

Axon Series
FM TRANSMITTER

SERVICE AND OPERATION MANUAL

Revision 2

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1.1 INITIAL STARTUP

At the startup time, the fans will be activated and all the LEDs will light up steadily for some seconds in order to automatically test them. During this time the following screenshots will appear in sequence.

1) This first one shows the manufacturer's brand and the model name/kind of the equipment .



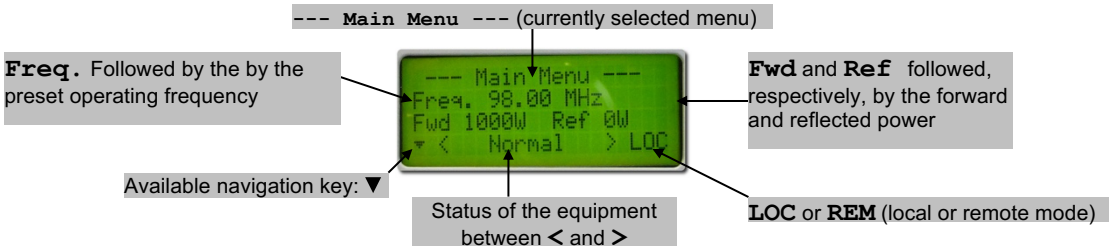
2) The second one shows the following information of the equipment:



- **SN**: the serial number (in the example **080008**)
- **CN**: the customer name which is set by default to **None**.
- **FW**: the firmware release (in the example the release 1.0)

*The customer name can be further set with the menu **Setting** – **Client Name** (➔**Error! Reference source not found.**)*

3) The third one is called "Main screen" (of the main menu) and shows:



- 1st line: **--- Main Menu ---** shows that the main menu is currently accessed
- 2nd line: **Freq.** – followed by the preset operating frequency (in the example **98.00 MHz**)
- 3rd line: **Fwd** followed by the forward power (in the example **1000W**) and **Ref** followed by the reflected power (in the example 0W)
- 4th line:
  - On the left shows the currently available navigation key (▼)
  - In the center the status of the equipment between the symbols **<** and **>** (usually **Normal**)
  - On the right **LOC** or **REM**, showing if the equipment is set, respectively, in local or remote mode (in the example is set in local mode)

*As better explained later, when an error/problem occurs, the related error/warning message replaces **Normal** and stays there as long as the reason of the alarm is present (➔3.8).*

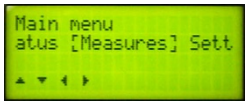
4) Press the navigation key ▼. The **Set LOC/REM SYSTEM** screenshot will appear showing if the equipment is currently in remote or local mode by showing, respectively, **REM** or **LOC** inside square brackets:



5) Should you need to change the current mode (in the example **REM** =remote mode), see par. 1.3, otherwise go to the next step.

In the remote mode, all the settings can be performer by remote commands only.

6) Press ▼. This screen will allow you to access the first submenu of the Main Menu (**Measures**). For further information see 1.2.a.

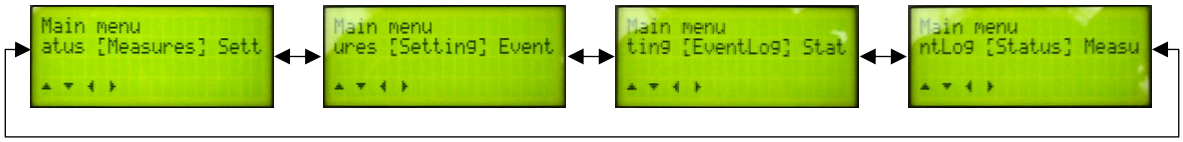


1.2 MENU STRUCTURE AND NAVIGATION

As briefly explained, the options and settings of the equipment are organized in menu and submenus. Due to the complete information of the LCD and the navigation keys, browsing and accessing the menu is very simple. Just note the following issues:

1.2.a Main Menu

If the equipment is in local mode, the main menu is divided in four submenus. Their name is stated in the 2nd line inside square brackets: **Measures**, **Setting**, **EventLog** and **Status**.

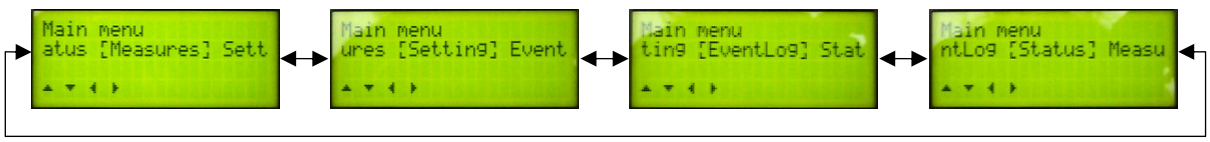


- **Measures** – allows to check the transmitter's operating parameters, for example, modulation, direct/reflected power, PA voltage, frequency, etc. (➔1.4).
- **Setting** (available only in local mode and password protected) - allows to set the transmitter's operating parameters, for example, modulation, direct/reflected power, PA voltage, frequency, etc. (➔1.5).
- **EventLog** – allows to see the list of alarms/events that have occurred during operation (➔**Error! Reference source not found.**).
- **Status** - allows to see the status of the equipment, for example preemphasis, LAN address, FW revision, etc. (➔**Error! Reference source not found.**).

