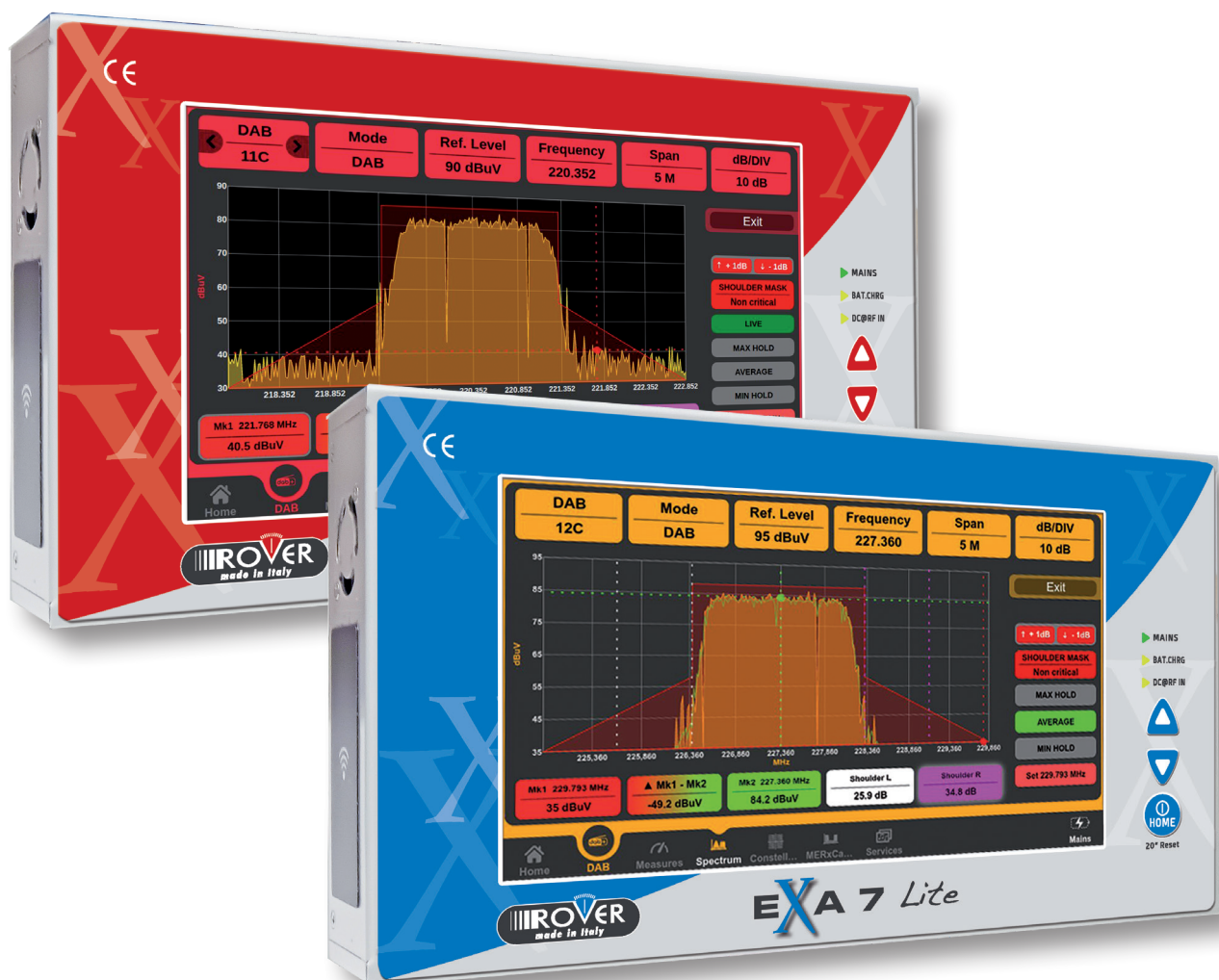




EXA 7 EXA 7 *Lite*

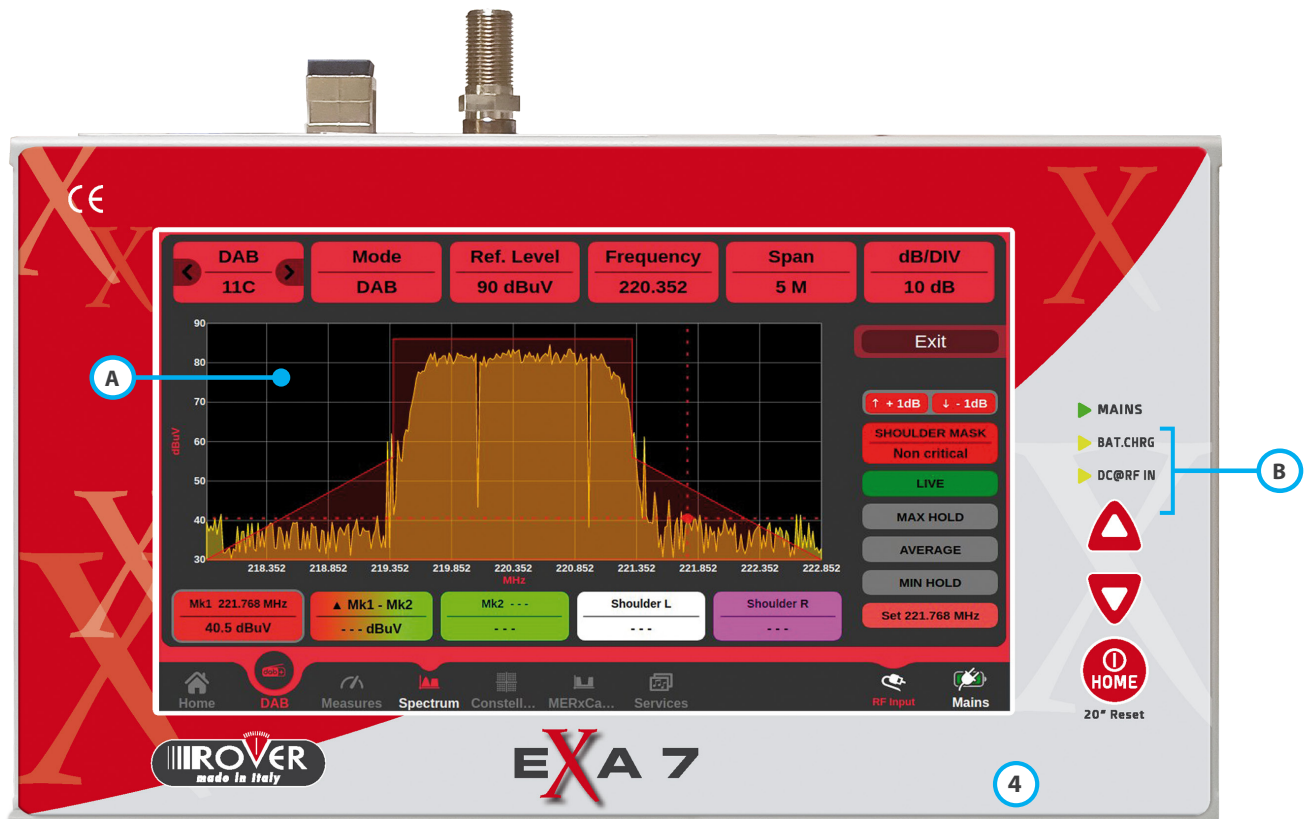
USER'S GUIDE



VEMA
technology

GET TO KNOW YOUR EXA

FRONT PANEL



A. Touch Display 7" inches

B. LEDs

• POWER



To turn on
press the
'HOME' key.



To turn off
press and hold
the 'HOME' key



Or press the 'HOME'
Button once and
touch the
SHUTDOWN icon

• RESET HARDWARE



With instrument ON, keep the "HOME" key pressed for 10"
and turn ON again.

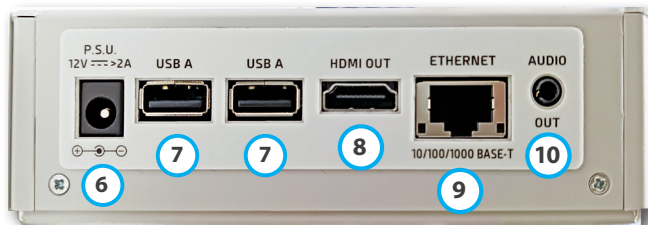
EXA 7 Physical Description and Connectors

• TOP & BOTTOM SIDES



- | | |
|----------------------------------|--|
| 1. OPTIC in: SC connector (opt.) | 3. Remote Power Supply switch DC at RF IN ON/OFF |
| 2. IF/RF IN "F" 75 Ω | 4. Fan |
| | 5. LAN Port for cable test |

• OTHER SIDES



RIGHT

- 6. Power Supply input (12 Vdc)
- 7. N.2 USB A for memory stick & accessories
- 8. HDMI Output (NOT AVAILABLE)
- 9. LAN Ethernet RJ45
- 10. Audio Stereo Output
- 11. Cover of Battery housing



REAR

MULTI-PURPOSE BAG

Make work easier by taking advantage of your multi-purpose bag (only for EXA7)



1

Work safely and without restrictions with both **hands free**.

Connect the shoulder strap to the two hooks at the corners of the bag (top left and bottom right), so you can hang your meter around your neck leaving both hands free.

2



3

The **sunlight shield flap** allows improved visibility of the high brightness display.

Secure your meter by connecting it to the antenna mast or in your car using the practical **ring belt with quick attachment**.

4



5

If you change the configuration of the shoulder strap, you can easily **carry** the meter vertically **by your side**.

You can also **carry** your instrument **using** its practical **handle**.

6



7

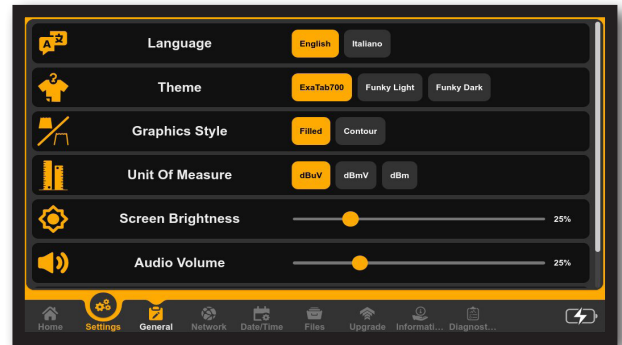
You can use the bag's convenient **stand flap** for operation on a counter.



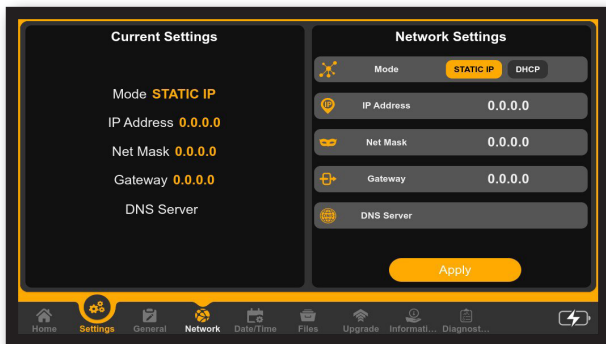
INSTRUMENT CONFIGURATION



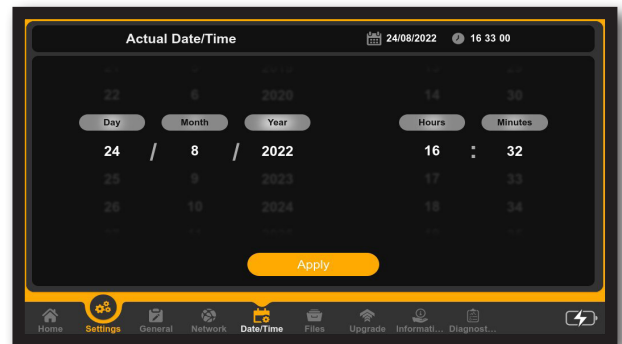
Touch SETTING ICON to access to the General settings menu



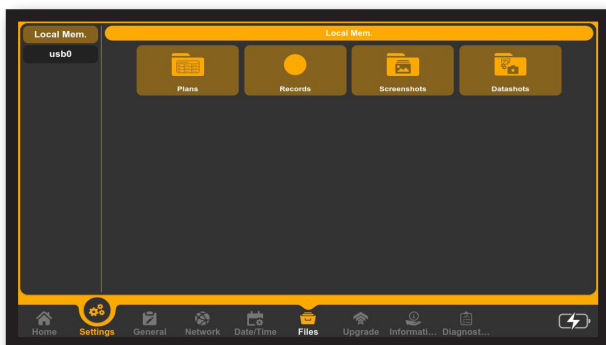
Settings menu configuration



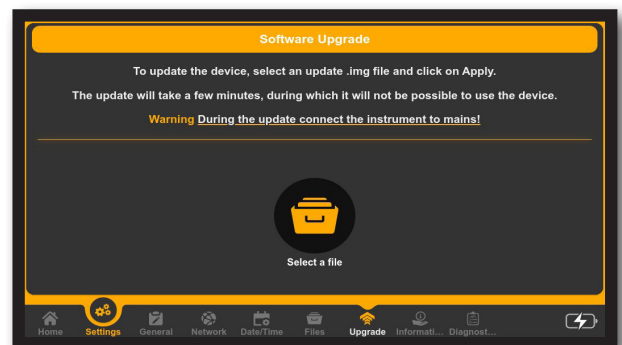
Touch NETWORK ICON to access to the Network settings menu



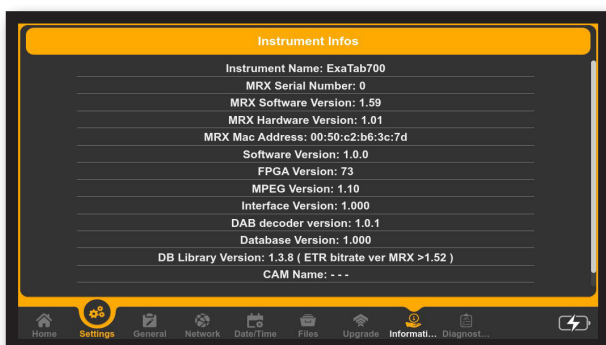
Touch DATE & TIME ICON to access to the Date & Time Actualization menu



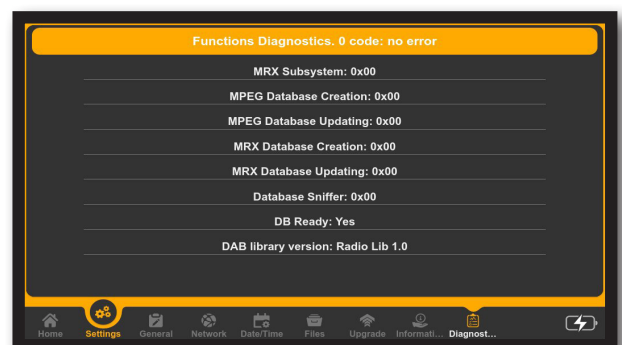
Touch FILES ICON to access to the Local Memory menu



Touch UPGRADE ICON to access to the Software Upgrade menu



Touch INFORMATION ICON to access to the Instrument Information menu

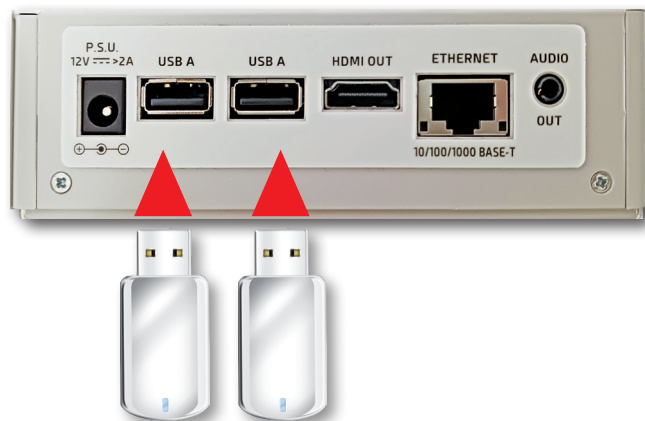


Touch DIAGNOSTIC ICON to access to the Function Diagnostic menu

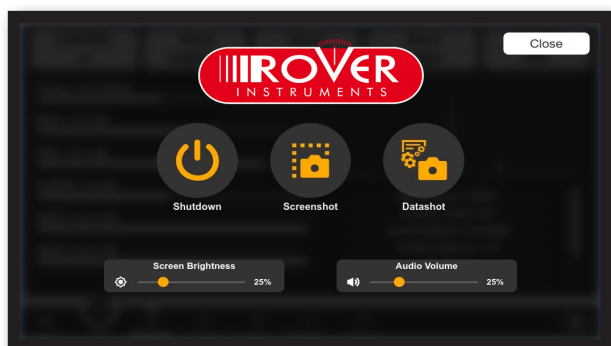


SCREEN SHOT

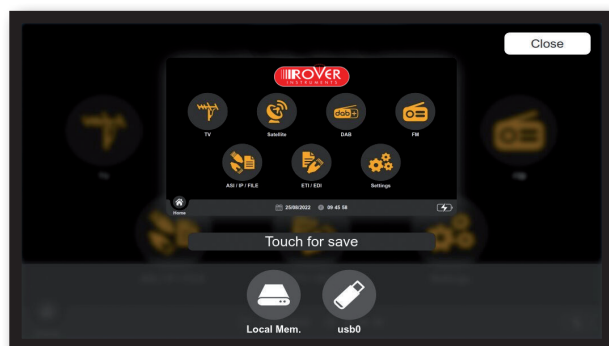
The "SCREEN SHOT" function allows you to directly save the TFT monitor screens in an external memory.



