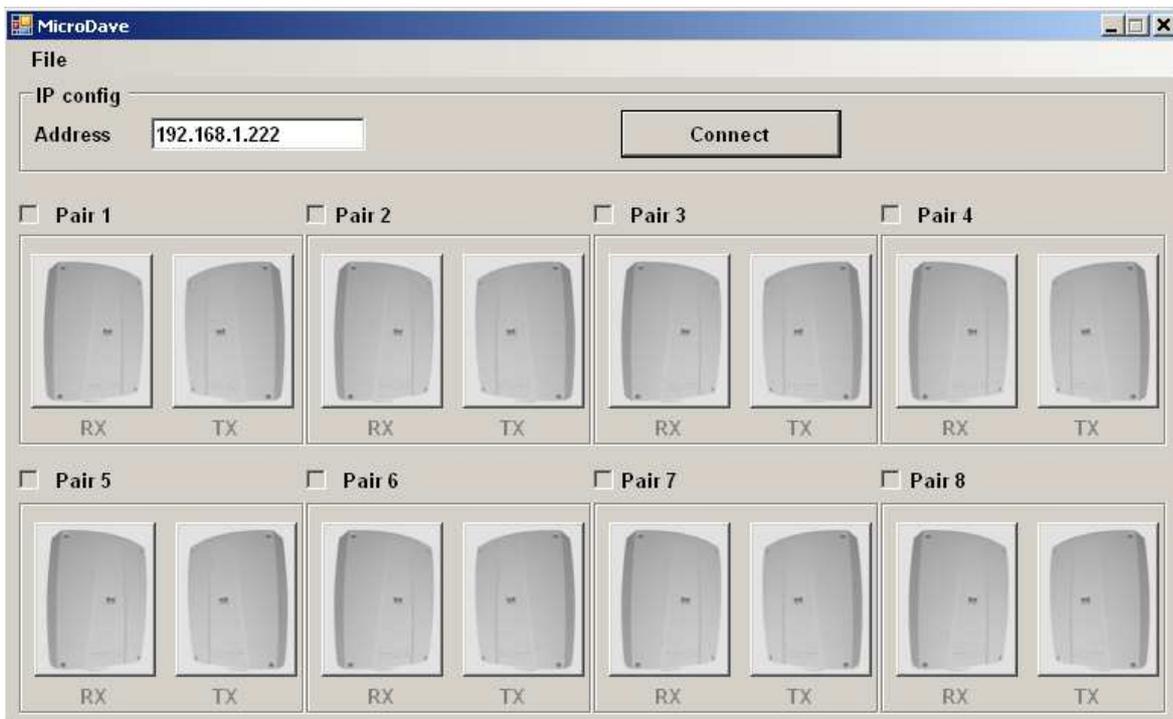
At the end of setup, please overwrite last file of MicroDave.exe, actually it is: “MicroDave 20 02 2012.exe”.

At the end of setup installation, it is possible to start with the configuration features of the MW DAVE RS connected to proper CMH9000DAVE (correct IP address).

Start the program:

MicroDave

The following page will be displayed on PC screen:



Select the right IP address in text box “IP config” related to the address IP set during the CMH9000DAVE configuration. As indicate in above picture the maximum number of MW DAVE RS connectable with a single CMH9000DAVE can be 8 pairs.

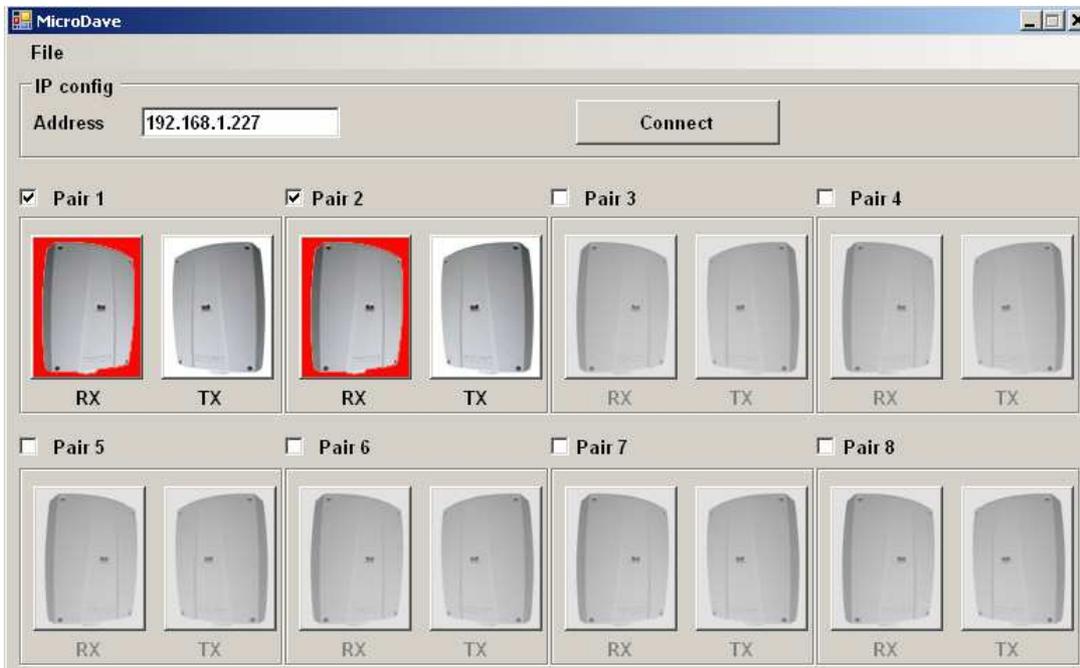


Set the right address by pushing the following button:



Enable all the MW that are connected through the RS485 COM1 (marked the box of the pair MW).

