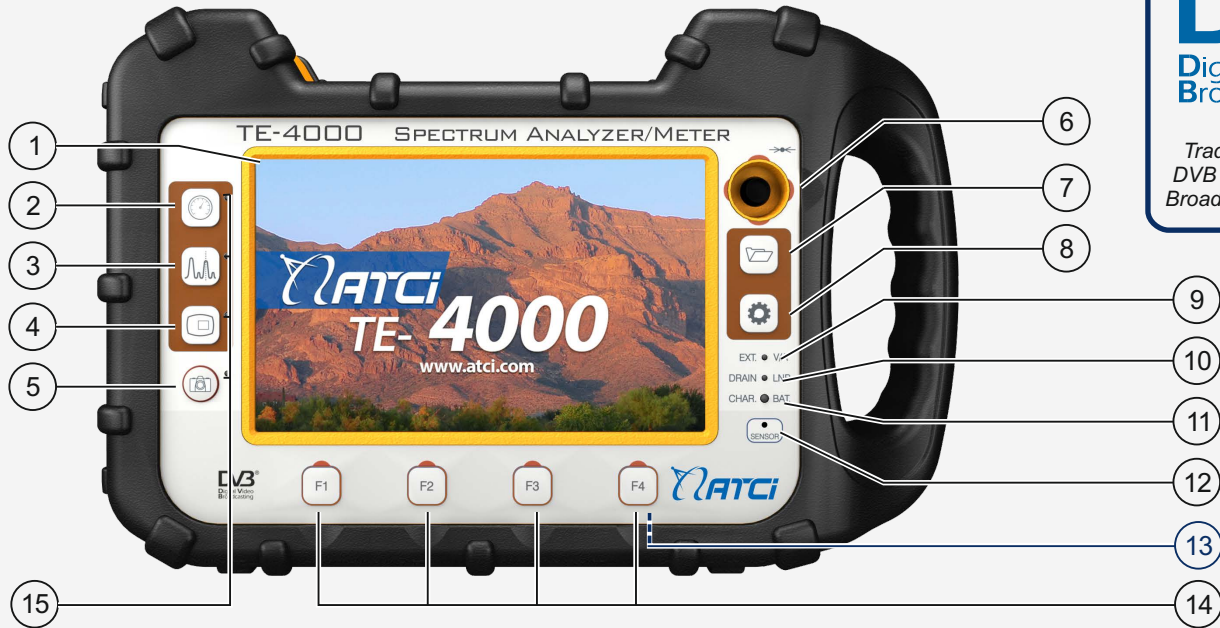


FRONT VIEW



Trademark of the
DVB - Digital Video
Broadcasting Project

- | | | |
|---|--|------------------------------------|
| ① Touch Screen | ⑥ Joystick | ⑪ Battery charging indicator |
| ② Measurement key | ⑦ Installations management key | ⑫ Light sensor |
| ③ Spectrum key | ⑧ Settings key | ⑬ Reset (press and hold 5s) |
| ④ TV key | ⑨ External Audio/Video Input indicator | ⑭ Softkeys |
| ⑤ Export (press >1s)
/ Reference (press <1s) | ⑩ External unit power Supply indicator | ⑮ Active Function indicator |

SCREEN ICONS REFERENCE

STATUS BAR

- Battery charging**
- Battery not charging, time left indicator**
- Battery not charging.** Yellow level indicates charge left
- Satellite band**
- Current voltage, 22 kHz signal and LNB power level**
- Terrestrial band**
- USB flash drive inserted**
- WIFI signal source**
- Current installation**
- Compressed installation**
- SatCR (SCD/EN50494) commands enabled**
- JESS (SCD2/EN50607) commands enabled**
- Joystick multi-function enabled.**
Two-letter code indicates the exact function:
 - FR** Frequency tuning
 - CH** Channel tuning
 - SP** SPAN change
 - MK** Marker moving
 - EC** Echo change/zoom
 - AP** Access Point change

* **Optical Option.** Refer annex on the User's Manual

- Task scheduled**
- IPTV signal source**
- 5 GHz RF Auxiliary Input***

SERVICE LIST SELECTOR

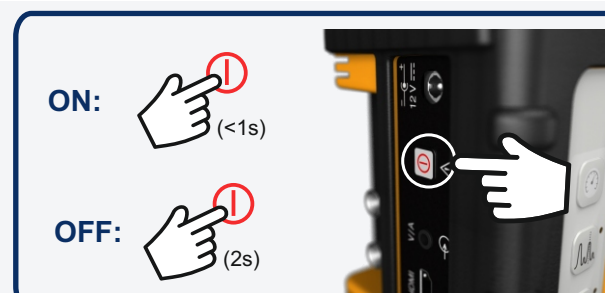
- DIGITAL TV service** **High Definition TV service**
- Digital radio** **Data** **Scrambled service**