*If the equipment is in remote mode, the **Setting** menu is not shown in the display. To access it, set the equipment in local mode (➔1.3).*

1.2.b Main navigation

When the submenus of the **Main menu** have been displayed:

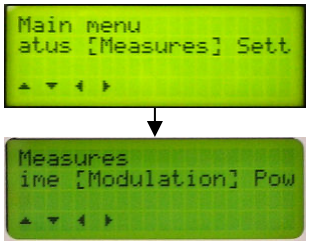


- To move from one submenu to the next one (e.g. from **Measures** to **Setting**), simply press the navigation key ►.
- To move from one submenu to the previous one (e.g. from **Setting** to **Measures**), simply press the navigation key ◄.

When the proper submenu has been selected, to see the list of its available options just press the navigation key ▼.



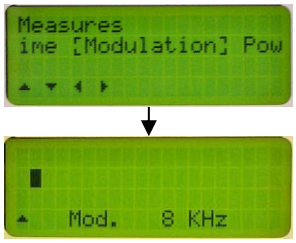
For example, if the submenu **Measures** has been currently displayed, pressing the key ▼ will lead to the first option (**Modulation**) of the **Measures** option list:



To select another option in the list, the same operation used to scroll from one submenu to another one are available, i.e.:

- To move from one option to the next one, simply press the navigation key ►.
- To move from one option to the previous one, simply press the navigation key ◄.

To access the currently displayed option in the list, just press the navigation key ▼. For example, if the option **Modulation** of the **Measures** submenu is currently displayed, pressing the ▼ will lead to the **Modulation** measure screenshot allowing to check the modulation:

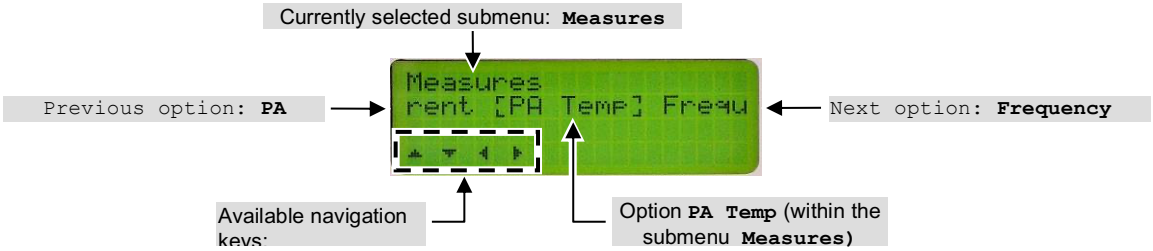


At this point, to go back to the option list, simply press the key ▲.

1.2.c On screen instructions

Navigating the menu and locating each screenshot is easy thanks to the on-screen guidance information which are continuously shown on each screenshot and dynamically updated:

- The 1st line works as a navigation map, always showing the menu or submenu name in which you are currently navigating (in the below stated example, the submenu **Measures**).
- The 2nd line shows:
  - In the center the currently selected option in the list which is stated inside square brackets (in the below stated example [**PA Temp**])
  - On the left the previous available option (before the currently selected one) with its ending letters (in the below stated example **rent** means **PA Current**, which is the previous option)
  - On the right the next available option (after the currently selected one) with its initial letters (in the below stated example **Freq** means **Frequency**, which is the next option)
- The last line always shows in the bottom-left part the keys you can press to navigate the menu (in the below stated example, the navigation keys ▲▼◄► are available, but not the **ENTER** one – see bottom note).



*When the **[ENTER]** key is available, it's represented as a filled-in circle ●.*