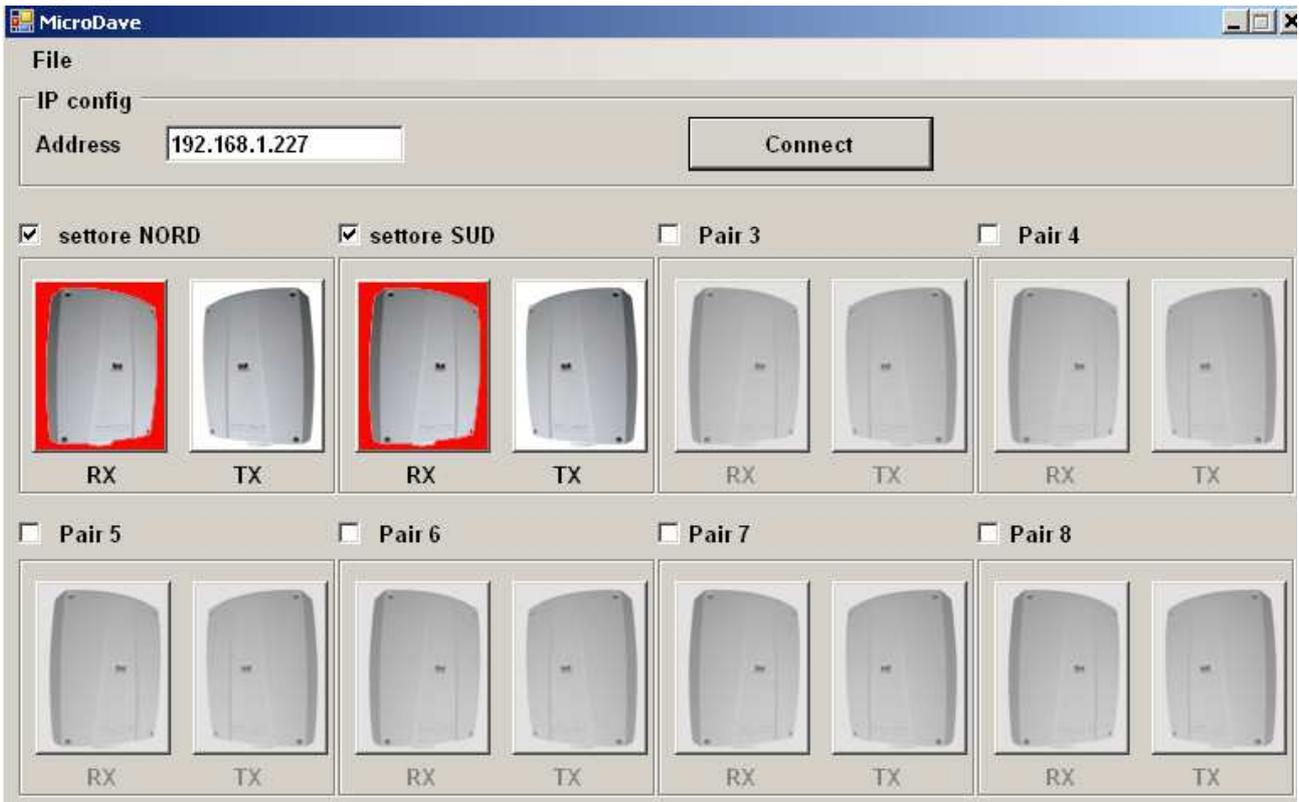
Verify that the connected MW answered right to the system, the MW connected are display clear on the windows, the MW doesn't detect or not connected are display in transparent way.



In the picture are represented only 2 pairs of MW are present (and in Alarm status: evidenced by Red color) and analyzed from the CMH9000DAVE with the address 192.168.1.227 (the default address stored in factory is 192.168.1.222, except a different address specified on label sticked on the board).

It is possible to rename the single sector (pair) by a double click over the "pair n".

Pair 1 is the pair of MW (Tx and Rx) with address 1 programmed by dip switch on MW DAVE electronic board.



Activated the connection, the next step will be to set the parameters of each MW connected.

The parameters of each individual MW heads could be programmed also previously by RS232 connector, using the local SW (DAVESOFT), if this set was done before, when the CMH9000DAVE read the MW board, automatically the parameter data set in RS232 configuration will be detected . Be careful, don't connect the local PC when the RS485 line is active and/or cabled.