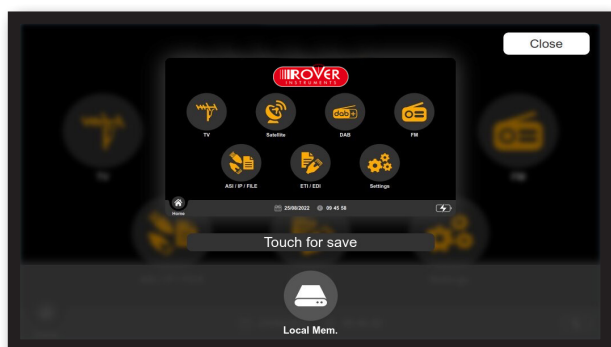
- If you wish, connect an external memory source (not provided) to the USB A 3.0 or 2.0 socket otherwise the USB ICON will not appear
- Set the instrument on the screen to be saved: Spectrum, Measurements, Constellation, Echoes etc. Now you will have 2 different solutions:



Swipe the screen down



Touch LOCAL MEM or USB ICON to save to the desired memory



Or swipe the screen up and touch LOCAL MEM or USB ICON to save to the desired memory

N.B.: The files are saved in .jpeg format.

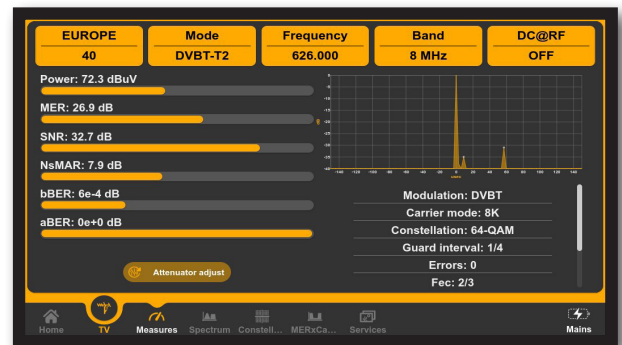


DVB-T/T2 TELEVISION ANALYZER

SWITCH TO TV MODE



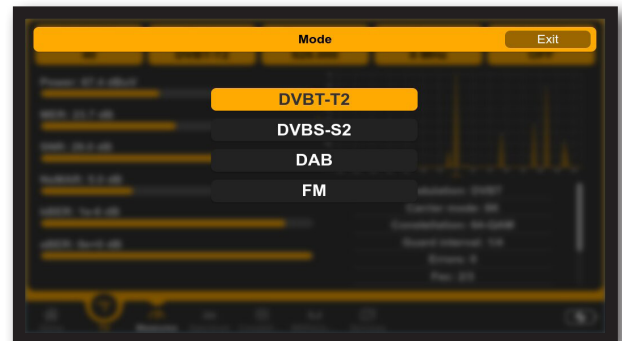
Touch the TV Icon



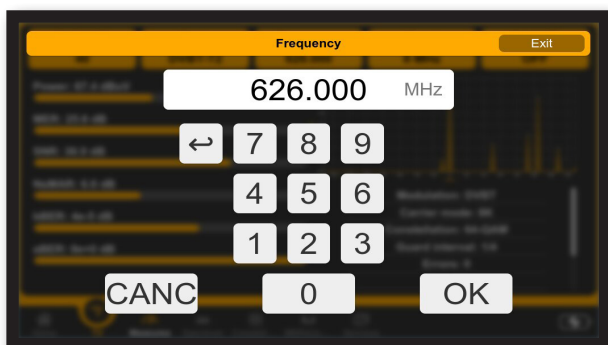
Main TV measurements screen



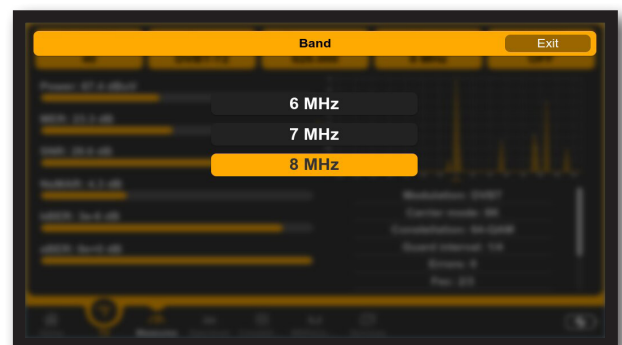
Touch EUROPE and select the Country & Channel desired, touch APPLY to confirm or EXIT



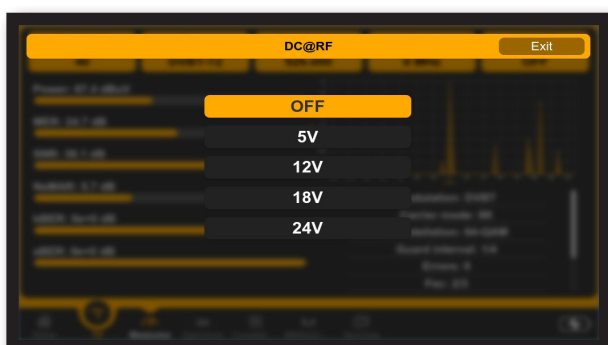
Touch MODE if you want to change the receiving mode



Touch FREQUENCY if you want to change the frequency received

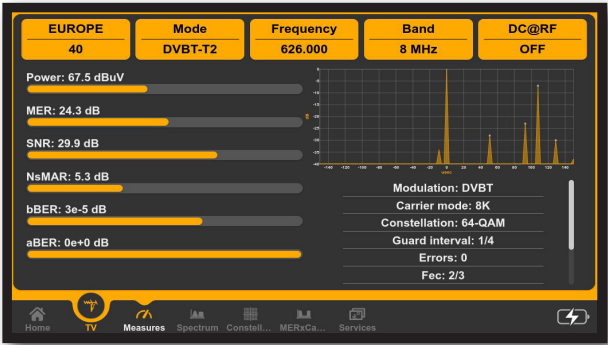


Touch BAND if you want to change the bandwidth received



Touch DC@RF if you want to enable remote power supply

ECHOES VISUALIZATION & MARKERS SELECTION

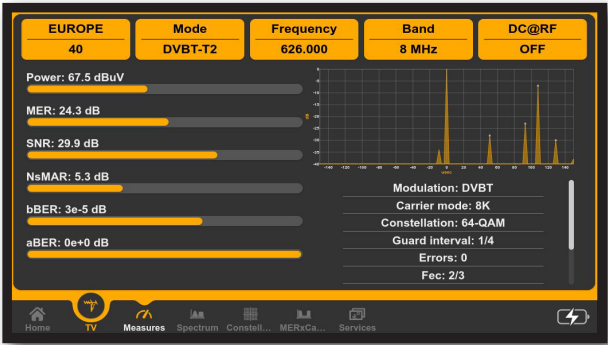


Touch the ECHOES GRAPHIC to zoom IN the Impulse response

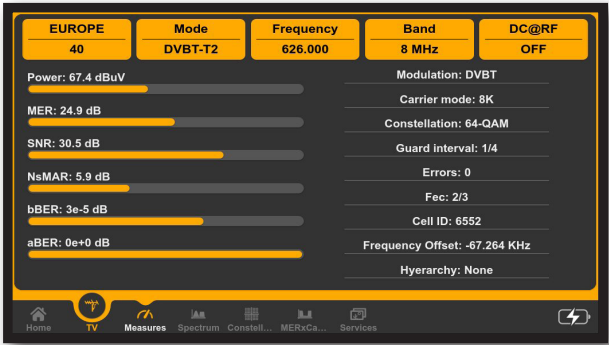


Touch the colored MARKERS BOXES to select the available markers

DVB-T TRANSMISSION PARAMETERS

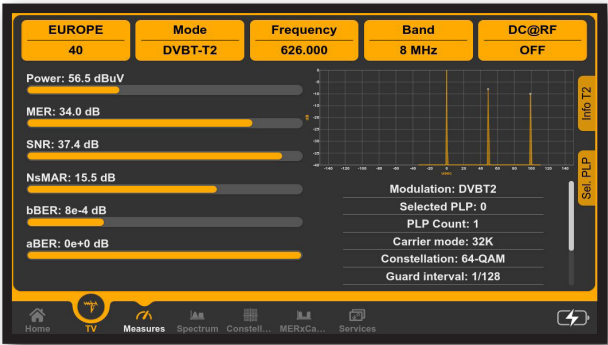


Touch the PARAMETERS LIST to zoom IN the transmission parameters

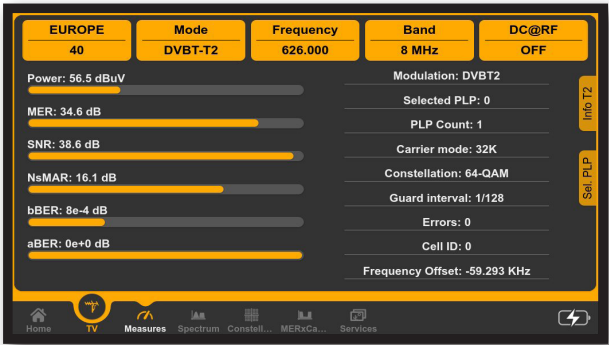


DVB-T transmission parameters list example

DVB-T2 TRANSMISSION PARAMETERS

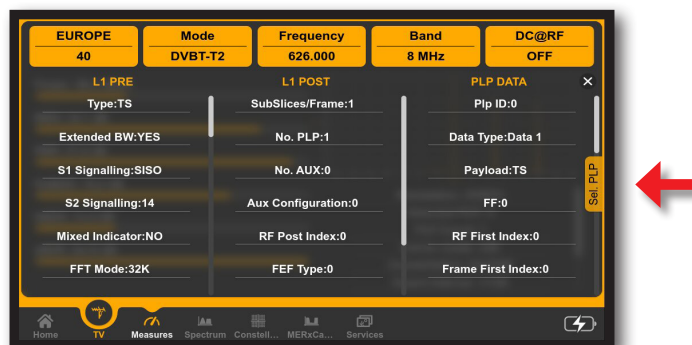


Touch the PARAMETERS LIST to zoom IN the transmission parameters



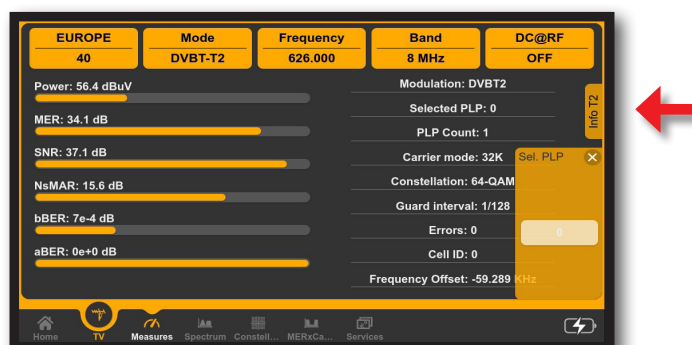
DVB-T2 transmission parameters list example