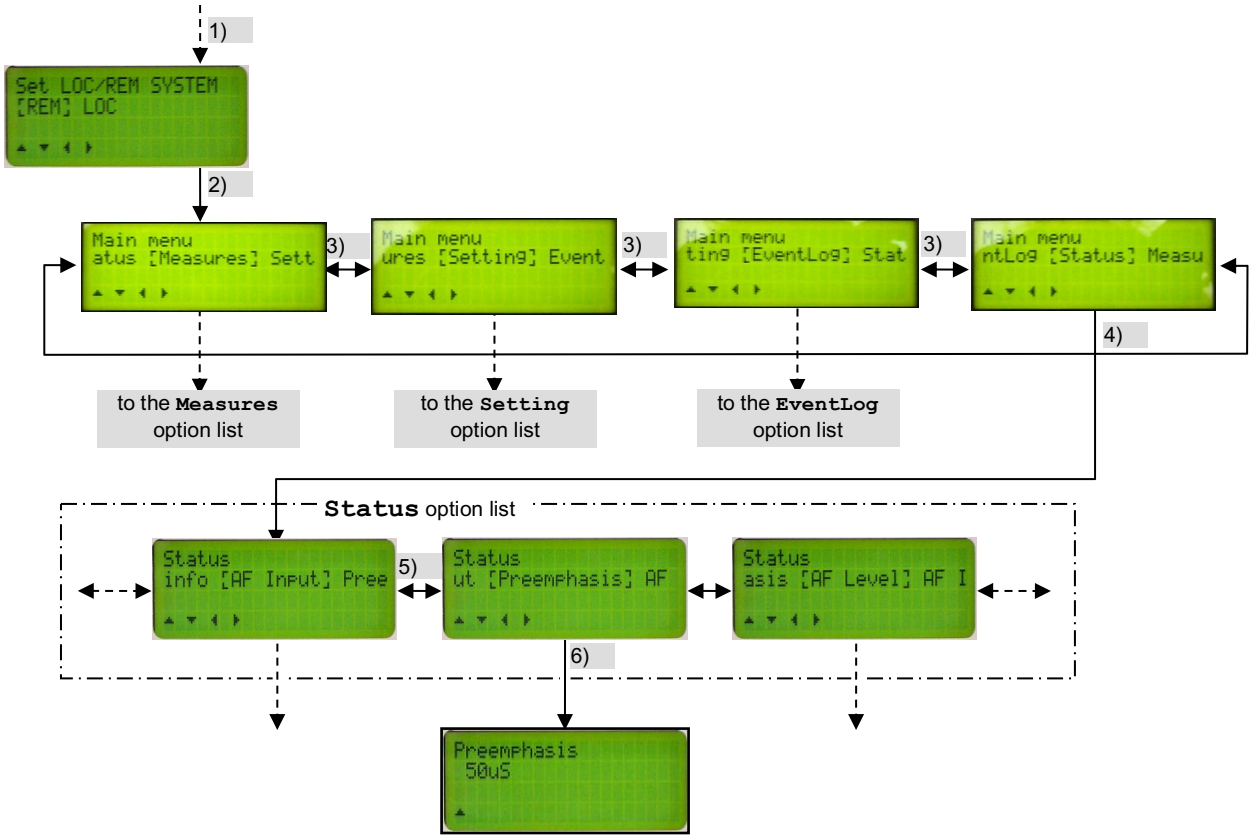
1.2.d Timings

When an option is accessed, if no keys are pressed for a certain time (variable according to the version, e.g. 1 minute), the display returns to the related submenu.

Moreover, if no keys are pressed for a certain time (also variable according to the version, e.g. 3 minutes) in every menu/submenu, the display is automatically reverted to the main screen (➔1.1 – step 3).

1.2.e Navigation example

This example better explain the navigation. See the below stated partial diagram (the full map is available on par. 1.6).



If the main screen is selected and there is the needs to check the currently selected preemphasis (submenu **Status** – **Preemphasis**), these are the proper operations to do:

1) Press once the ▼ key to move one step down in the **Set LOC/REM SYSTEM**.
2) Press once the ▼ key to move one step down in the submenus.

3) Press three times the ► key (or the key ◄ once) to reach the **Status** submenu.

4) Press once the ▼ key to access the option list of the **Status** menu (the first one is **AF Input**).

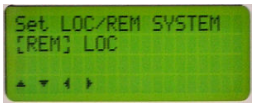
5) Press the ► key to reach the **Preemphasis** option in the option list.

6) Press ▼ to check the **Preemphasis** (in the example **50 uS**).

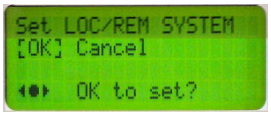
*In this last screenshot only the ▲ sign is shown in the last line. This means that the only available operation is to return to the **Status** option by pressing the ▲ key.*

1.3 SETTING THE LOCAL OR REMOTE MODE

When the **Set LOC/REM SYSTEM** screenshot is selected (➔1.1 step 5), it shows if the equipment is currently in remote or local mode by showing, respectively, **REM** or **LOC** inside square brackets:



1) Press ◄ or ► in order to select the needed mode, then press the [**ENTER**] key. The display will show:



2) Press [**ENTER**] to confirm the previously selected mode (or, to escape, use ◄ or ► to select **Cancel** then press [**ENTER**].

*In the remote mode, all the settings can be performer by remote commands only, so the **Setting** menu (explained later) won't be available.*

In the last step you can also exit without changing the mode by following the escape procedure (➔0).