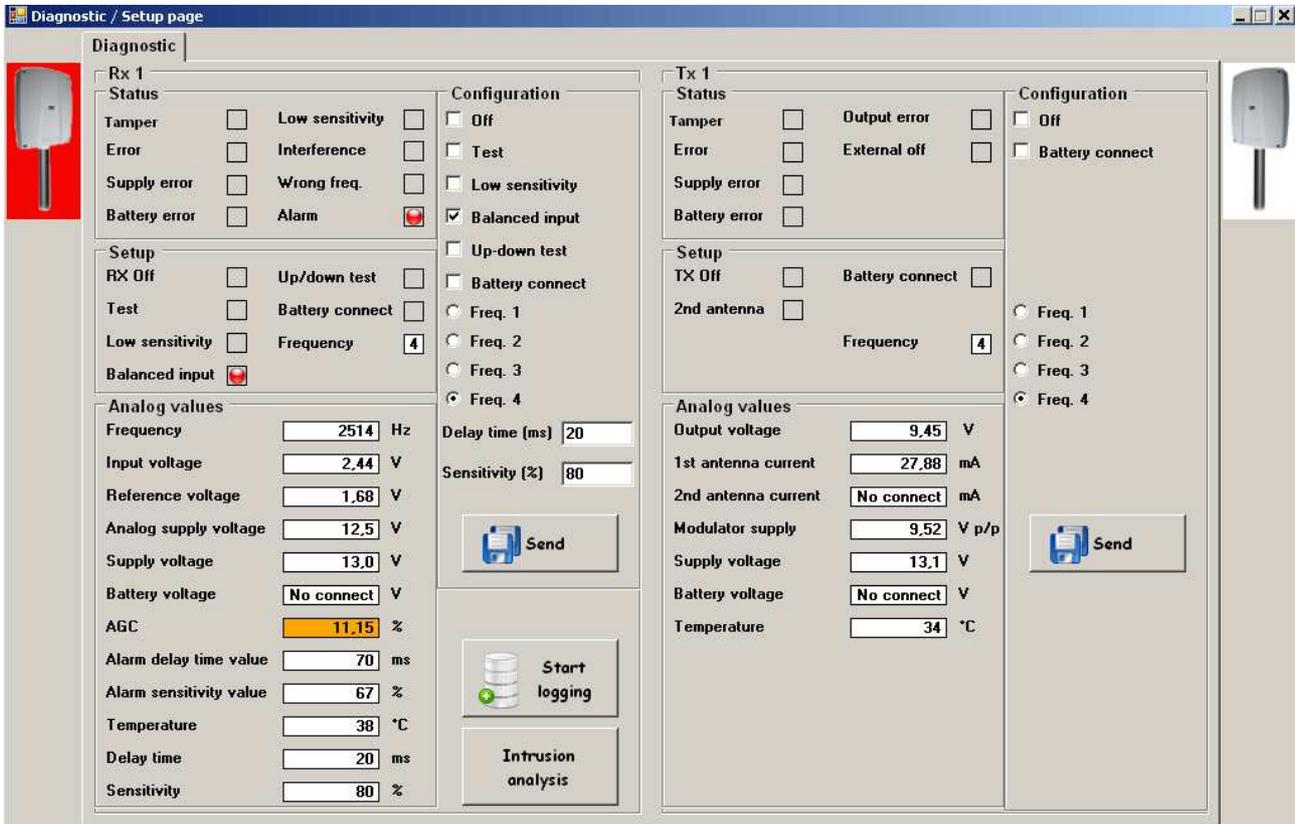
In any case, always check carefully the data collected by CMH9000DAVE because they may be changed or not correct due to a wrong data reading.

The MWs that are not mark as present in the system and the MW that it doesn't answer to the system, are displayed in transparency.

MW Set

Click on the Rx or Tx figure (clear displayed) to enter in the program mode of each head pair of MW.

The following page will be displayed on PC screen:



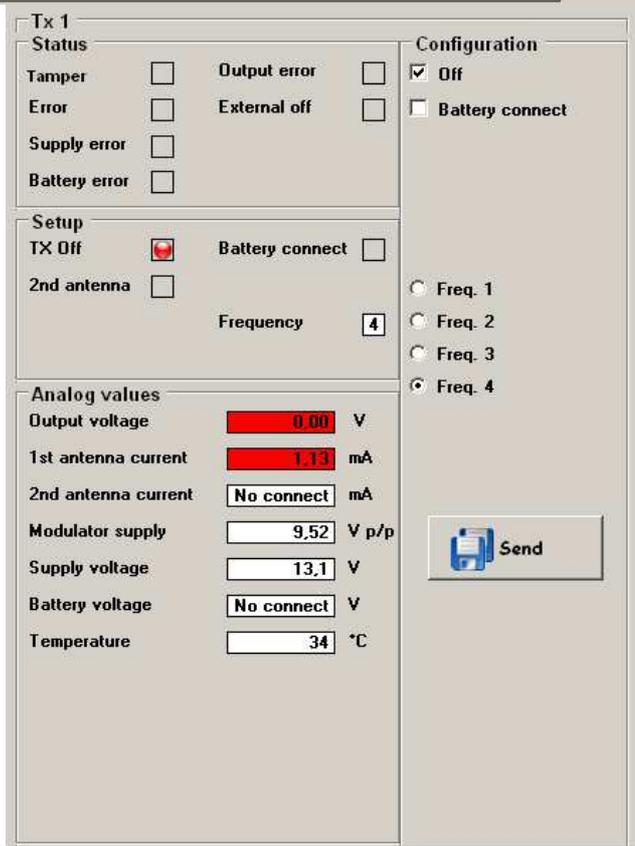
For what concern the setting of frequency channel, sensitivity, delay time consult the instruction manual of MESDAVE200RS.

Tx Setting

Select work parameters of head MW Tx based on installation typology.

The screen window side way shows is the parameter read by CMH9000DAVE according to the data stored in a Tx Head MW with address 1.

Take care that for 2 adjacent sectors the frequency channel must always be different.



The marker box in Configuration window (top right on screen) indicate if it is marked with symbol \surd and \bullet that the functions are active.

The symbol  present in the Setup sector confirmed that the data configured are stored on MW board memory.

If the marker box **Off** is signed with symbol \surd , the transmitter is not active and it doesn't send the radio signal to the receiver. The receiver will be always in alarm.