INFO DVB-T2



Touch INFO T2 to access to DVB-T2 informations

PLP SELECTION



Touch SELECTION PLP to access to PLP Selection menu

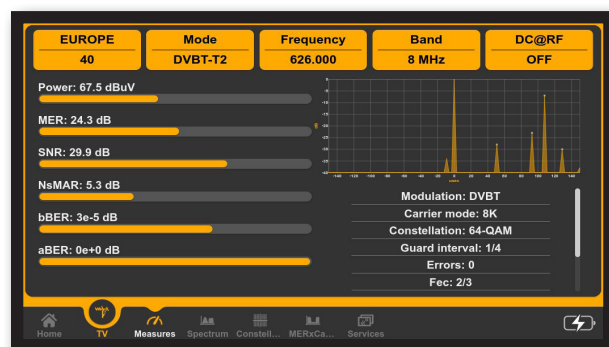


TV SPECTRUM ANALYZER

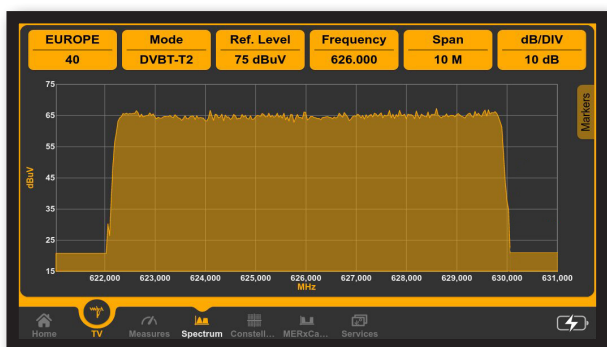
SWITCH TO TV SPECTRUM MODE _____



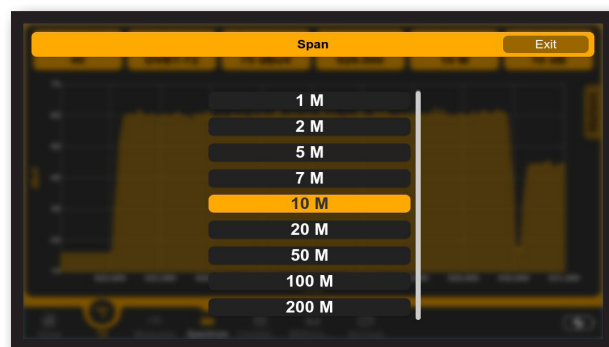
Touch the TV Icon



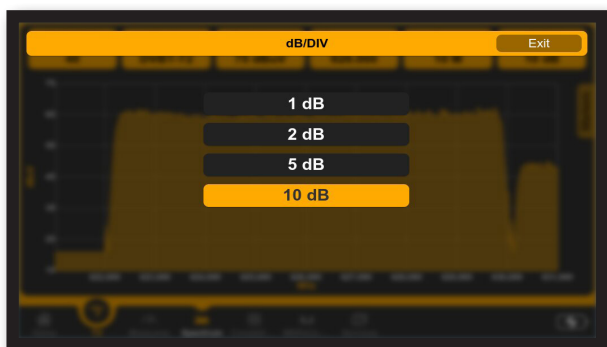
Touch the Spectrum Icon



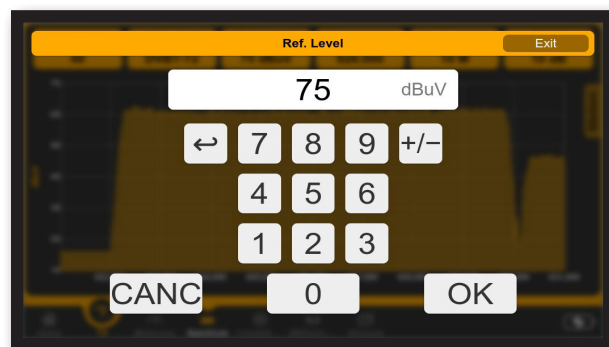
TV Spectrum example



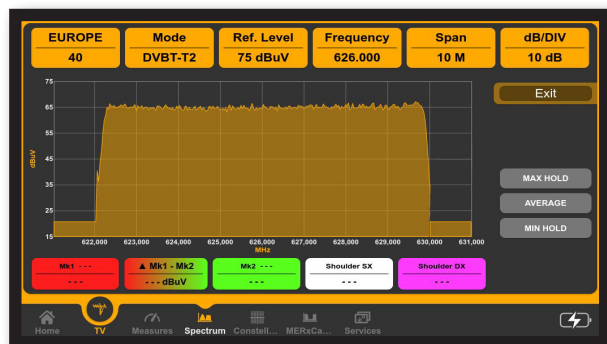
Touch SPAN to change the Span value



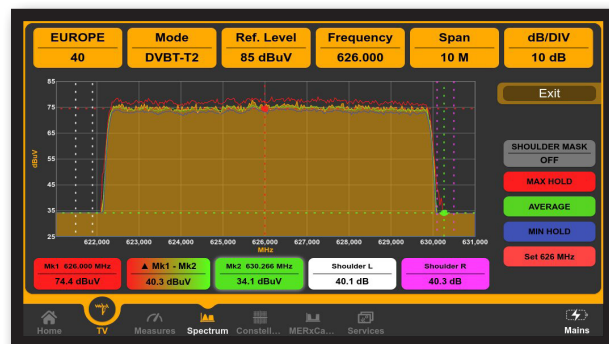
Touch dB/DIV to change the dB division value



Touch REFERENCE LEVEL to change the Reference Level value



Touch MARKERS to access to the MARKERS SETUP MENU



MARKERS, MAX and MIN HOLD, AVERAGE, SHOULDER MASK SX and DX CONFIGURATION EXAMPLE

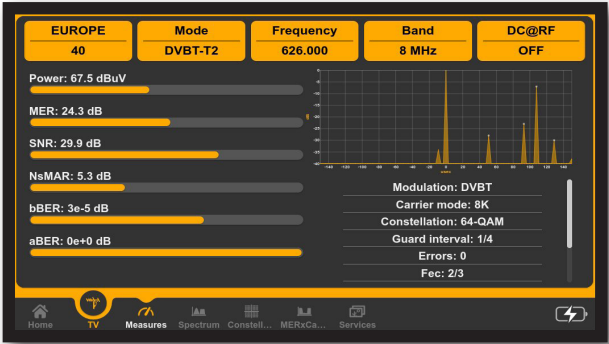


TV CONSTELLATION ANALYZER

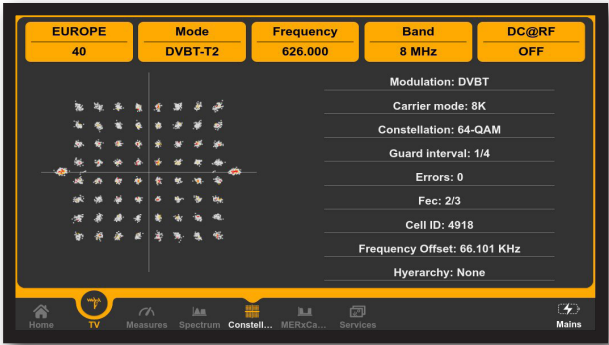
SWITCH TO TV CONSTELLATION MODE_____



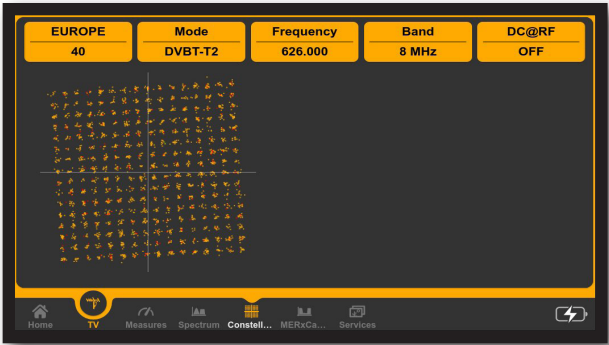
Touch the TV Icon



Touch the Constellation Icon



DVB-T Constellation example

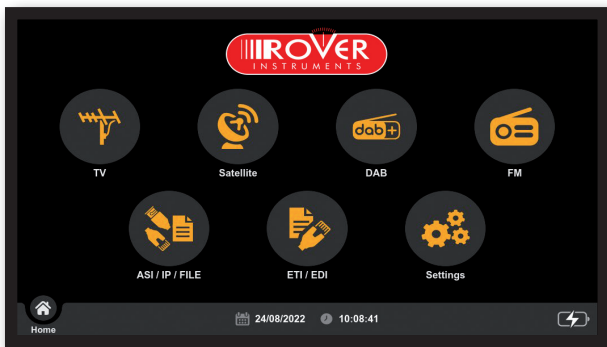


DVB-T2 Constellation example

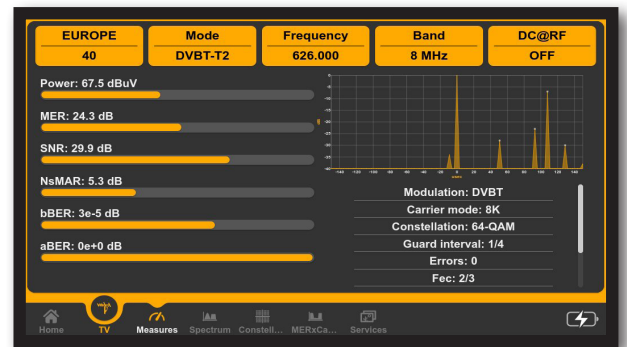


TV MER VS CARRIER ANALYZER

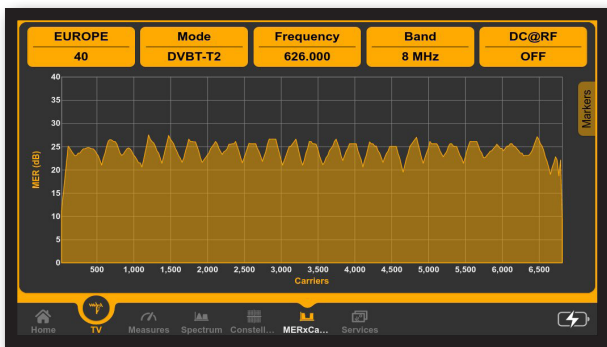
SWITCH TO MER VS CARRIER MODE



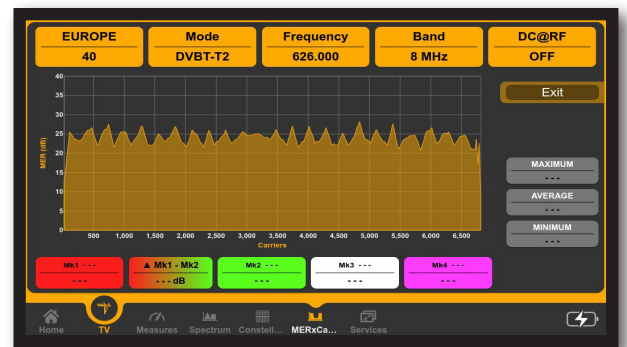
Touch the TV Icon



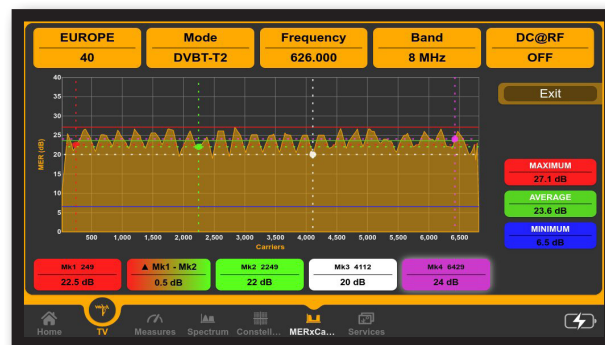
Touch the MER VS CARRIER Icon



DVB-T MER VS CARRIER analyser example



Touch Markers to access to the Markers setup menu



MARKERS, MAXIMUM and MINIMUM, AVERAGE CONFIGURATION EXAMPLE

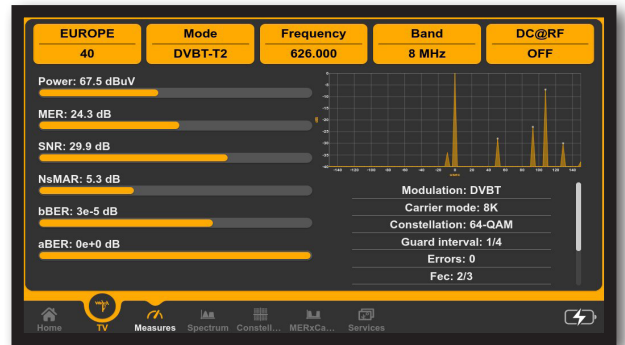


TV MPEG SERVICE

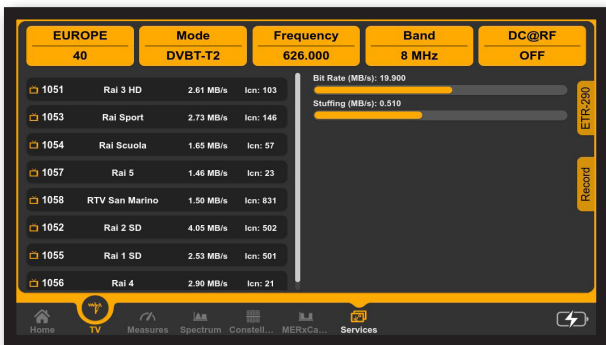
SWITCH TO TV MPEG SERVICE MODE



Touch the TV Icon



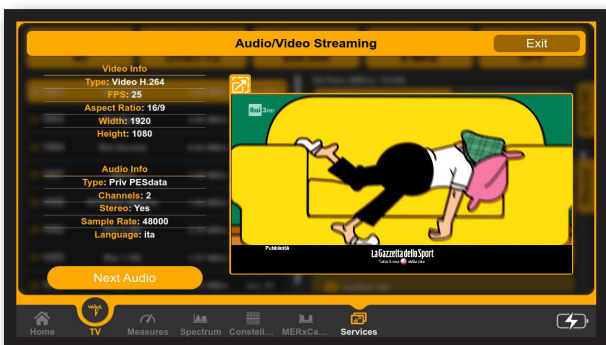
Touch the Service Icon



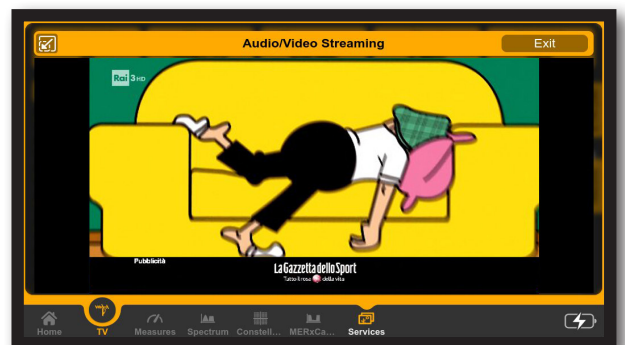
TV Service List example



Touch the SERVICE desired



Touch the PLAY SYMBOL to start the selected TV channel



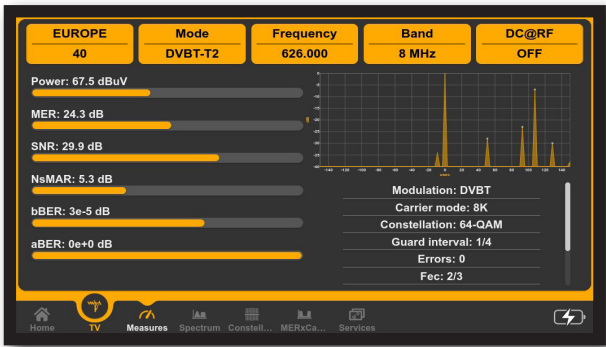
FULL SCREEN image example

TV STREAM RECORDING

SWITCH TO TV STREAM RECORDING MODE _____



Touch the TV Icon



Touch the Service Icon

EUROPE

40

Mode

DVBT-T2

Frequency

626.000

Band

8 MHz

DC@RF

OFF

1051

Rai 3 HD

2.61 MB/s

Icon: 103

1053

Rai Sport

2.73 MB/s

Icon: 146

1054

Rai Scuola

1.65 MB/s

Icon: 57

1057

Rai 5

1.46 MB/s

Icon: 23

1058

RTV San Marino

1.50 MB/s

Icon: 831

1052

Rai 2 SD

4.05 MB/s

Icon: 502

1055

Rai 1 SD

2.53 MB/s

Icon: 501

1056

Rai 4

2.90 MB/s

Icon: 21

Bit Rate (MB/s): 19.900

Stuffing (MB/s): 0.510

ETR-290

Record

Home

TV

Measure

Spectrum

Constell...

MERCa...