1.4 MEASURES SUBMENU

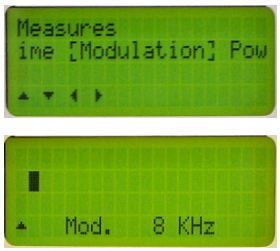
This submenu allows to provide some measurements and see the following transmitter's operating parameters available in these screenshots:

- **`Modulation`** – checks the modulation of the equipment (➔1.4.a)
- **`Power`** – checks the forward and reflected R.F. power (➔1.4.b)
- **`PA Voltage`** – checks the voltage supplying the R.F. power amplifier (➔1.4.b)
- **`PA current`** – checks the current drain of the R.F. power amplifier (➔1.4.d)
- **`PA Temp`** – checks the working temperature of the R.F. power amplifier (➔1.4.e)
- **`Frequency`** – shows the operating frequency (➔3.4.f)
- **`Time`** – shows time and date set in the equipment (➔3.4.g)

Each of the above submenus can be accessed simply by using the ▼ key from each item in the menu list and is used just to view parameters (to change them, use the **`Setting`** submenu - ➔1.5). For this reason only the ▲ key to step back to the **`Measure`** option list is available.

1.4.a Modulation

This option checks the current level of modulation.

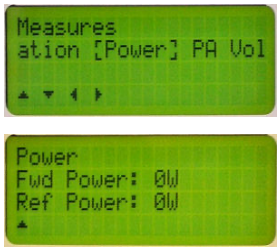


- The 2nd line of the display is a modulation bar meter graphically showing the current level of the modulating signal (in the example only one bar is shown).
- The last line digitally shows the current modulation level in KHz

Should you need to change the attenuation of the modulation input (i.e. the modulation level), see par 1.5.f.

1.4.b Power

This option checks the R.F. power currently handled by the equipment:

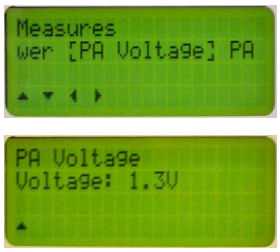


- **`Fwd Power:`** shows the forward power
- **`Ref Power:`** shows the reflected power

Should you need to change the R.F. output power, see par 1.5.c.

1.4.c PA Voltage

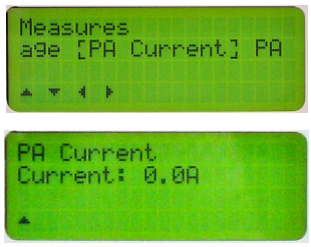
This option checks the voltage supplying the R.F. power amplifier:



The value of this voltage changes according to the current operation. For example the over stated example shows the typical voltage in standby mode.

1.4.d PA current

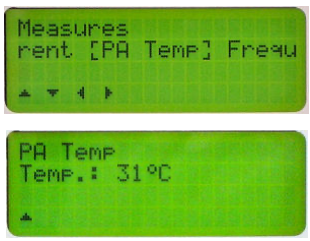
This option checks the current drained by the R.F. power amplifier:



The value of this voltage changes according to the current operation. For example the over stated example shows the current drain in standby mode.

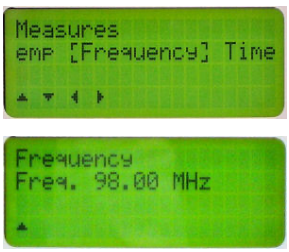
1.4.e MOSFET Temp

This option checks the operating temperature of the R.F. power amplifier:



1.4.f Frequency

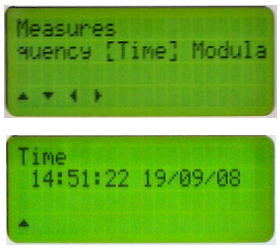
This option shows the operating frequency currently set:



Should you need to change the operating frequency, see par 1.5.b.

1.4.g Time

This option shows the system time and date currently set in the equipment:



The time is shown in **`hh:mm:ss`** (hours, minutes and seconds) format and the date in **`dd:mm:yy`** (day, month and year) format.

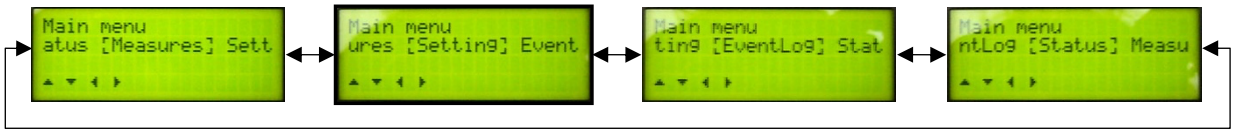
*Date and time are particularly important for the proper operation of the **`EventLog`** list (**➔Error! Reference source not found.**). Should you need to adjust time and date, see par 1.5.h.*

1.5 SETTING SUBMENU

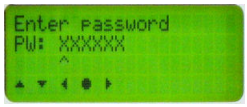
This menu is available only in local mode (➔1.3). It allows to set the transmitter's operating parameters as below stated, for this reason it's password protected.