If the marker box Battery Connect is signed with symbol \surd , the battery check is active and the battery must be connected to the proper faston.

The marker box of Frequency is signed with the symbol \bullet to identify the channel selected and confirmed in the Setup section (it will be indicated as number).

To change the frequency channel transmission click the mouse button left over the for activate the selection desired.

When all the parameters are set on the page, it needs to be sent to the electronic board connected, push the button:



The new data stored on the MW board will be display in Setup section.

In single box of analogical value will be show the data without any color, if the value is in a correct range. The value will be colored if the data are out of range, the yellow color indicate a value that is not perfect but the MW could work correctly, the Red color indicate that the value is out of range and it could be generate a false alarm or unstable signal communication from Tx and Rx.

Rx Setting

Select the work parameters of head MW Rx based on installation typology and based on data detected during the test mode.

The window screen sideways shows the parameters read by CMH9000DAVE according to the data stored in a Rx Head MW with address 1.

Take care that the frequency channel select on Rx must have the same channel selected on Tx in front .

Off

The marker boxes present in a Config sector signed with a symbol \surd are active.

If the marker box Off is signed with symbol \surd , the receiver is not in service and it will be always in alarm. This function is used to simulate the alarm status of system and check the correct answer (switch of the output, drive the video recorder and so on.)

Test

If the marker box Test is signed with symbol \surd the receiver is in test mode.

The test mode stopped the AGC functionality and without automatic adjustment of AGC the alignment can be done easily. Refer to the manual instruction MESDAVE200RS for the correct alignment procedure.

Low sensitivity

If the marker box Low sensitivity is signed with symbol \surd the receiver is set with a reduced sensitivity. This option could be set when a critical environmental condition (as snow, high grass, strong wind and rain) needs an reduction of sensitivity to reduce the ratio of undesired alarms . Reduce the sensitivity means reduce the accuracy of MW to detect the intruder.

Before activate this function in service mode, it needs to be tested during the installation, because the reduction of sensitivity depends by the value of sensitivity and delay time set on MW data.

Balance Input

If the marker box Balance Input is signed with symbol \surd the reducing of sensitivity through the input can be done only with a balance resistor (3K30hm).

Up-Down test

If the marker box Up-Down test is signed with symbol \surd the alarm will be activate only when the signal reach both thershold trigger level of setted sensitivity.

If the marker box Up-Down test is signed with symbol \surd the alarm will be activate only when the signal reach trigger treshold up and down sensitivity setted .

Sensitivity

In the Sensitivity box is set the value in % of the mass that must be detected.

Higher value, smaller object (cat for example) will be detected.

It is possible to set a number from 10% to 90%.

With a correct value selected and with a flat and regular soil could be possible to eliminate a detection (alarm) of cat or small animals.

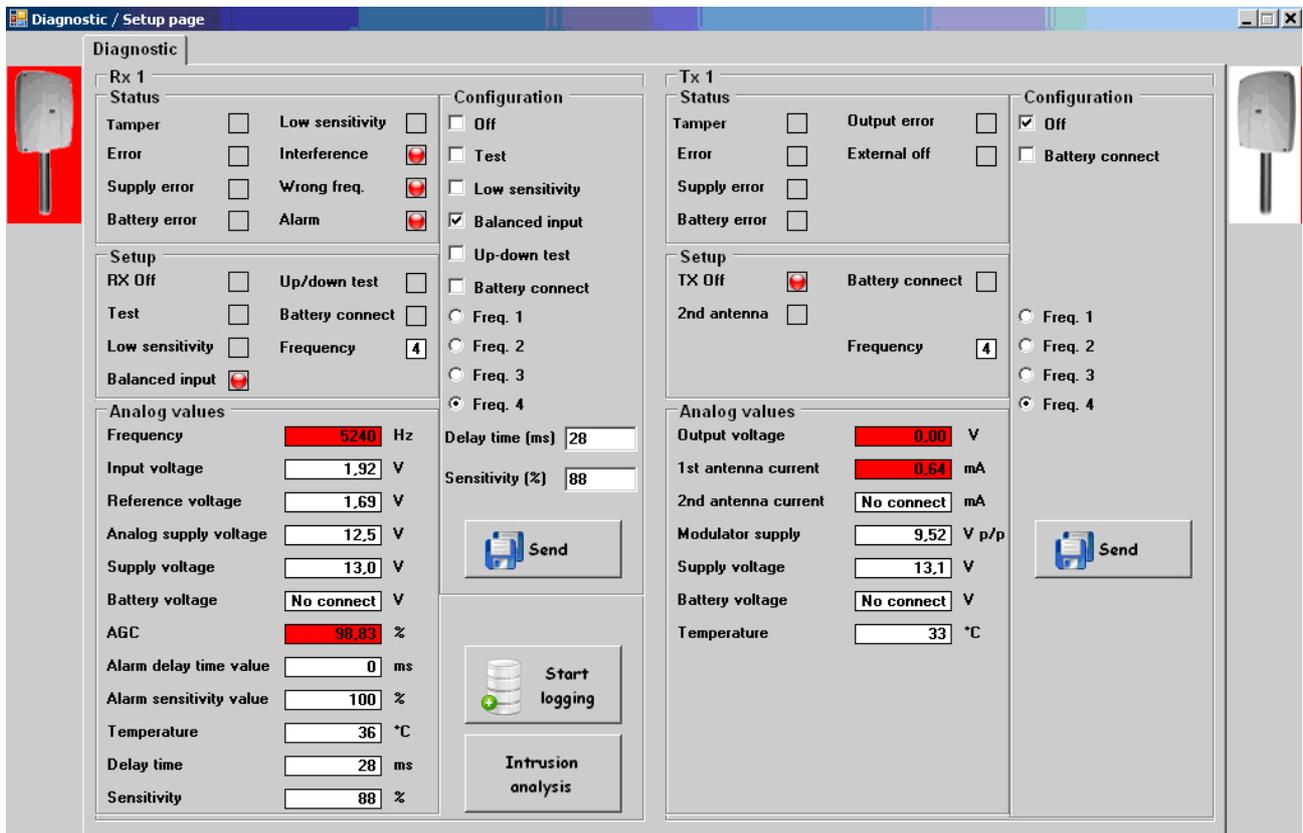
If the suggested data are conform to the installation philosophy push the button:



To store on MW board **Sensitivity** and **Delay Time** data.

MW Diagnostic

Click on the Rx or Tx figure (displayed in clear) to enter in diagnostic mode of each head pair of MW:



The page shows the analogical value and setup data stored in MW board.

Both heads, Tx and Rx, are display together on the PC screen.

The analogical data will be with or without colored mark, the color will indicate the correct parameter value or a critical value.

The color of data color has the following meaning:

No color (clear) : Correct value

Yellow color : Out of range value, but could be that it doesn't create problems

Red color : Wrong value

Proceed to set the MW parameters in correct way till you obtain theoretically a page without the Yellow color in diagnostic data value box on Rx head.

The symbol  or  displayed on sector Status or in sector Config, indicates this function as in service mode (active).

Transmitter Diagnostic

Tx 1		Configuration	
Status		<input checked="" type="checkbox"/> Off	
Tamper	<input type="checkbox"/>	Output error	<input type="checkbox"/>
Error	<input type="checkbox"/>	External off	<input type="checkbox"/>
Supply error	<input type="checkbox"/>	<input type="checkbox"/> Battery connect	
Battery error	<input type="checkbox"/>		
Setup		<input type="radio"/> Freq. 1 <input type="radio"/> Freq. 2 <input type="radio"/> Freq. 3 <input checked="" type="radio"/> Freq. 4	
TX Off		Battery connect	<input type="checkbox"/>
2nd antenna	<input type="checkbox"/>	Frequency	<input type="text" value="4"/>
Analog values			
Output voltage	<input type="text" value="0.00"/> V		
1st antenna current	<input type="text" value="1.13"/> mA		
2nd antenna current	<input type="text" value="No connect"/> mA		
Modulator supply	<input type="text" value="9.52"/> V p/p		
Supply voltage	<input type="text" value="13.1"/> V		
Battery voltage	<input type="text" value="No connect"/> V		
Temperature	<input type="text" value="34"/> °C		

In section Status the mark box with the presence of symbol  means an eventually fault or a trouble present on MW Head Tx.

In section **Status** are analyzed the following events:

Tamper

Symbol  present in a Tamper box means that the box of head MW is open.

Error

Symbol  present in Error box means that electronics board has some problem.

The analogical data have to be verified where this problem is located (Red color on analogic data) , Antenna current, wrong selection of battery or not connected, wrong voltage value and so on.

Supply error

Symbol  present in a Supply error box means that MW electronic circuit has a wrong 12V power supply value (out of correct range value).

Battery error

Symbol  present in a Battery error box means that MW has a wrong 12V battery voltage level (out of correct range value).

Output error

Symbol  present in a Output error box means that the antenna current consumption on the TX head is out of normal value range. It doesn't mean that the system will not work correctly, but only a warning of possible problem of the system, could be it is not stable.

The out of range value could also be consequential to the wrong voltage value of modulator supply, installer has to check the correct value of Modulator Supply.

External off

Symbol  present in a External Off box means head MW is not active, by the activation of external Off input, no signal will be emitted from transmitter and the Rx will be always in alarm. The next table represents the range of diagnostic value, in Yellow could be acceptable:

Typical value	Red	Yellow		Yellow	Red
Output voltage 9,45V	<2%		+/-2%		+2%
1st antenna 30mA	<35%	-25 to +35%	+/-25%	+25% to 35%	>35%
2nd antenna 30mA	<35%	-25 to +35%	+/-25%	+25% to 35%	>35%
Modulated voltage 9,5V	<2%		+/-2%		+2%
Supply voltage 12,5V	<15%	Up to -15%	+/-10%	Up to +15%	>15%
Battery voltage 13,5V	<11	<12,5	12,5 to 13,8	>13,8	>14,2
Temperature 25°C	<25	-25 to 0	0 to 40	40 to 65	>65

The temperature data is refer to the electronic circuit temperature.