Services

TV Service List example



Touch RECORD Icon to Start and Stop TV Stream recording

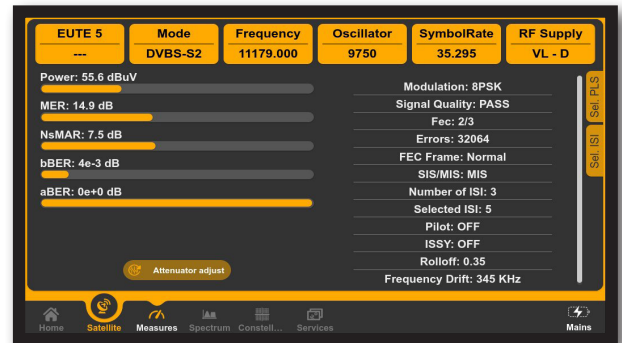


DVB-S/S2 SATELLITE ANALYZER

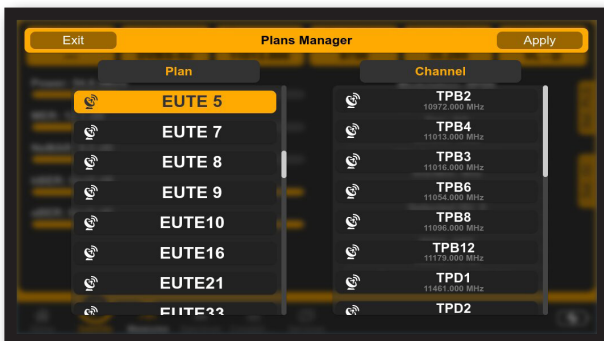
SWITCH TO SAT MODE



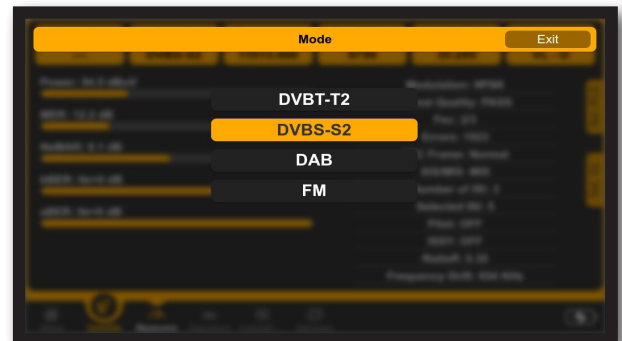
Touch the SAT Icon



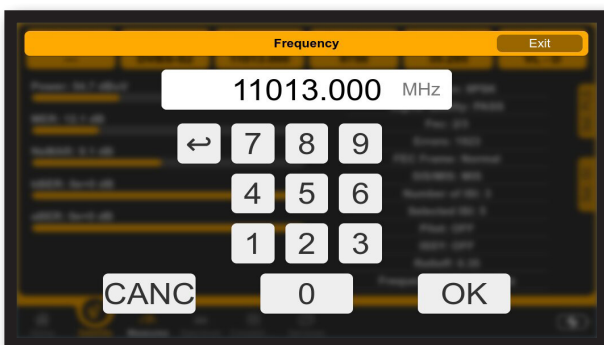
Main SAT measurements screen



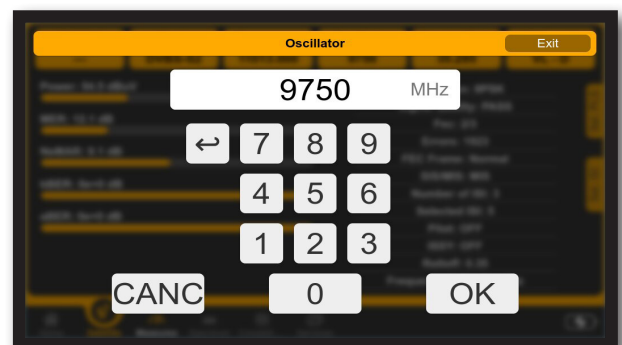
Touch EUTE 5 and select the Satellite & Transponder desired, touch APPLY to confirm or EXIT



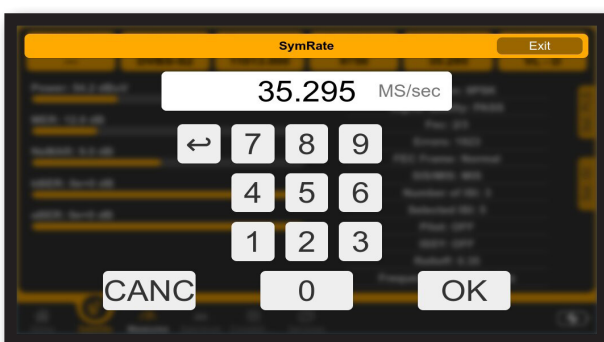
Touch MODE if you want to change the receiving mode



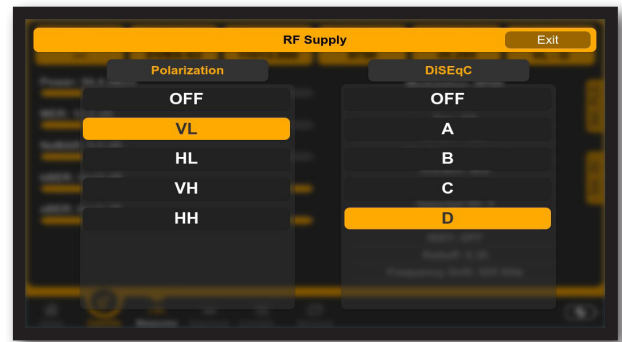
Touch FREQUENCY if you want to change the frequency received



Touch OSCILLATOR if you want to change the LNB Local Oscillator value

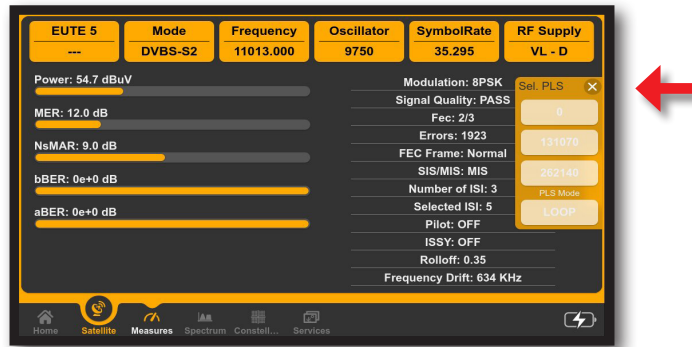


Touch SYMBOL RATE if you want to change the Symbol Rate value



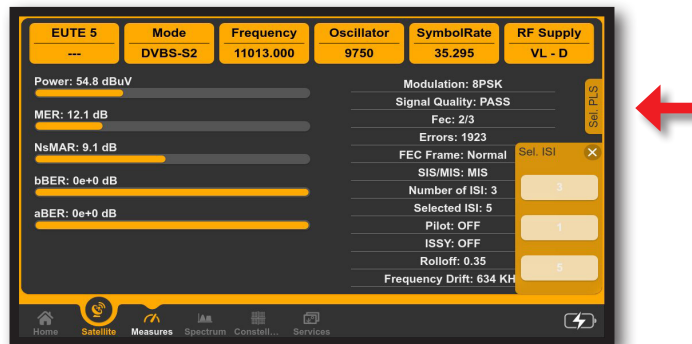
Touch RF SUPPLY LNB if you want to change the Band and the Polarization & DiSEqC value

PLS SELECTION



Touch SELECTION PLS to access
to PLS Selection menu

ISI SELECTION



Touch SELECTION ISI to access
to ISI Selection menu

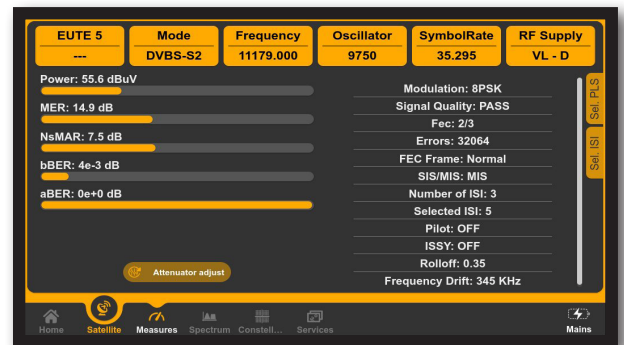


SAT SPECTRUM ANALYZER

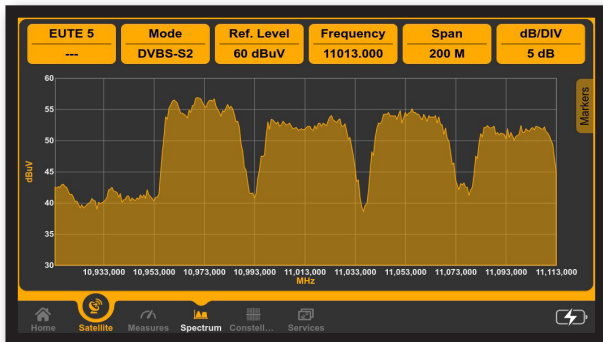
SWITCH TO SAT SPECTRUM MODE_____



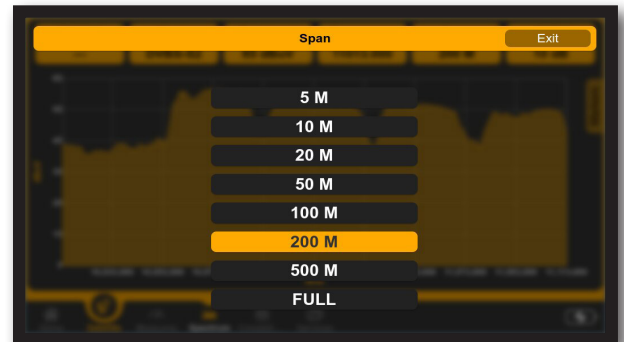
Touch the SAT Icon



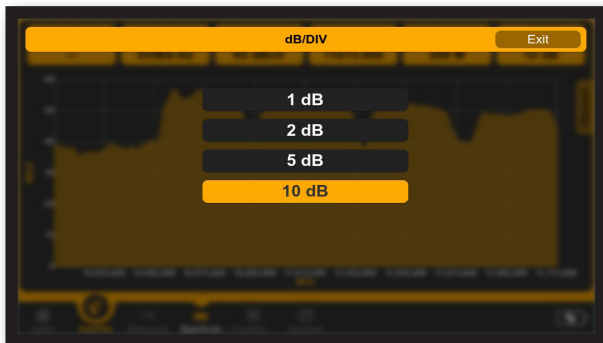
Touch the Spectrum Icon



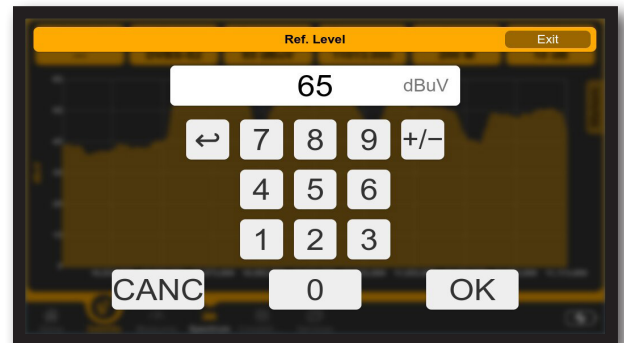
5 dB div SAT Spectrum example



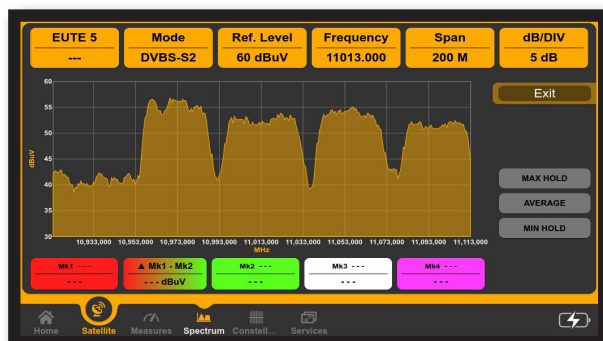
Touch SPAN to change the Span value



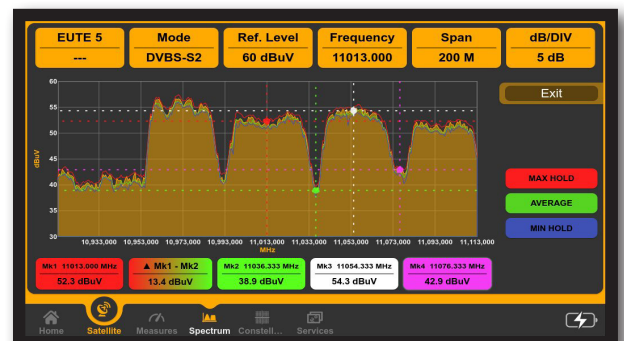
Touch dB/DIV to change the dB division value