To access the **Setting** menu:

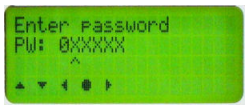
1) Check that the equipment is set in local mode. If not, set it this way using the **Set LOC/REM SYSTEM** screenshot (➔1.3).
2) Inside the main menu, use the ◄ and ► keys to select the **Setting** submenu.



3) Press the ▼ key. The **Enter password** screen will appear. Note that the first digit of the password is pointed with the ^ symbol underneath.



4) Use the ▼ and ▲ keys to set the 1st digit of the password (which is preset by default to **000000**), then press the ► key. The ^ symbol will move to the next digit.



5) Repeat the previous step until you have set all the six digits.
6) As soon as you set the sixth digit, press [**ENTER**] to enter the password. If the password is correct, the option list of the **Setting** submenu will be available with this screenshot:



*If necessary, the password can be changed by using the **Password** setting option as below stated (➔**Error! Reference source not found.**).*

Setting list:

- **StandBy** – sets the system in standby mode (➔1.5.a)
- **Freq Table** – sets the operating frequency (➔1.5.b)
- **Pwr Out Table** – sets the R.F. output power (➔1.5.c)
- **AF Input** – sets the audio frequency input mode (Mono, Stereo, etc. -➔0)
- **Preemphasis** – sets the preemphasis value (➔1.5.e)
- **AF Level** – sets the audio frequency level (A.F. input attenuation - ➔1.5.f)
- **AF Impedance** – sets the audio input impedance (➔1.5.g)
- **Time Set** – sets the system time and date (➔1.5.h)
- **Factory reset** – restores the system to the factory settings (➔1.5.i)
- **Event Clear** – clears the event log (➔1.5.j)
- **Language** – sets the on-screen language (➔**Error! Reference source not found.**)
- **Device Addr.** – sets the address of the RS485 interface (➔**Error! Reference source not found.**)

- **Password** – sets the password to access the setting menu (➔**Error! Reference source not found.**)
- **Client Name** – sets the client name which appears on the startup screen (➔**Error! Reference source not found.**)
- **SW Update** – allows to update the system software (➔**Error! Reference source not found.**)
- **LAN Restart-** allows TCP/IP restart in case of network fail (➔1.5.k)
- **SMS Alarm** (➔3.5.q)
- **Failure Counter** (➔**Error! Reference source not found.**)
- **Reset Mode** (➔3.5.s)
- **Warning** (➔3.5.t)
- **-3dB Mode** (➔3.5.u)
- **GSM N.1; N.2; N.3** (➔3.5.v)
- **SWR Block** (➔3.5.z)
- **IP Address** – to check/set the IP address (➔1.5.n)
- **Subnet Mask** – to check/set the Subnet Mask address (➔1.5.o)
- **Gateway** – to check/set the Gateway address (➔1.5.p)

Each of the above submenus can be accessed simply by using the ▼ key from each item in the menu list. The specific instructions of each setting are stated in the following paragraphs.

1.5.a StandBy

This option allows setting the equipment in standby mode or, from this last condition, restore the normal operating condition.



1) When this option is accessed, the display shows inside square brackets whether or not the standby mode is active. In this case is **OFF**, i.e. the equipment is not in standby mode, so it's normally operating.



2) Use the ◄ and ► keys to select the other available setting (in this case **ON** = standby).



3) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.
4) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔3.5.b.1). The equipment will be set in standby mode.

When the equipment is in standby mode, the **ST-BY** yellow LED **Error! Reference source not found.** will be steadily glowing.

1.5.b Frequency table set

This submenu allows to set (up to 10) preset R.F. frequency values (F0 to F9). The operating frequency will be selected according the **Frequency Control** pins status (➔**Error! Reference source not found.**). This operation mode works only when in remote mode.



*If the **Frequency Control** port has no pins connected to ground, the on-air frequency is **F0**.*

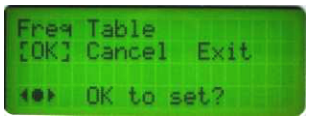
1) In the following screens the ^ symbol points to the digit which will be changed.
2) Use the ▼ and ▲ keys to set this digit, then press the◀ key. The ^ symbol will move one digit left (100kHz resolution).



3) Repeat the previous step until you have set all the digits you need to change (in the example we changed all the digits till the 100MHz resolution).



4) Press the **[ENTER]** key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.



5) Press the **[ENTER]** key to confirm the frequency. The new frequency will be stored and the display will go back to option list.



6) To exit the **Frequency Table** menu press the **[ENTER]** key, then select **[Exit]**.

The equipment rejects eventual frequency settings which are outside the FM broadcast range.