Receiver diagnostic

Rx 2	
Status	
Tamper <input type="checkbox"/>	Low sensitivity <input type="checkbox"/>
Error <input type="checkbox"/>	Interference <input checked="" type="checkbox"/>
Supply error <input type="checkbox"/>	Wrong freq. <input type="checkbox"/>
Battery error <input type="checkbox"/>	Alarm <input checked="" type="checkbox"/>
Setup	
RX Off <input type="checkbox"/>	Up/down test <input type="checkbox"/>
Test <input type="checkbox"/>	Battery connect <input type="checkbox"/>
Low sensitivity <input type="checkbox"/>	Frequency <input type="text" value="1"/>
Balanced input <input checked="" type="checkbox"/>	
Analog values	
Frequency	<input type="text" value="1728"/> Hz
Input voltage	<input type="text" value="1,95"/> V
Reference voltage	<input type="text" value="1,68"/> V
Analog supply voltage	<input type="text" value="12,8"/> V
Supply voltage	<input type="text" value="13,1"/> V
Battery voltage	<input type="text" value="No connect"/> V
AGC	<input type="text" value="99,22"/> %
Alarm delay time value	<input type="text" value="14724"/> ms
Alarm sensitivity value	<input type="text" value="100"/> %
Temperature	<input type="text" value="32"/> °C
Delay time	<input type="text" value="27"/> ms
Sensitivity	<input type="text" value="87"/> %
Configuration	
<input type="checkbox"/> Off	
<input type="checkbox"/> Test	
<input type="checkbox"/> Low sensitivity	
<input checked="" type="checkbox"/> Balanced input	
<input type="checkbox"/> Up-down test	
<input type="checkbox"/> Battery connect	
<input checked="" type="radio"/> Freq. 1	
<input type="radio"/> Freq. 2	
<input type="radio"/> Freq. 3	
<input type="radio"/> Freq. 4	
Delay time (ms)	<input type="text" value="27"/>
Sensitivity (%)	<input type="text" value="87"/>
	
	
	

In section **Status** the mark box with the presence of symbol  displayed the eventually fault or trouble present on MW Head Rx.

In section **Status** are analyze the following events:

Tamper

Symbol  present in a Tamper box means that the box of head MW is open.

Error

Symbol  present in Error box means that electronics board has some problem.

The analogical data have to be verified where this problem is located (Red color on analogic data) , Antenna current, wrong selection of battery or not connected, wrong voltage value and so on.

Supply error

Symbol  present in a Supply error box means that MW electronic circuit has a wrong 12V power supply value (out of correct range value).

Battery error

Symbol  present in a Battery error box means that MW has a wrong 12V battery voltage level (out of correct range value).

Low sensitivity

Symbol  present in a Low sensitivity box means that electronic circuit of head MW has a low sensitivity activated. In this status the receiver works with a sensitivity reduced to prevent false alarm in a critical or bad environmental weather condition. Check the conformity of alarm detection, before activated this function.

Interference

Symbol  present in Interference box means that the radio signal detected has not only the frequency of the channel selected but more than one frequency mixed or the signal is too low and the MW Rx is not able to decode it, or an obstacle is present in the detection area.

Wrong frequency

Symbol  present in a Wrong frequency box means that the transmitter is not set with the same frequency channel of the receiver.

Alarm

Symbol  present in Alarm box means that the receiver doesn't receive or doesn't decode a correct signal. The signal received has not:

- Correct frequency channel
- Alignment is not made in right way
- Tx is shutoff
- Receiver is not in service
- Power supply voltage is not enough
- Tx has a fault
- Interference

Or any other trouble eventually evidenced in diagnostic of Tx or Rx MW head.

If the receiver didn't go out from alarm condition, the installer has to follow the alignment procedure describe in instruction manual of MESDAVE200RS.

Setup

Symbol  present in one of the setup box means that the parameter is set with the indicated function as active, the data changes can be done on the **Configuration** sector as described previously.

RX Off

Symbol  present in Rx Off box means that the receiver is shutdown and it will always be in alarm status.

Test

Symbol  present in Test box means that the receiver is in alignment mode, the AGC doesn't work and the alignment procedure is activated.

Low sensitivity

Symbol  present in Low Sensitivity box means that the receiver is set with a different sensitivity as set in configuration, the MW will detect a mass greater than the mass value set in program mode.

Balanced Input

Symbol  present in Balance Input box means that the SENSE input present on terminal block will be activated only when the input is balanced by a resistor of 3K30hm.

Attention: If the symbol  is not present on Balance Input box the input could be activated by a negative command (without balance resistor).

Up down test

Symbol  present in Up Down test box means that the receiver will be activated only when the signal reaches both threshold trigger level of set sensitivity.. It is used normally when the site is not in right condition for a correct MW service, to prevent undesired alarm. The installer has to check and check that the system is able to detect in right way, with this function activated.

Battery connect

Symbol  present in Battery connect box means that a battery backup is installed and connected to the MW board.

Frequency

Symbol  present in Frequency channel box (1 or 2 or 3 or 4) indicate the channel selected, it must be the same in MW head in front (pair of MW).

Verify that the parameters stored in MW board conform to the security requirements.

If the installer needs to change the programmed parameters refer to manual instruction section "setting MW".

On left part of visualized page is shown the analog value stored in board memory.

Check on **Status** sector that there is no evidence mark on **Error** box.

The number showed on the Frequency box must be same as the frequency channel number displayed in the MW pair.

Input voltage

Input voltage value indicate the quantity of the signal that the antenna receiver is able to detect. Normally this value must be close to 1,7Volts.

This value can change during the alignment.

In alignment mode a low value less than 0,7Volts indicates a low alignment quality. Try to increase this value, make a correct mechanical alignment and after by a trimmer adjustment.

Reference voltage

This is a factory set voltage value, it must be approximately 1,68Volts.

Supply voltage

Analogical value read from data must be between 11 to 13,6volts.

Battery voltage

Analogical value of battery voltage must be according to the battery model connect to apposite fastons.

AGC

Analogical value displayed in this box is very important for a correct MW service system, it is an alignment parameter, indicates the quantity of radio signal linked from Transmitter to Receiver. A value close to 100 means a very poor radio signal, a value close to zero means a high power radio signal. When mechanical alignment is ended the value of this parameter must be set approximately at 15%, set this value after 2 minutes that the MW is in standby mode.