Touch REFERENCE LEVEL to change the Reference Level value



Touch MARKERS to access to the MARKERS SETUP MENU



MARKERS, MAX and MIN HOLD, AVERAGE, SHOULDER SX and DX CONFIGURATION EXAMPLE

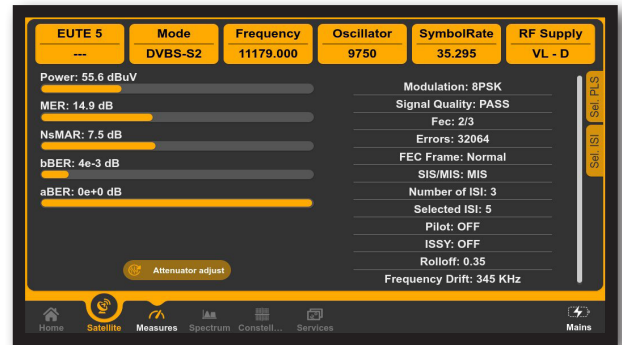


SAT CONSTELLATION ANALYZER

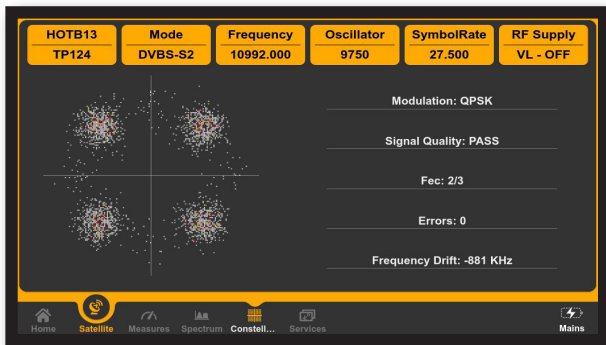
SWITCH TO SAT CONSTELLATION MODE _____



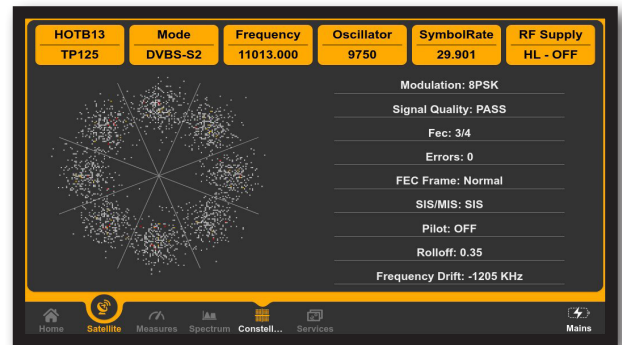
Touch the SAT Icon



Touch the Constellation Icon



DVB-S Constellation example



DVB-S2 Constellation example

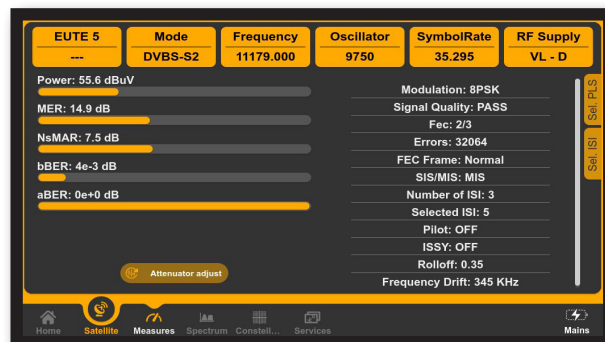


SAT MPEG SERVICE

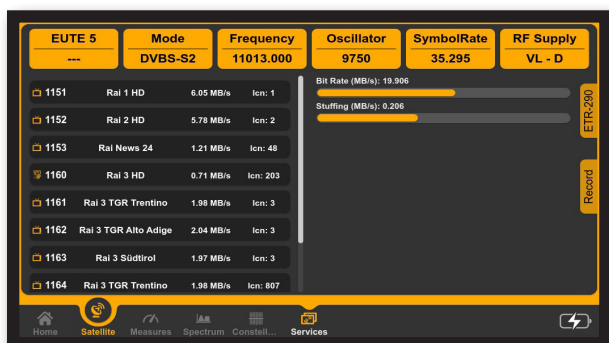
SWITCH TO SAT MPEG SERVICE MODE



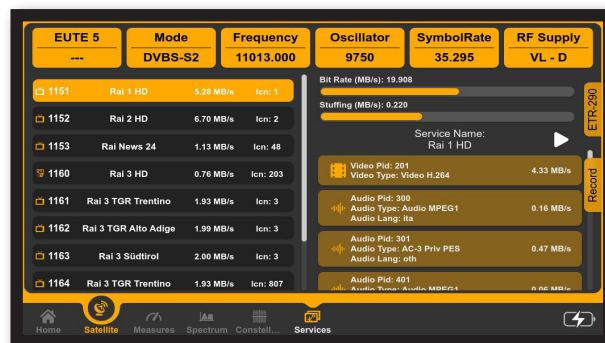
Touch the SAT Icon



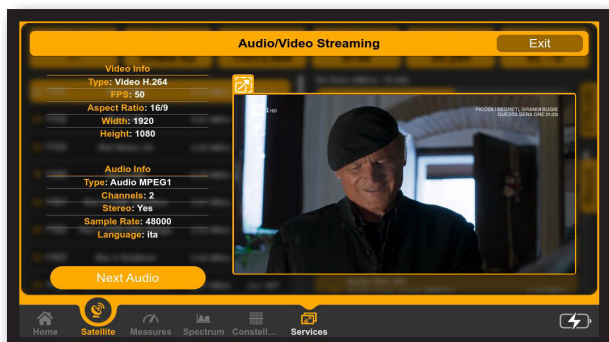
Touch the Service Icon



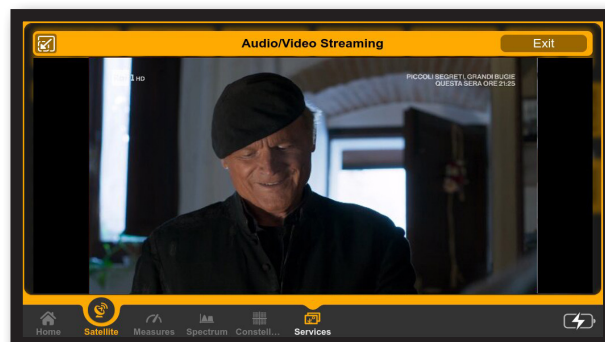
SAT Service List example



Touch the SERVICE desired



Touch the PLAY SYMBOL to start the selected SAT channel



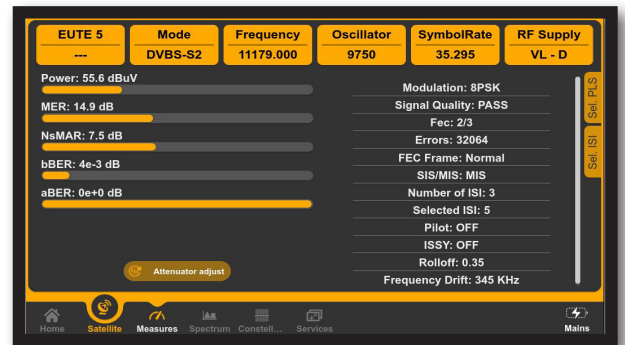
FULL SCREEN image example

SAT STREAM RECORDING

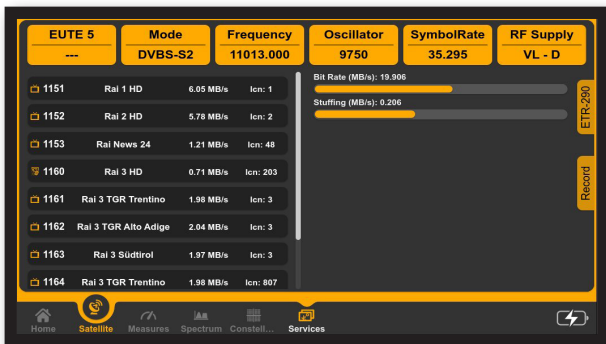
SWITCH TO SAT STREAM RECORDING MODE_____



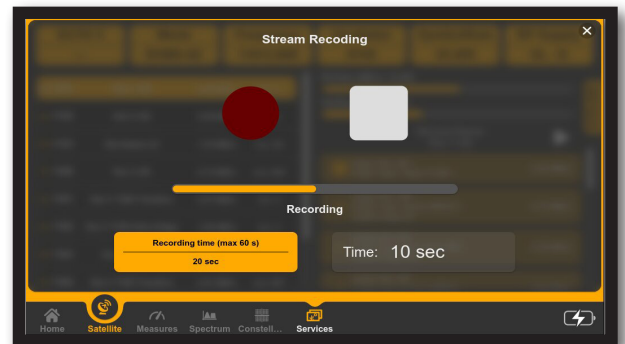
Touch the SAT Icon



Touch the Service Icon



SAT Service List example



Touch RECORD Icon to Start and Stop SAT Stream recording

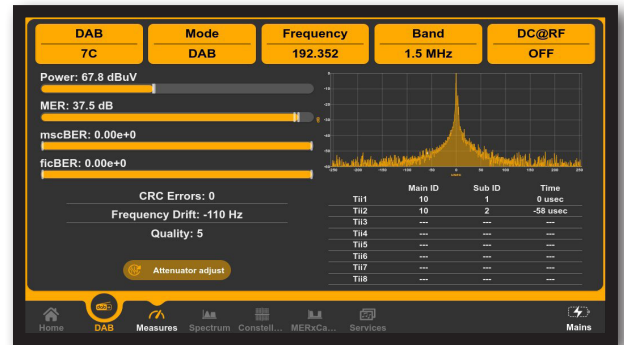


DAB ANALYZER (OPT.)

SWITCH TO TV DAB MODE



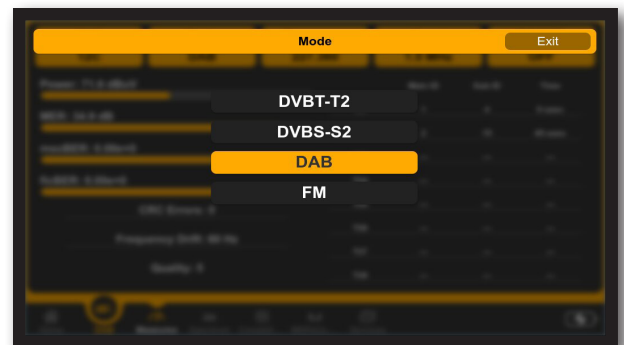
Touch the DAB Icon



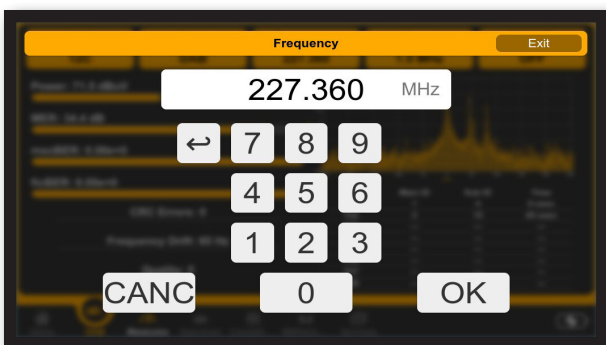
Main DAB Measurements screen



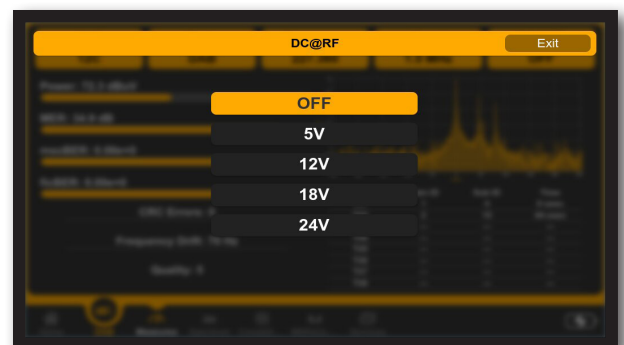
Touch DAB and select the Channel desired, touch APPLY to confirm or EXIT



Touch MODE if you want to change the Receiving Mode

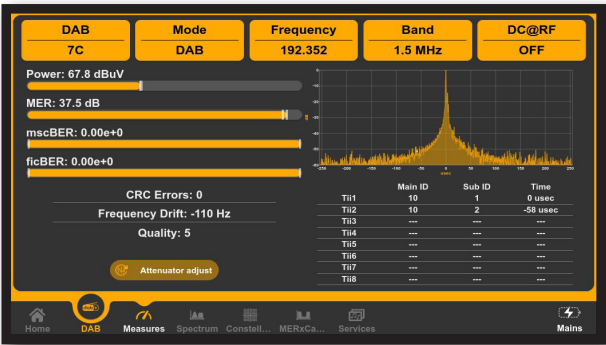


Touch FREQUENCY if you want to change the Frequency received

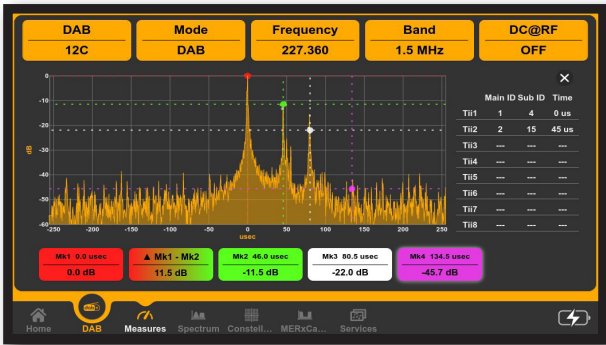


Touch DC@RF if you want to enable Remote Power Supply

ECHOES VISUALIZATION & MARKERS SELECTION

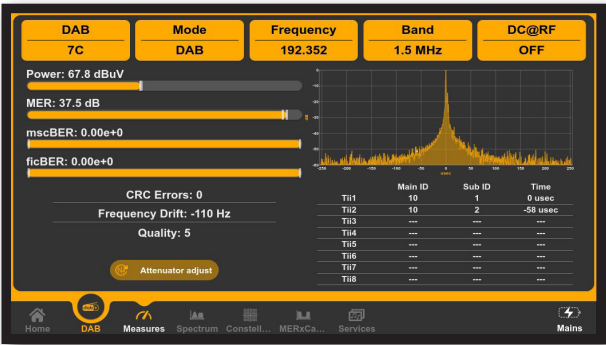


Touch the ECHOES GRAPHIC to zoom IN the Impulse response

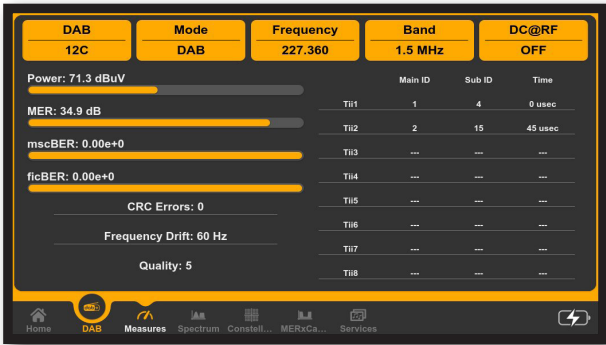


Touch the colored MARKERS BOXES to select the available markers

TRANSMISSION PARAMETERS



Touch the PARAMETERS LIST to zoom IN the transmission parameters



DAB transmission parameters list example

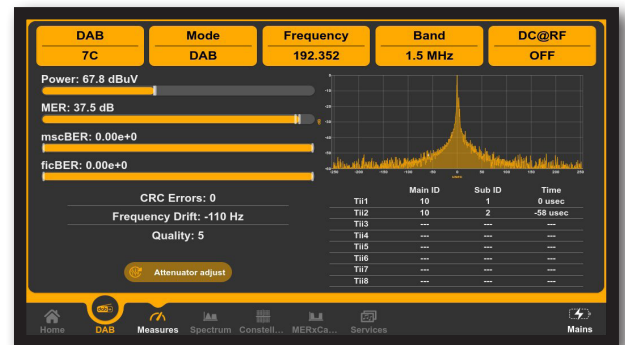


DAB SPECTRUM ANALYZER

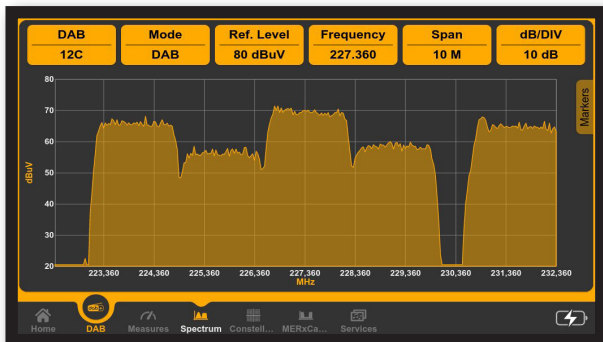
SWITCH TO DAB SPECTRUM MODE _____



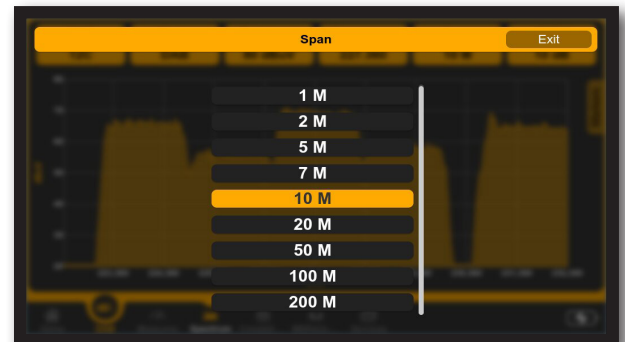
Touch the DAB Icon



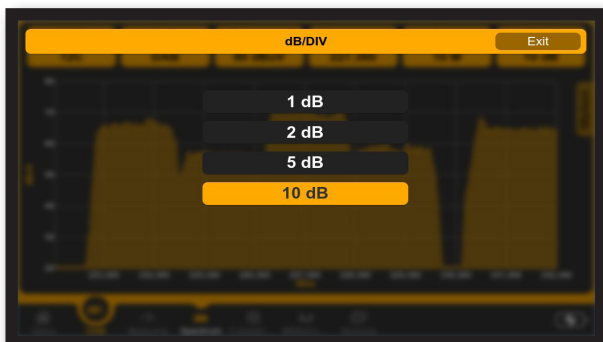
Touch the Spectrum Icon



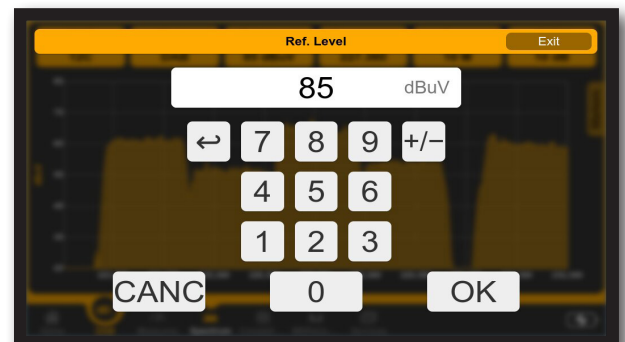
DAB Spectrum example



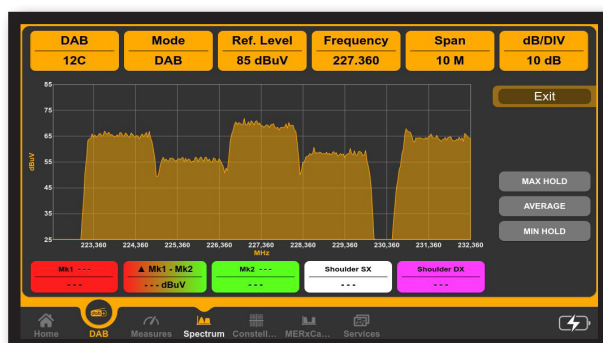
Touch SPAN to change the Span value



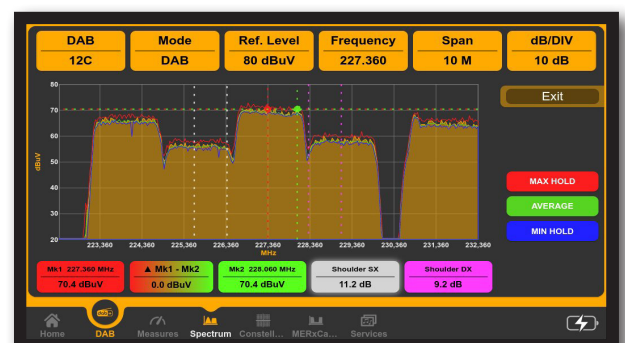
Touch dB/DIV to change the dB division value