1.5.b.1 Escape procedure

This procedure applies to the major part of the **Setting** submenus and allows to escape without storing the new setting (i.e. leave the previous one) in case of mistakes. It might slightly change according to the currently selected submenu, but it basically works this way:

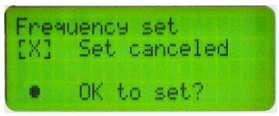
1) After changing the setting of the selected option, the equipment prompts to confirm the change showing in the 2nd line **OK** inside square brackets (e.g. step 4 of the par. 1.5.b).



2) At this stage, if you need to escape without changing the setting, just use the ◄ and ► keys to move the square brackets on **`Cancel`** (in some settings the message could be different, e.g. **`NO`**).

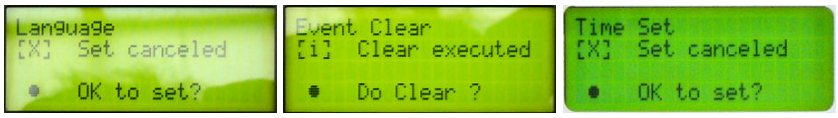


3) Press [**ENTER**]. The 2nd line of the display will show a message informing that you activated the escape procedure (e.g. **`[X] Set canceled`**):



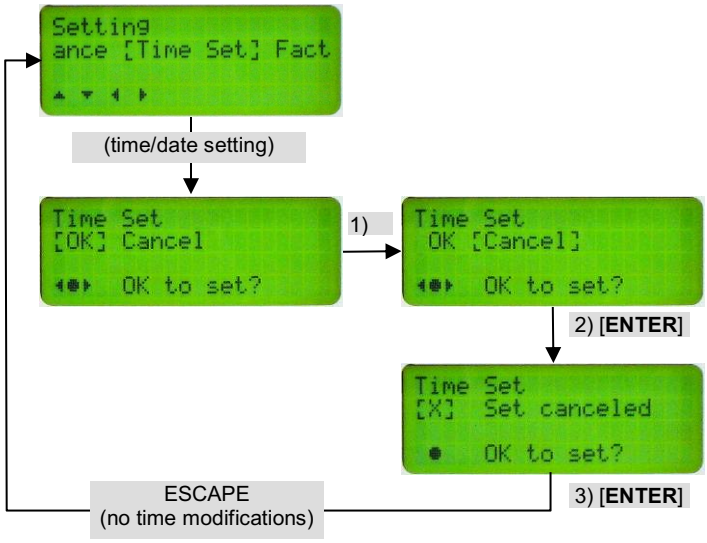
4) Press [**ENTER**] to confirm you want to escape. The new setting won't be stored and you come back to the option list without changing the settings of the previously selected submenu.

Obviously, when you will use the escape procedure with other **`Setting`** submenus, the 1st line of the screen will show the name of the submenu you are currently working on as per the following examples:



However the escape operation is the same.

This is the diagram of the escape procedure applied to the **`Time Set`** submenu (➔1.5.h):



1.5.c Output Power

This option allows to set (up to 10) preset R.F. output power levels (from P0 to P9). The on-air output power is the one selected using the pins of the **Frequency Control** port (➔**Error! Reference source not found.**). This operation mode works only when in remote mode.



1) Select the location to be set (in this example the 0 position).



2) Use the ▼ and ▲ keys to set the first digit on the right, then press the ◄ key. The ^ symbol will move one digit left. Repeat this step until you have set all the digits you need to change (in the example we changed all the digits till the 100 W resolution in order to set the output power to 400W.



3) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with [**OK**].



4) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure (➔3.5.b.1). The new setting of the R.F. output power will be stored and the display will go back to the option list.

*Step 2 – the setting of each digit is performed in an intelligent way. This means, for example, that if you are currently setting the 1W resolution digit which currently reads **9** and you press ▲, you will obtain 10W (not **0**). Moreover, output powers higher than 600W cannot be stored.*

1.5.d AF Input

This submenu allows to set the A.F. input mode (mono, MPX, stereo, digital).



1) Use the ◄ and ► keys to set one of the following settings (in the example **Stereo**):



- **Mono** – monophonic modulation (input from the connector Right) filter 15KHz
- **MPX**- for ext Stereo signal , filter 100khz.
- **Stereo** – stereophonic modulation (input from connectors L and R) set ON the internal Stereo Coder.
- **Digital AF** – digital modulation (input from connector AES-EBU) set ON the internal Stereo Coder.

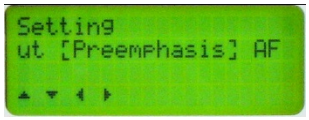
One or more settings couldn't be available according to the installed option or firmware version.

2) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.

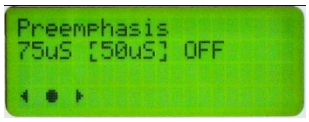
3) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔3.5.b.1). The new setting of the A.F. input mode will be stored and the display will go back to the option list.