Alarm delay time value

The value displayed on this box indicates the object speed detection, that comes in detection area. This value changes every time at the end of each alarm, and it is the last value speed detect. If during the intrusion there is a speed change or there are many different value decoded , only last value will be showed.

We recommend to crossing the detection area simulating the mode of the intrusion that want to be detect.

Repeat the type of intrusion in different way and in a different position along the sector. More simulations will be done, more accurate will be the data suggested. To set in right way the Sensitivity and Delay parameter, made the simulation by using function "Intrusion Analysis".

Alarm sensitivity value

The analogical value detected in this box is an important parameter related to the mass of the object detectable. The simulation of intrusion as describe in previous paragraph, allow to set the right value of Sensitivity in configuration. Using the Intrusion analysis tool , the system will indicate, at the end of simulation, the suggested value to set the memory.

Refer to paragraph of Setting, for correct configuration data.

We recommend to repeat all intruder simulation once you set the definite value of sensitivity and delay time .

How to use the “Intrusion analysis” is described on paragraph named “ sensitivity and delay time setting”.

The table below indicate the data limit and relative color.

The analogical value must be into the following range:

Typical Value	Red	Yellow	Green	Yellow	Red
Frequency 1 (900Hz)	<10%		+/- 10%		>10%
Frequency 2 (1160Hz)	<10%		+/- 10%		>10%
Frequency 3 (1500Hz)	<10%		+/- 10%		>10%
Frequency 4 (2400Hz)	<10%		+/- 10%		>10%
Input voltage					
Signal center voltage 1.68V	<2%		+/- 2%		>2%
Analog supply voltage 12V	<15%	Up to -15%	+/-10%	Up to +15%	>15%
Supply Voltage 12.5V	<15%	Up -15%	+/-10%	Up to +15%	>15%
AGC 20% (from 0 to 99)	Down 5%	5 to 15	15 to 25%	25 to 35	Up 35
Temperature 25°C	<-25	-25 to 0	0 to 40	40 to 65	>65

The temperature data is refer to the electronic circuit temperature.

Store data on Alarm

Push the button:



Will be request a file name for store the data collected when an alarm will occurs to save this file in a dedicate folder.

The data log event save will collect the analogical value and all needed data 60 seconds before and 60 seconds after the real alarm (time and date related).

The data of the Transmitter and receiver will be save simultaneously.

To stop the log event stored mode, push the following button:



Attention: the save data file is a *.txt file and it doesn't need a lot of memory to store it, but in any case is better to stop the log according to the hard disk full capability.

Will not be saved the last alarm data, if the save file will be interrupt before the end of total time storing.

Detection Test

The installer has to test the detection efficiently of system (always with a PC connected), in a different point on detection area field , with the object dimension that it want to detect (normally will be simulated human intruder).

This test is very important to set the correct parameter of the MW (sensitivity and delay time) according with the type of detection needed (for example: if the installation require only detect car or vehicle, the sensitivity can be lower than normal value.

The reason to set the correct real mass target detection, is to reduce at the minimum the probability of alarm for small animals .

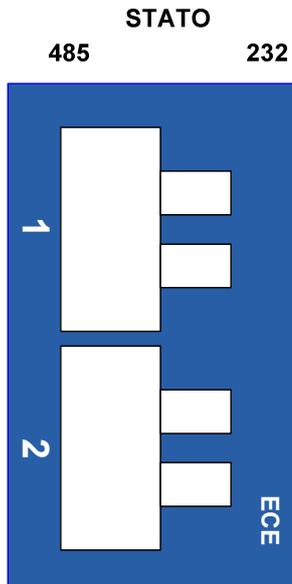
When the system detect the intrusion symbol  will be display in a Alarm box.

At the end of each alarm, the data displayed in a sensitivity (%) and delay time (mS) boxes will be upgraded to the last value detected .

The test theoretically must be done with a high sensitivity programmed (set 80% and 20mS), because if the sensitivity is too low, some type of intrusion (fast one or a small object) will not be detected.

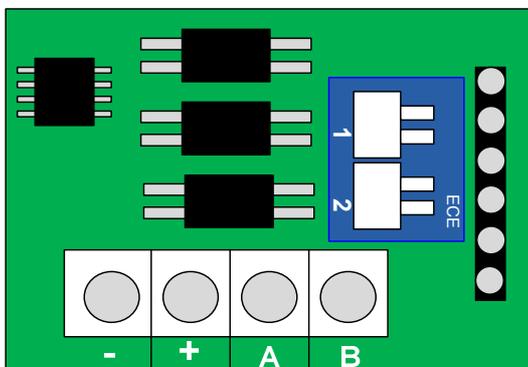
Each intrusion test must theoretically be done with a pause, from one to the other alarm, more than 1 minute. At the end of programm and installation set, the system stability must be verify , check that the Mw doesn't release any alarm without intrusion. It is recommend to save the configuration data in a file on a programmer PC, in the way that all data can be easily available in case of maintenance, consulting or any other install work.

DaveSoft Switch 232/485 scheme



The switch, draw in white and located on the 485 board of the MesDaveSoft, allow to select the type of communication between the microwave and the remote terminal.