Touch REFERENCE LEVEL to change the Reference Level value



Touch MARKERS to access to the MARKERS SETUP MENU



MARKERS, MAX and MIN HOLD, AVERAGE, SHOULDER SX and DX CONFIGURATION EXAMPLE

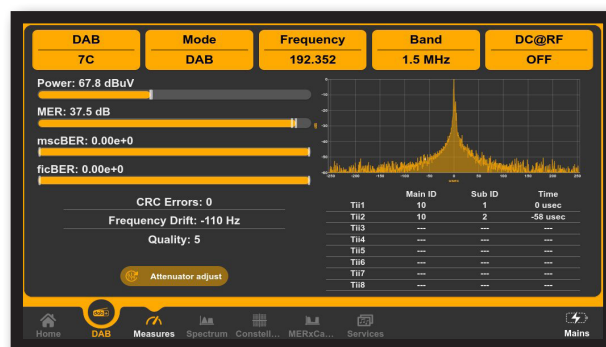


DAB CONSTELLATION ANALYZER

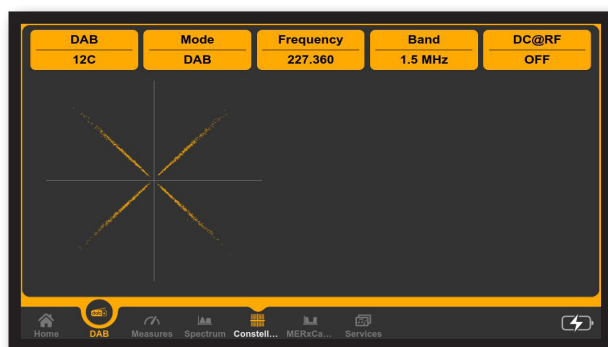
SWITCH TO DAB CONSTELLATION MODE _____



Touch the DAB Icon



Touch the Constellation Icon



DAB Constellation example

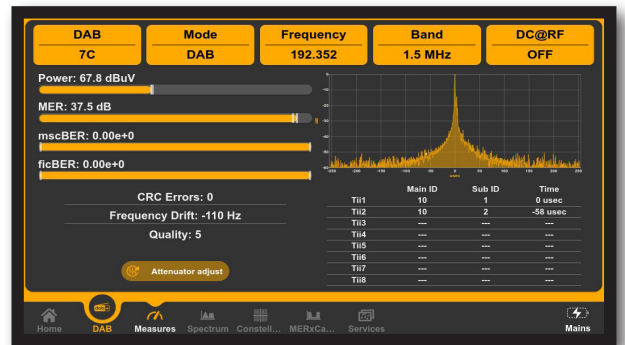


DAB MER VS CARRIER ANALYZER

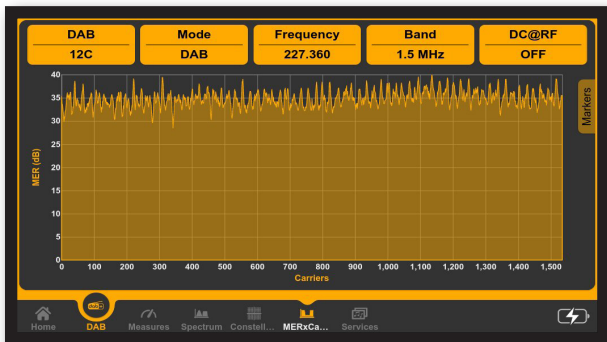
SWITCH TO DAB MER VS CARRIER MODE_____



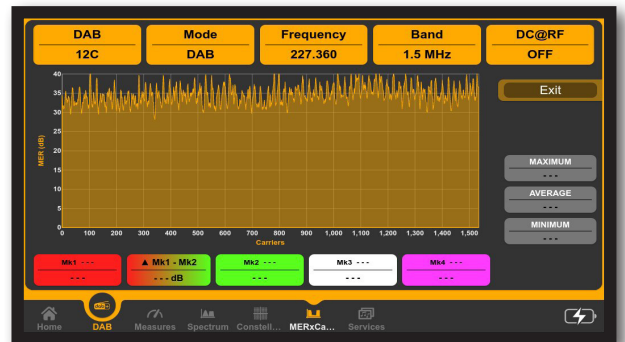
Touch the DAB Icon



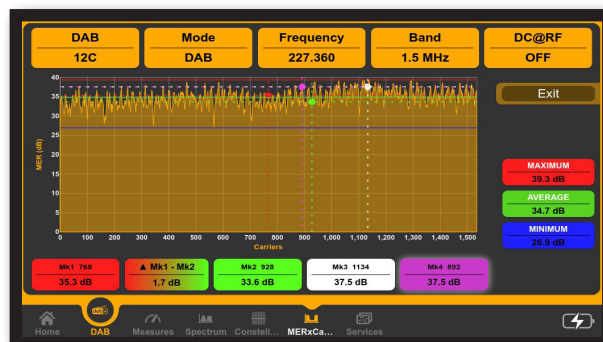
Touch the MER VS CARRIER Icon



DAB MER VS CARRIER analyser example



Touch Markers to access to the Markers setup menu



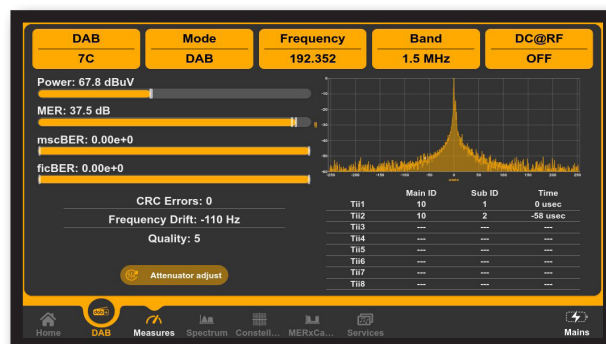
MARKERS, MAXIMUM and MINIMUM, AVERAGE CONFIGURATION EXAMPLE



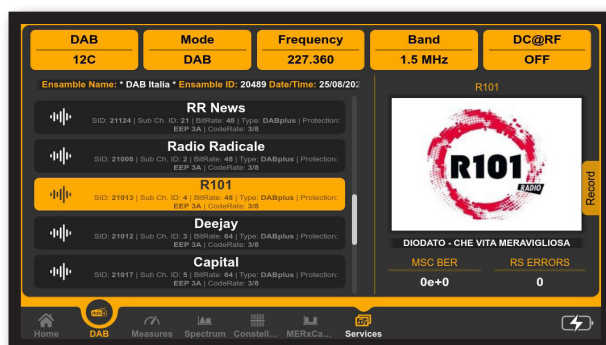
SWITCH TO DAB MPEG SERVICE MODE



Touch the DAB Icon



Touch the Service Icon



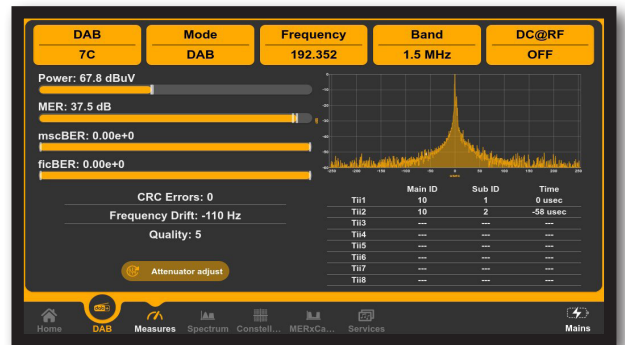
DAB Service List example

DAB STREAM RECORDING

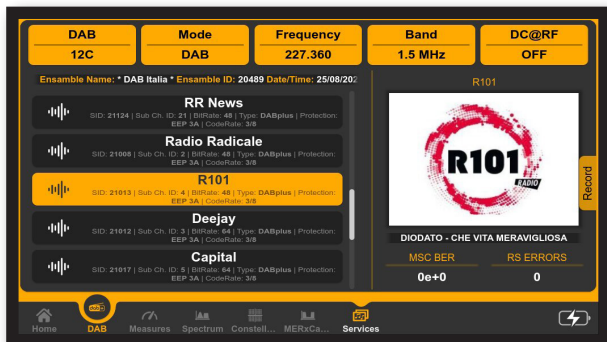
SWITCH TO DAB STREAM RECORDING MODE_____



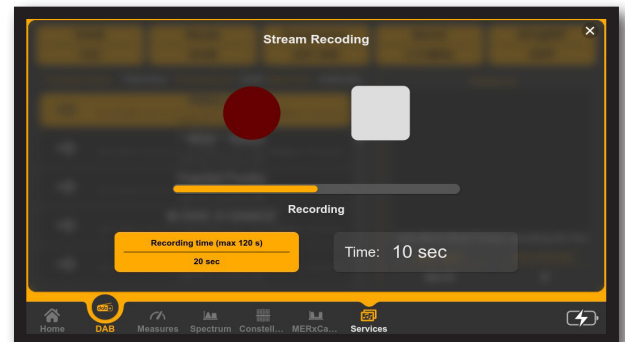
Touch the DAB Icon



Touch the Service Icon



DAB Service List example



Touch RECORD Icon to Start and Stop DAB Stream recording

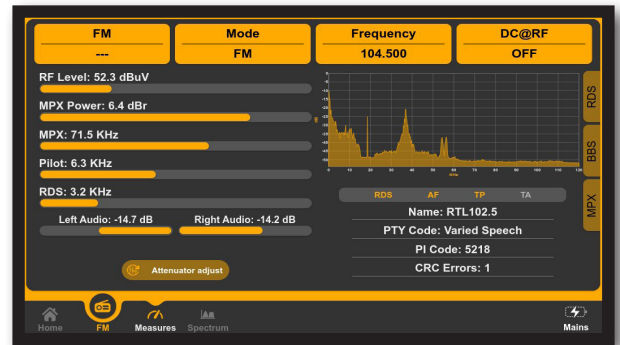


FM ANALYZER (OPT.)