1.5.e Preemphasis

This submenu allows to set the preemphasis of the modulation.



1) Use the ◄ and ► keys to set one of the following settings (in the example **50uS**):



- **75uS** – pre-emphasis of 75 microseconds
- **50uS** – pre-emphasis of 50 microseconds
- **OFF** – no pre-emphasis (flat)

2) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.

3) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔3.5.b.1). The new setting of the preemphasis will be stored and the display will go back to the option list.

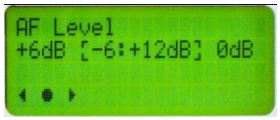
1.5.f AF Level

This submenu allows to set the attenuation of the modulation input, i.e. set the audio frequency level according to the A.F. source currently used.





4) Use the ◄ and ► keys to set one of the following settings (in the example **-6:+12dB**):



- **0dB** – no attenuation
- **+6dB** – amplification of +6dB
- **-6:+12dB** – variable adjustment from –6dB to +12dB by means of the external trimmers **Error! Reference source not found.**

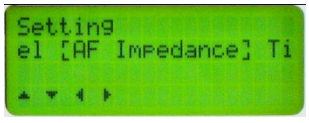
5) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.

6) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔0). The new setting of the A.F. level will be stored and the display will go back to the option list.

*Obviously, as soon as the setting **-6:+12dB** has been set, the trimmers **Error! Reference source not found.** must be regulated according to the A.F. source currently used.*

1.5.g AF Impedance

This submenu allows to set the A.F. input impedance according to the A.F. source currently used.



1) Use the ◄ and ► keys to set one of the following settings (in the example **10K**):



- **600** – input impedance of 600 ohm
- **10K** – input impedance of 10 Kohm

2) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.

3) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔3.5.b.1). The new setting of the A.F. impedance will be stored and the display will go back to the option list.

1.5.h Time Set

This submenu allows to adjust the system time (hours, minutes, day, month and year in this order). Adjusting the system time is particularly important for the **EventLog** list (➔**Error! Reference source not found.**).



1) As can be seen, the 2nd digit of the time is pointed with the ^ symbol underneath.



2) Use the ▼ and ▲ keys to set the hour, then press the ▶ key. The ^ symbol will move to the minutes.



3) Repeat the previous step to set minutes, day, month and year.

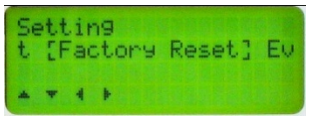


4) Press the [**ENTER**] key to enter the setting. The display prompts to confirm it with **OK** inside square brackets.

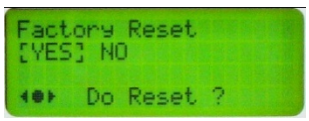
5) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure - ➔3.5.b.1). The new setting of the time will be stored and the display will go back to the option list.

1.5.i Factory reset

This submenu restores all the settings (frequency, output power, etc.) to the factory default (e.g. frequency set to 98.00 MHz).



1) Ensure that **YES** is set (or use the ◀ and ▶ keys to set it). The display asks to confirm the operation with the message **Do Reset?**



2) Press the [**ENTER**] key to confirm. The equipment will restart showing the startup screens and all the settings will be reverted to the factory default as it was switched on for the first time.

On step 1, you can also set **No** *in order to escape without resetting the equipment (this submenu isn't fitted with the standard escape procedure).*

Obviously, since all the settings are restored to the factory default, frequency, power and all the main settings will need to be accessed and modified.

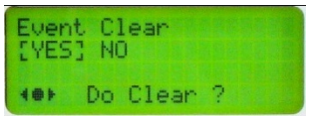
1.5.j Event Clear

This submenu allows to clear the event log, i.e. the list which records the events (e.g. power on) and alarms

of the equipment (➔**Error! Reference source not found.**).



1) Ensure that **YES** is set (or use the ◄ and ► keys to set it). The display asks to confirm the operation with the message **Do Clear?**



2) Press the [**ENTER**] key to confirm (or, to escape without changing the setting, follow the escape procedure described on par. 0). All the events in the event log will be cleared.

1.5.k LAN Restart

This submenu allows the restart in case of Network failure.



1.5.l Reset Mode

This menu allow the reset setting in case of permanent stop caused by the **Failure Counter** (➔3.5.r).



The available options are: **Never** / **Every 24 hour** / **At power on**:







1.5.m Swr Block

This menu allows to set the SWR protection behavior.

The protection starts its effect once the Reflected power will be over the 10% of the maximum power.



There are two options:

If SWR Block is ON the unit stops the power output and restarts after few second. This restart will be carried out for 4 times, and if for all these tests the VSWR alarm is confirmed, the unit will be stopped

switching OFF the output power. In this case a permanent alarm will be displayed and a RESET will be requested to start again the on-air operation.