- With the two switches shifted on the left, the microwave will communicate with the RS485 port
- With the two switches shifted on the right, the microwave will communicate with the remote terminal with the RS232 port, through the USB connection cable included in the DaveSoft Package
- Remember that the DipSwitch on the microwave board under this switch must have ONLY the switch 1 in ON, and all the others in OFF (in exception of the case where there are 2 cavities on the TX MW, where must also be in ON the MW TX switch 6)



Layout of the serial board on the microwave, with the switch

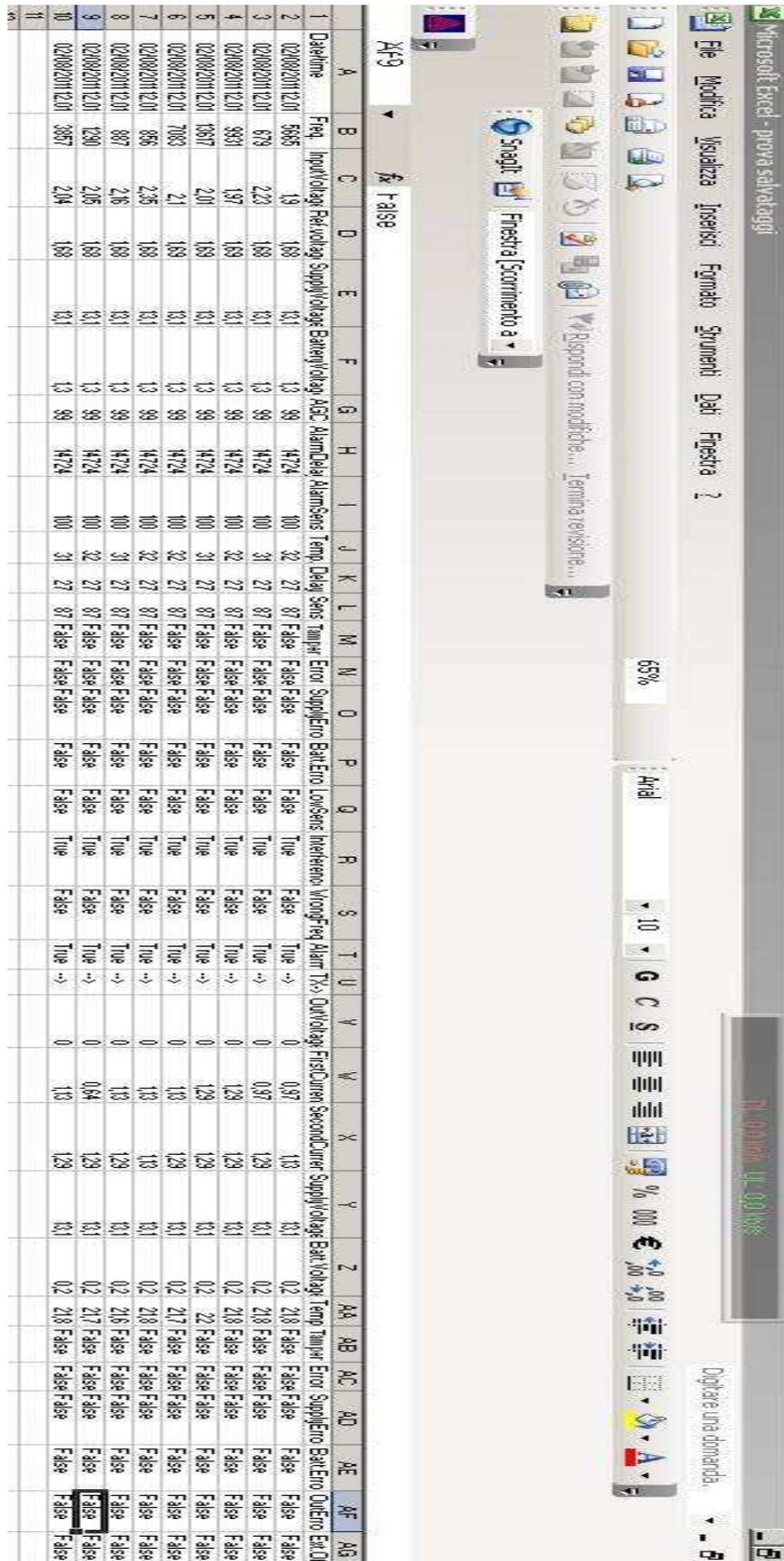
The SW DAVESOFT local can be use to set the parameter of MW head. The installer needs a portable PC and to connect it close to the MW head (RS232 connection type).

To set the communication via RS232 the dip 1 and 2 on the RS485 board must be move in external position, then connect the USB to RS232 cable (packaged in DAVESOFT product) to the 6 pins black connector.

Remember of select at the end of programming, the correct dip switch position according with the serial line used.

Typical structure of *.txt log event file

The next picture represent the typical structure of data file store on login events:



The excel menu will be display in OS language inside on PC.

WARRANTY

Sicurit Alarmitalia Spa and/or its subsidiaries and/or its affiliates (" the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twenty-four months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period, at its option, to repair or replace the Product or any part thereof. The Manufacturer shall not be responsible for dismantling and / or reinstallation charges. To exercise the warranty the Product must be returned to the Manufacturer freight prepaid and insured.

This Warranty does not apply in the following cases:

Improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer does not represent that the Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result. The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function. However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

Warning: The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his or her safety and the protection of his or her property.

Thank you to choose SICURIT Product. This product is designed and manufactured with high quality materials which can be recycled and reused.



The symbol  means that the electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste and dispose it at your local community waste collection centre.

Please follow your local rules about electronic waste recycle.

This symbol mark and recycle system are applied in the EU (European Directivity WEEE) countries and could be not applied in other areas of the world.

NOTE:

The SICURIT ALARMITALIA reserves the rights to modify this documentation without any preliminary notice.