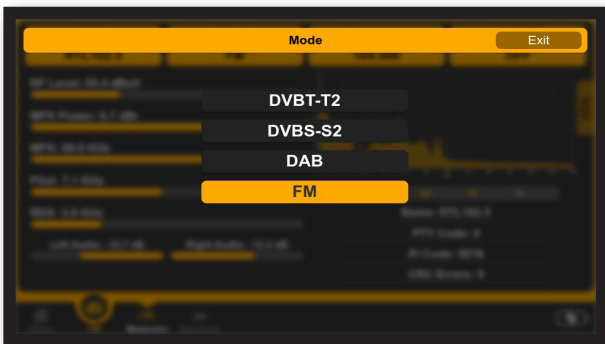
SWITCH TO FM MODE



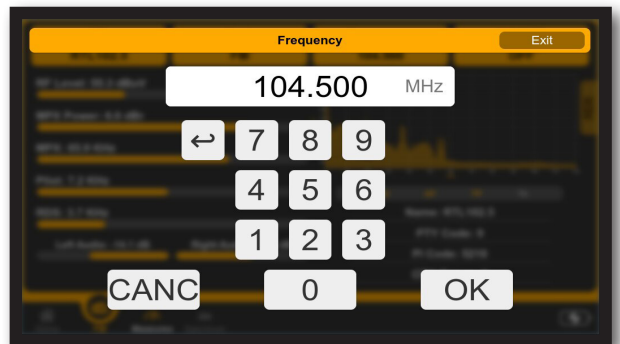
Touch the FM Icon



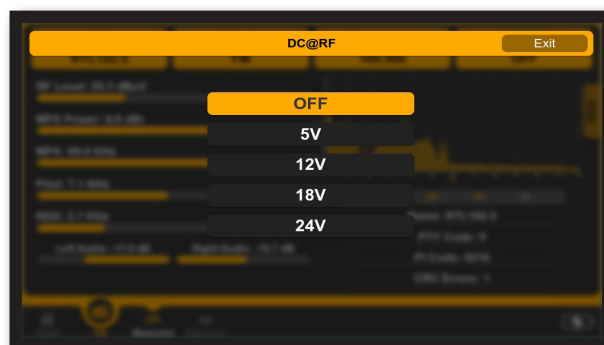
Main FM measurements screen



Touch MODE if you want to change the receiving mode

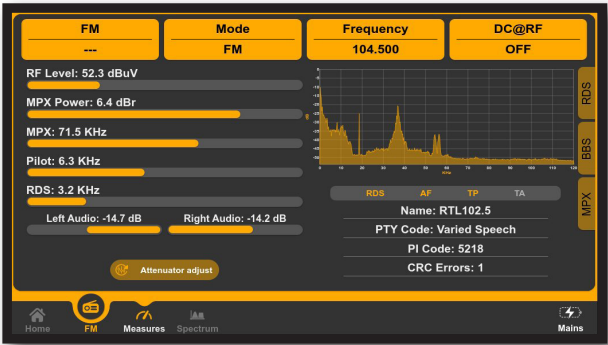


Touch FREQUENCY if you want to change the frequency received

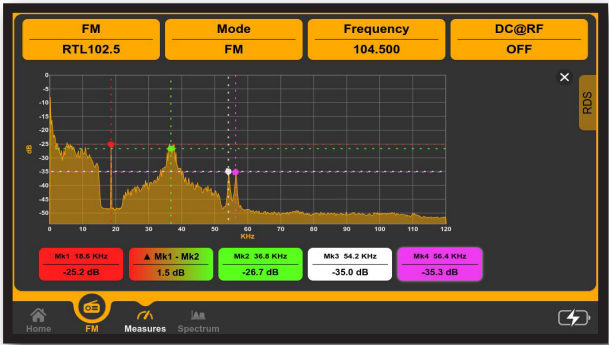


Touch DC@RF if you want to enable remote power supply

MPX VISUALIZATION & MARKERS SELECTION

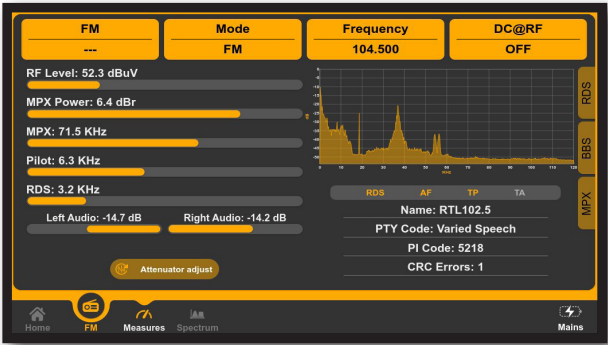


Touch the MPX GRAPHIC to zoom IN the MPX Informations

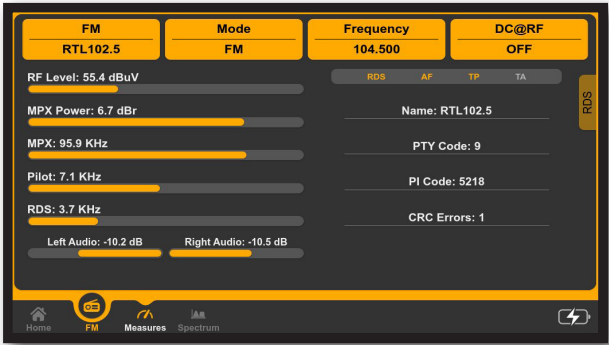


Touch the colored MARKERS BOXES to select the available markers

TRANSMISSION PARAMETERS

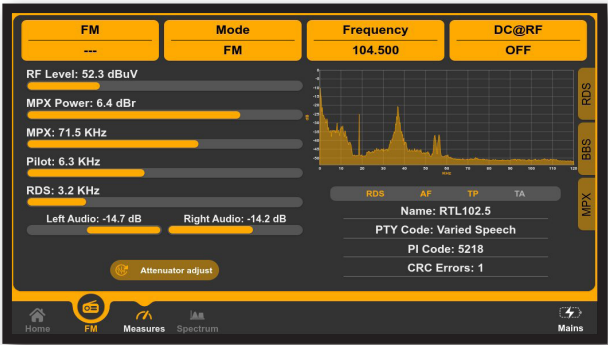


Touch the PARAMETERS LIST to zoom IN the transmission parameters

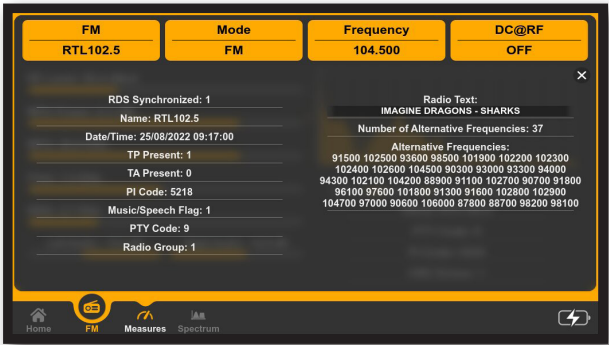


FM transmission parameters list example

RDS TRANSMISSION PARAMETERS



Touch the RDS ICON to zoom IN the RDS Transmission parameters



RDS transmission parameters list example

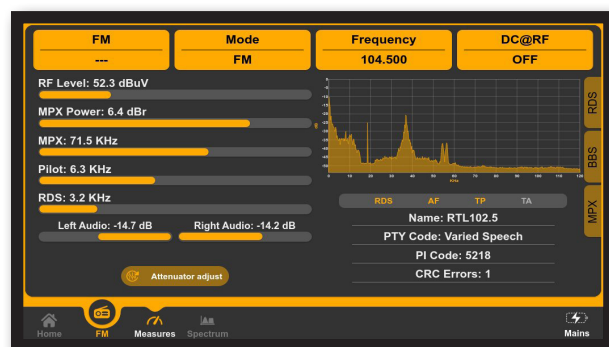


FM SPECTRUM ANALYZER

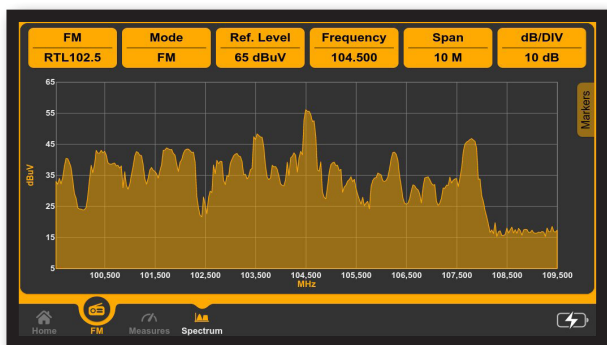
SWITCH TO FM SPECTRUM MODE _____



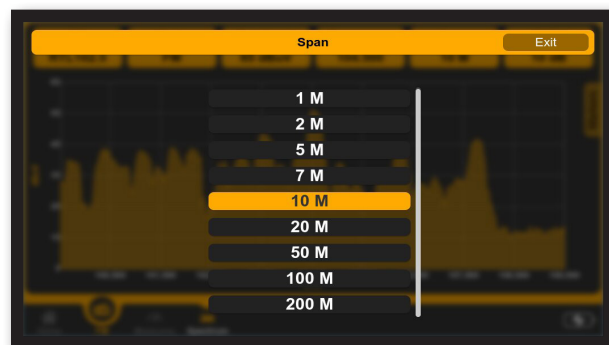
Touch the FM Icon



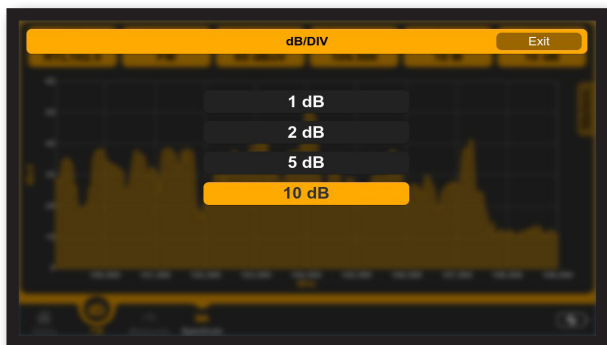
Touch the Spectrum Icon



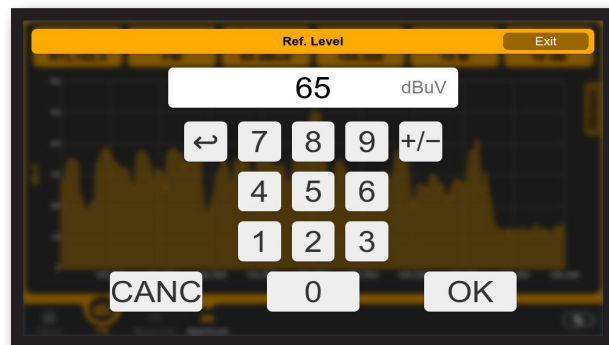
FM Spectrum example



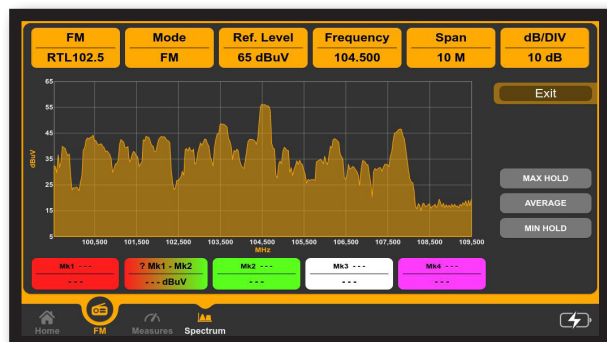
Touch SPAN to change the Span value



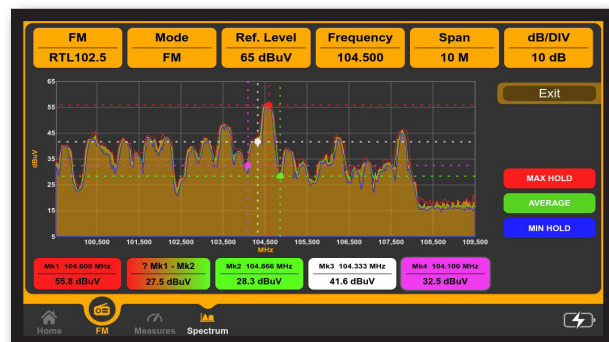
Touch dB/DIV to change the dB division value



Touch REFERENCE LEVEL to change the Reference Level value



Touch MARKERS to access to the MARKERS SETUP MENU



MARKERS, MAX and MIN HOLD, AVERAGE, SHOULDER SX and DX CONFIGURATION EXAMPLE

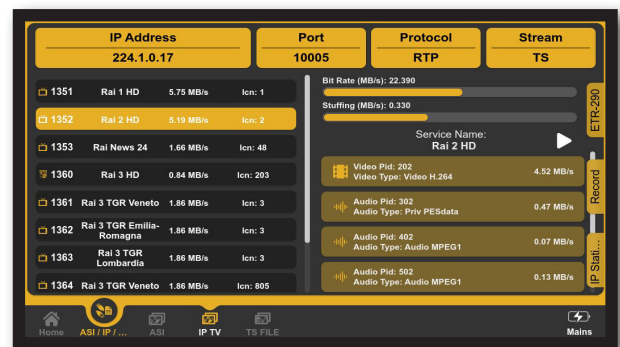


IP TV ANALYZER, (TS OVER IP), (OPT.)

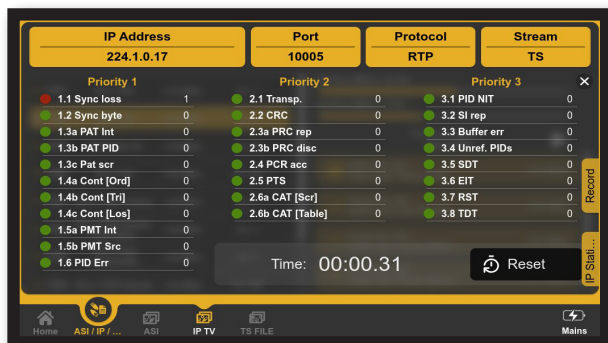
SWITCH TO IP MODE



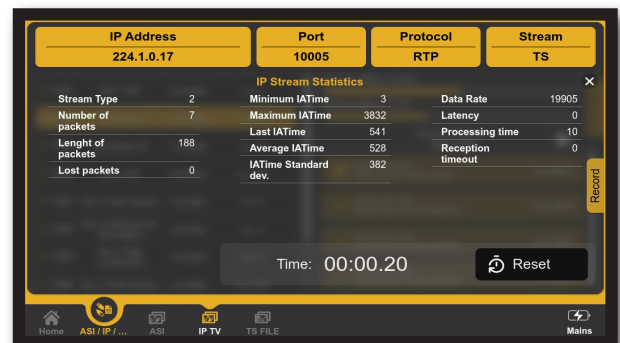
Touch the ASI/IP/FILE Icon



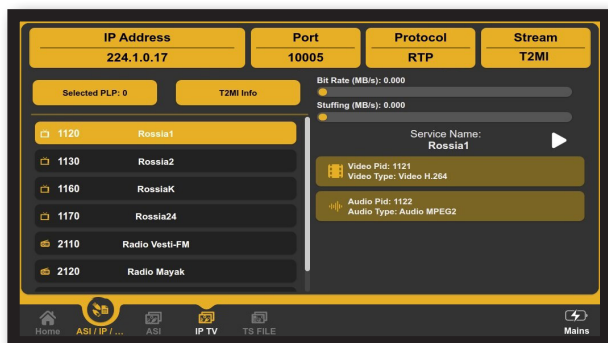
Touch IPTV ICON to start IPTV analyzer



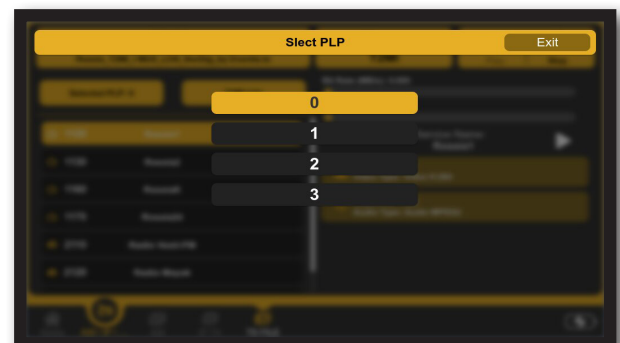
Touch ETR-290 ICON to start ETR-290 analyzer



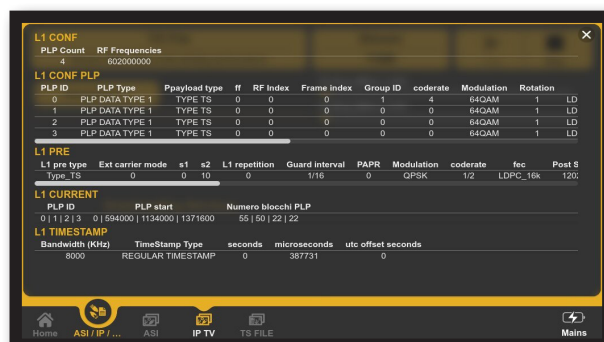
Touch IP STATIC ICON to start IPTV measures



Example about T2MI MULTI PLP



Example of PLP Selection when receiving a T2MI Stream



T2MI Informations

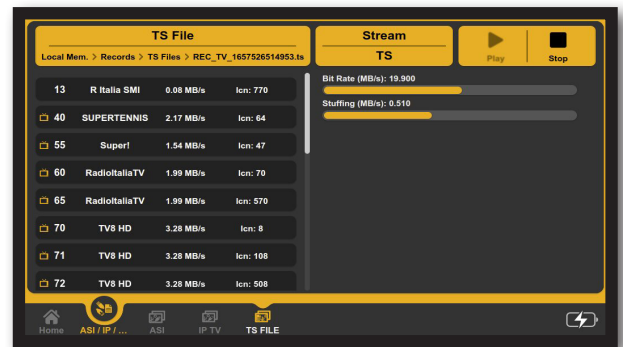


FILE ANALYZER

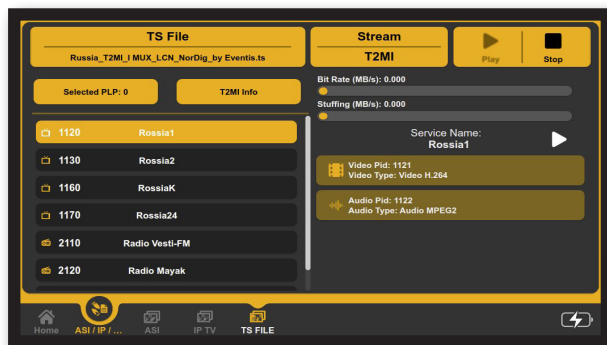
SWITCH TO FILE MODE



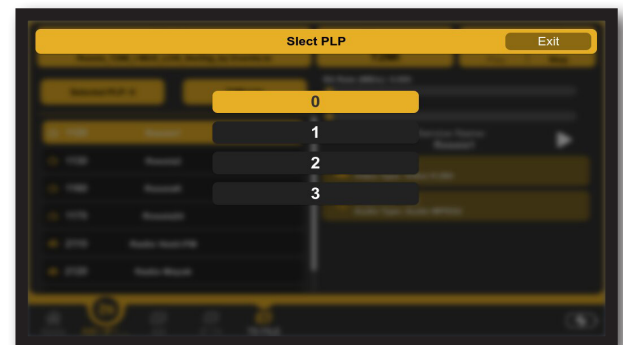
Touch the ASI/IP/FILE Icon



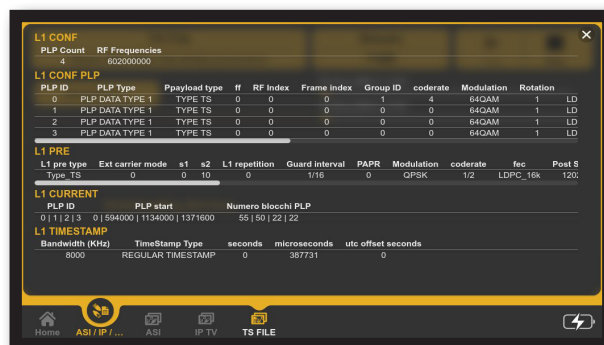
Touch TS FILE ICON and select the file desired analyzer