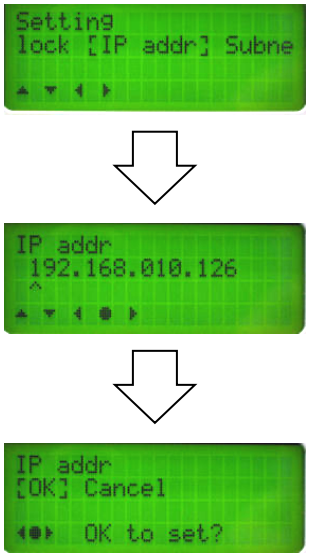


If SWR Block is set OFF the equipment will never switch off the output power. The protection will simply linearly reduce the R.F. output power. Even in case of open load or closed load, the reflected power will be maximum the 10% of the maximum power (see the following picture).



1.5.n IP Address

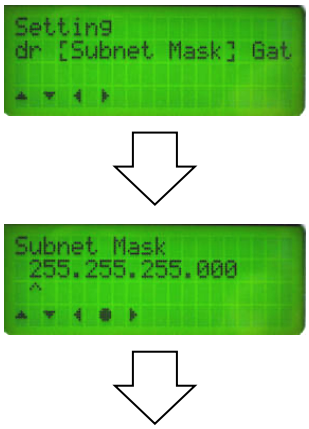
This menu allows checking/changing the IP address.



*Changing of the parameter have effect only after the restart of the equipment (switching off/on through the power line switch **Error! Reference source not found.**) or via the **LAN Restart** function (➔ 3.5.p)*

1.5.o Subnet Mask

This menu allows checking/changing the Subnet Mask address:





1.5.p Gateway

This menu allows checking/changing the Gateway address.



ALARM SECTION

As already explained on par. 1.1, the 4th line of the display shows in the center the current status of the equipment (between the symbols < and >) which is usually **Normal**. However, if an alarm occurs, it replaces the said caption with an appropriate message and stays there as long as the reason of the alarm is present. For example, the following screenshot is showing the **Interlck** (interlock) alarm.



When the normal conditions are restored (nothing is causing alarms), the display reverts to **Normal**.

The following table explains the meaning each alarms which might be shown.

Alarm	Meaning
Low Power	Poor R.F. output power (i.e. -3dB or less than the preset one)
EEprom Flt	An unrecoverable error in the non-volatile memory occurred (the equipment is forced and kept in standby mode for security reasons)
EEprom Wrn	A recoverable error in the non-volatile memory occurred (the software was able to correct it)
Interlck	Interlock contact opened (the equipment is forced to standby mode)
Exc SWR	The value of the reflected power reached 1/10 of the preset R.F. output power (or is higher). In this condition the R.F. output power is automatically reduced for security reasons
PS Overload	Overload of the power supply which supplies the R.F. power amplifier
Vaux Fail	Fault in the power supply which supplies the control logic unit
PLL Unlock	The PLL frequency synthesizer is unlocked
SWR Block	If **SWR Block is ON** the unit stops the power output after for 4 consecutive VSWR alarms. A reset command can be carried out: through the power line switch **Error! Reference source not found.** or, in remote mode, through the pin 11 of the REMOTE 2 port (➔**Error! Reference source not found.**)
EXT Alarm	This alarm is caused by closing the pin 6 of the REMOTE 1 port. This connection is used with RX connection
Modulation Alarm	This alarm is active when the deviation is less than 10khz for more than 5 minutes. Not active for the preset F0-P0, or when the transmitter is in stand-by status, or when the ExtSquelch is active
Low Power	Active if the measured output power is less than the set output power
Over Temperature	Active for heat-sink over temperature (threshold: 80°C)

Unbal	Excessive unbalanced power in the R.F. power amplifier module
PA Overheat	Temperature of the R.F. power amplifier heatsink is greater than 85°C
Over Pwr	Excessive R.F. output power (higher than +20% of the set one)
PS Overheat	Overheating of the power supply which supplies the R.F. power amplifier
PS Fault	Fault in the power supply which supplies the R.F. power amplifier
EEprom Err	Hardware faults in managing the non-volatile memory
BF Error	Error during communication with the AF board

Every alarm (up to 100 alarms) is stored in the **EventLog** list, which can be checked with the appropriate menu, ➔**Error! Reference source not found.**). The said list also stores the following events:

Event	Meaning
Power on	Equipment has been switched on (at the date shown in the relevant screenshot)
Normal	Normal operation of the equipment
Stand-By	Equipment locally set in stand-by mode by means of the dedicated menu command (➔1.5.a)
Ext Squelch	Command through pin 3 of the REMOTE 2 port which sets the power OFF. This connection is used for RX configurations

HOW TO SETUP THE FIRST TIME

QUICK START VIDEO



SCAN THE QR CODE

1.6 MENU DIAGRAM