Example about T2MI MULTI PLP



Example of PLP Selection when receiving a T2MI Stream



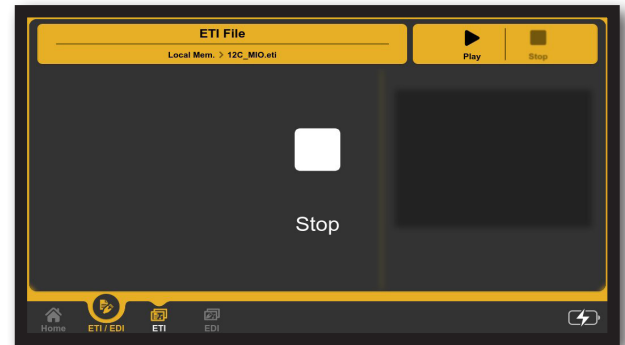
T2MI Informations



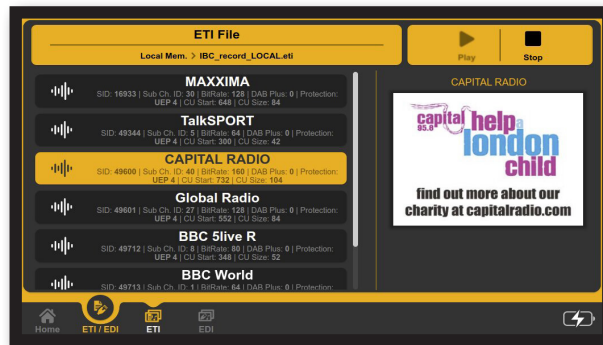
SWITCH TO ETI MODE



Touch the ETI/EDI Icon



Select the file required



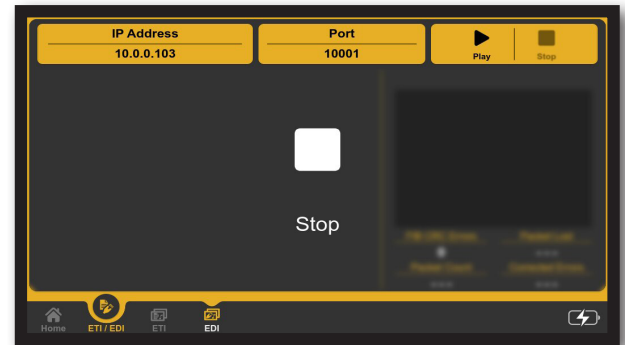
Main ETI screen



SWITCH TO EDI MODE



Touch the ETI/EDI Icon



Touch EDI ICON



Main EDI screen

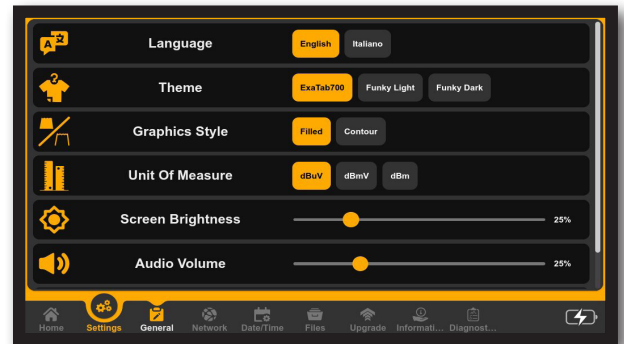


MEMORY MANAGEMENT

RECALL A FILE MEMORY



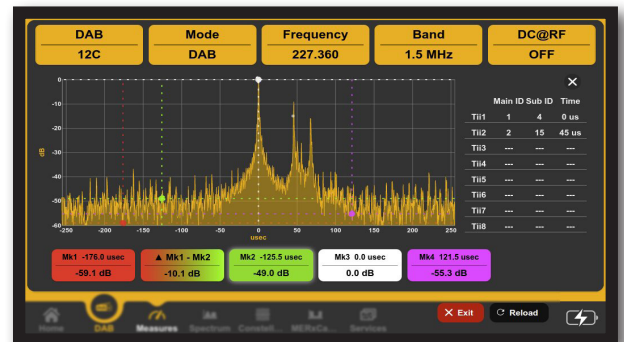
Touch the SETTINGS Icon to access to the GENERAL SETTINGS menu



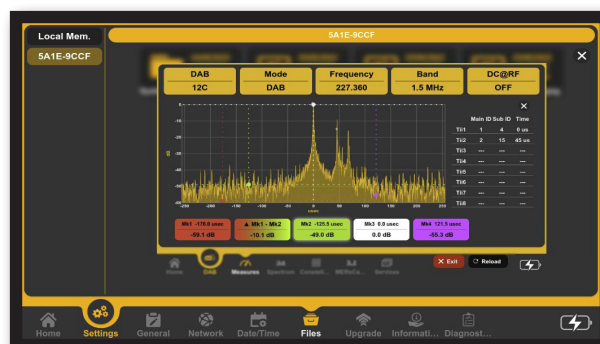
Touch FILES Icon to access at the local Memory



Touch FILES Icon to access to the local Memory folder desired



Example of opening a DATA-SHOOT file



Example of opening a SCREENSHOOT file

NOTES

Handwriting practice lines consisting of 25 horizontal rows. Each row is defined by two dashed lines, providing a guide for letter height and placement.

SUGGESTED VALUES

This table shows the suggested measurements at a user's socket for the main digital modulations.

SUGGESTED VALUE TO: SUBSCRIBER SOCKET, KUNDEN ANTENNEN DOSE, PRESA UTENTE, PRISE DE L'ABONNE', TOMA FINAL DE USUARIO, АБОНЕНТСКИЙ РАЗЪЕМ

DVB-S QPSK			DVB-S2 8PSK			DVB-T-H & GB COFDM			DVB-T2 & GB COFDM			ATSC (USA) 8VSB		
PARAM.	MIN	TYP.	PARAM.	MIN	TYP.	PARAM.	MIN	TYP.	PARAM.	MIN	TYP.	PARAM.	MIN	TYP.
AVG PWR	40 dB μ V	50 dB μ V	AVG PWR	40 dB μ V	50 dB μ V	AVG PWR	40 dB μ V	50 dB μ V	AVG PWR	40 dB μ V	50 dB μ V	AVG PWR	-15 dBmV	-5 dBmV
NOISE MARG.	3 dB	6 dB	NOISE MARG.	3 dB	6 dB	NOISE MARG.	6 dB	9 dB	NOISE MARG.	6 dB	9 dB	NOISE MARG.	2 dB	9 dB
aBER post Viterbi	2x10 ⁻⁶	2x10 ⁻⁸	PER 8PSK	<1x10 ⁻⁷	<1x10 ⁻⁸	aBER post Viterbi	2x10 ⁻⁶	2x10 ⁻⁸	PER	1x10 ⁻⁷	1x10 ⁻⁸	bBER pre Trellis	1x10 ⁻³	<1x10 ⁻⁶
MER QPSK 2/3 FEC	9 dB	12 dB	MER 8PSK 2/3 FEC	11 dB	14 dB	MER 64 QAM 2/3 FEC	25 dB	28 dB	MER 256 QAM 2/3 FEC	25 dB	28 dB	bBER post Trellis	3x10 ⁻⁶	<1x10 ⁻⁸
MER QPSK 3/4 FEC	10 dB	13 dB	MER 8PSK 3/4 FEC	12 dB	15 dB	MER 16 QAM 2/3 FEC	20 dB	23 dB	MER 256 QAM 3/4 FEC	26,5 dB	29,5 dB	aBER pre R.S.	3x10 ⁻⁶	<1x10 ⁻⁸
MER QPSK 5/6 FEC	11 dB	14 dB	MER 8PSK 5/6 FEC	13 dB	16 dB	MER QPSK 2/3 FEC	14 dB	17 dB	MER 256 QAM 5/6 FEC	28,5 dB	31,5 dB	MER	16 dB	23 dB



made in Italy



WARNINGS



RECHARGEABLE BATTERY

This device contains a built-in Li-PO (Lithium polimer) battery that can be recharged many times. The battery contains chemicals that might wear with time even if not used. Please dispose of batteries properly.

Do not take the battery pack apart or expose it to extreme temperatures (over 50°C). If the device has been exposed to very low or high temperatures let it rest at room temperature before use.

RECHARGING THE BATTERY

The Battery must be recharged at room temperature (about 20°C) with the device turned off. To avoid premature failure of the battery never leave the device with an empty battery for prolonged periods.

SERVICE NOTES and GUARANTEE REGULATIONS

(CEE and EXTRA CEE)

ROVER Laboratories. S.p.A. has a standard guarantee period of 12 months.

This is extended to 24 months for countries within the European Community, and in any case, in accordance with the laws and/or possible regulations applied in your country.

GUARANTEE REGULATIONS:

1. IMPORTANT: the guarantee is valid only upon the presentation of invoice or receipt to ROVER Laboratories S.p.A. The purchase date must be clearly indicated on the invoice/receipt.
2. The guarantee covers the replacement free of charge of parts only, when malfunctioning is solely due to manufacturing faults. The faults must be identified and defined by ROVER personnel only.
3. The guarantee is void if:
 - a. the equipment is tampered with or repaired by non-authorized personnel
 - b. damage is found, caused by the incorrect use of the equipment, without following the advice explained in the User's Guide accompanying the equipment.
 - c. damage is found caused by the use of the equipment in unsuitable working environments.
4. The following parts are not covered by the guarantee:
 - a. Parts subject to wear, such as aesthetic ones, keyboard, plastic chassis, etc.
 - b. Batteries: 3 months from the date of purchase, if original.
 - c. Bags and carrying cases, including shoulder straps.
5. The equipment can not be replaced and the guarantee is extended after the repair of a fault.

SERVICE NOTES AND PROCEDURES:

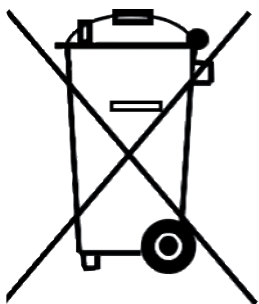
6. The equipment can only be repaired by the manufacturer or by an authorized ROVER Laboratories service center:
 - a. *Before returning the meter for repair, always contact the distributor where you purchased the unit or an authorized service center if present in your area to obtain the return procedure for your analyzer. If no authorised ROVER service centers are available in your area, please contact ROVER Laboratories S.p.A. directly at the following data:*
 - **wecare@roverinstruments.com**
 - **+39 030 990 6894** **Fax number**
 - b. *Important: please take note that non-authorised returns for repair to ROVER Laboratories S.p.A. will be rejected.*
 - c. *When returning the meter, always send it with the following documentation attached:*
 - *the fully-compiled FAULT IDENTIFICATION FORM*
 - *transport document*
 - *the eventual request for an estimate of repair costs*
 - d. *Please note that the request for an estimate of repair costs must be submitted upon return of the analyzer with a written note. If the repair cost estimate is not accepted, ROVER Laboratories reserves the right to charge the customer for the estimate costs analysis.*

7. Risks and costs for transport to ROVER Laboratories S.p.A. must be sustained by the buyer. After repair, if the equipment is under guarantee, ROVER Laboratories S.p.A. will pay for the transport returning the goods to the customer. If the instrument is not under guarantee, after repair, the equipment will be returned by courier service with the amount to be paid by the customer shown on the invoice.
8. The guarantee does not cover compensation for direct or indirect damages of any kind to people or goods caused by the use of the equipment and/or compensation caused by the suspension of use due to eventual repairs.
9. ROVER Laboratories S.p.A. is not responsible for eventual tampering and/or modifications that may cause the goods to no longer adhere to the European "CE" regulations, especially regarding EMC and safety.
10. ROVER Laboratories instruments is recognised and is fully compliant with DVB regulations and specifications (ETS 300 421-12/94) and is consequently marked with the DVB logo.

DISPOSAL OF ELECTRONIC EQUIPMENT

Disposal of electric/electronic equipment (applicable in all CEE countries and wherever separate waste collection system is applied).

This symbol on the packaging indicates that the product should not be considered as domestic waste. The product, at the moment of disposal, should be brought to a waste collection point with the proper facilities to manage electrical/electronic appliances.



Electric/electronic appliances, if not disposed of correctly, may have negative consequences on your health and environment.

Furthermore, a proper recycling procedure helps maintaining natural resources.

For more information about the correct disposal of this product, please refer to your local waste management offices or the shop where this product was bought.

METER MAINTENANCE

CLEANING THE METER

Cleaning the meter from dust and dirt is easy and helps maintaining it in optimal work conditions through the years. The cleaning procedure is simple and quick and requires only minor attention. Never use chemical aggressive products (diluent) and/or abrasive or rough clothes which may damage plastics and displays.

Always use a soft cloth, dampened with a simple water and alcohol solution or a de-greasing not abrasive liquid soap.

Keyboard and display should be gently cleaned. Rubbing the keyboard and/or the display(s) may seriously damage their functions.

MAINTENANCE AND CARE OF THE METER

This meter has been designed to withstand severe conditions of use. Even so, its life may be prolonged by respecting some simple and effective rules:

- The meter has not been designed to withstand high temperatures (over 60°C or 140° F). Those temperatures can be easily reached when the meter is left in a car, especially behind the windshield, or in the trunk. The LCD display and/or other details may easily be damaged by the extreme temperature.
- The internal battery may rapidly lose its efficiency if exposed to high or low temperatures. This will result in reduced autonomy of the meter when powered by internal battery.
- When recharging the internal battery, do allow a good air circulation around the meter and the adapter: do not cover it with clothes and do not recharge the battery when the meter is contained in its transport case
- The meter is not waterproof, even if it is protected against incidental water drops. In case of contact with water, electronic circuits may be damaged, allow the meter to dry thoroughly before trying to turn it on. Do not use hairdryer or other strong heating sources, but just leave the meter in quiet air. If possible, contact Rover Laboratories S.p.A. Technical Assistance.

FAULT IDENTIFICATION FORM (RMA)

To: ROVER INSTRUMENTS SERVICE DEPARTMENT • Fax: +39.030.9906894

E-mail: wecare@roverinstruments.com • Subject: FAULT Identification Form

PLEASE FILL IN ALL AREAS. CUSTOMER INFORMATION:

- Date Company:
- Name and surname of the holder * :
- Company address * :
City * : ZIP code * :
- Address delivery/pickup, a subsidiary of * :
City * : ZIP code * :
- VAT * :
- Tax code * :
- Telephone:
- E-mail * :
- Reference person:
- Bank support * :
- IBAN code * :

* Fields NOT required for official ROVER dealers (required for any end customer).

N.B. Please enter the TAX CODE even if it the same as your VAT number. In the case of sole proprietorship, please communicate the name and surname of the owner.

METER INFORMATION:

- Meter Model:
- Purchase date:
- Copy and invoice number (if under warranty):
- Bought from:
- Software Version (SW):(optional)
- Hardware Version (HW):(optional)
- Serial Number (S.NO):

NOTE: the information relevant to: model, serial number, firmware/hardware version are shown on the first display after you switch on (start up), or on the meter's information display in the configuration menu. If the meter does not switch on, you can find the meter's serial number on the label placed on the back of the meter.

DETAILED and ACCURATE DESCRIPTION OF FAULT:

Please describe and attach the fault, especially if OCCASIONAL, or if it occurs ONLY under certain conditions: for example "cool instrument" or "warm instrument", after no. minutes of operation, etc.

We suggest you provide photographs of the damaged parts or attach a movie that shows the problem on the display.

If descriptions of the fault are incomplete and we are unable to reproduce the fault in our laboratories, we may have to resend you the instrument unrepared.

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(*) add lines if more space is needed for your description.

TIMING OF REPAIRS: The applicable Repair times are 10 working days (barring unforeseen circumstances).

WARRANTY REPAIRS: Repairs are guaranteed for 3 months on the same intervention.

DO NOT SEND ROVER YOUR INSTRUMENT UNTIL YOU HAVE REQUESTED AND RECEIVED OUR "RMA" AND BAR CODE, WITH SHIPMENT INSTRUCTIONS, OTHERWISE THE INSTRUMENT WILL BE REJECTED ON ARRIVAL AT ROVER.

To receive information regarding the status of your authorization, write to: wecare@roverinstruments.com quoting your "RMA" number



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CUSTOMER SUPPORT

Wecare@roverinstruments.com

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UG-EXA-7-EN-V2

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