DIALOG BOXES

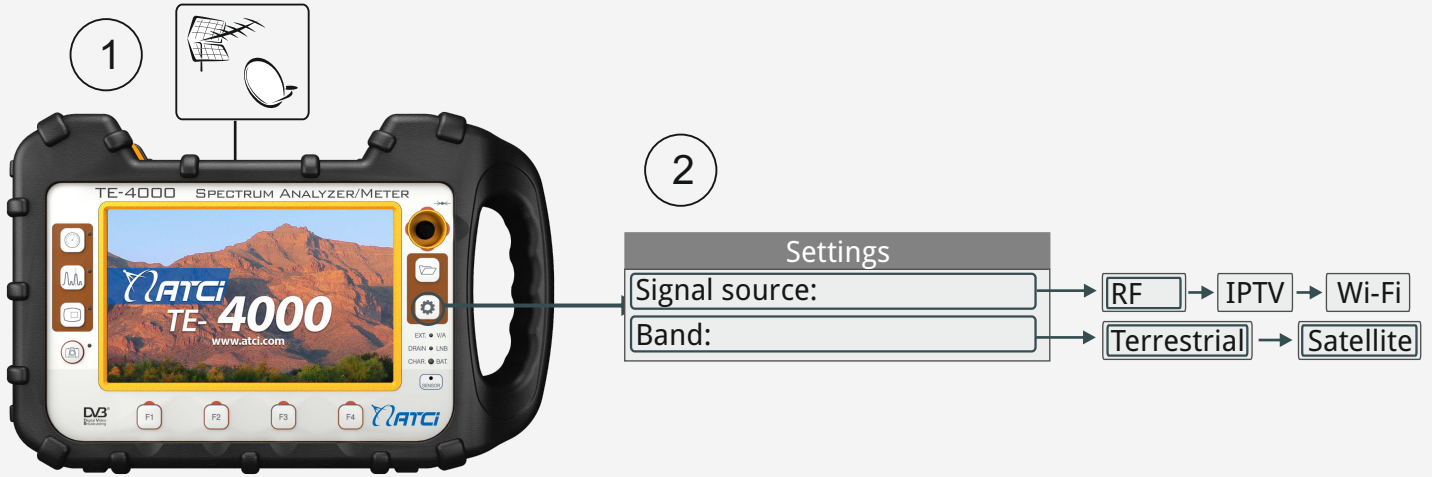
- Error message** **OK message**
- Question message** **Warning message**

VIDEO & AUDIO SETTINGS MENU

- TFT backlight brightness** **Volume**

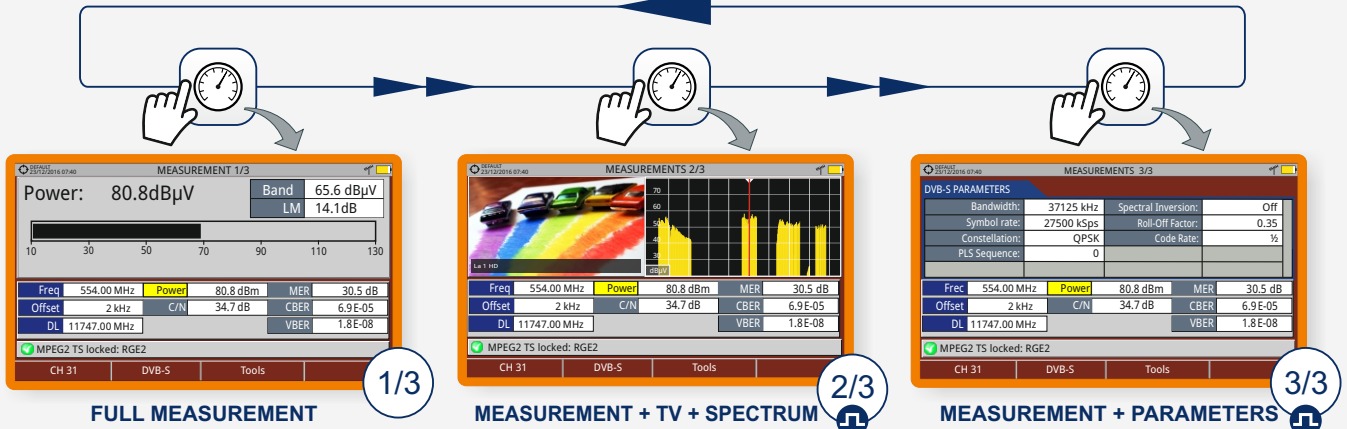


RF ► SETTINGS

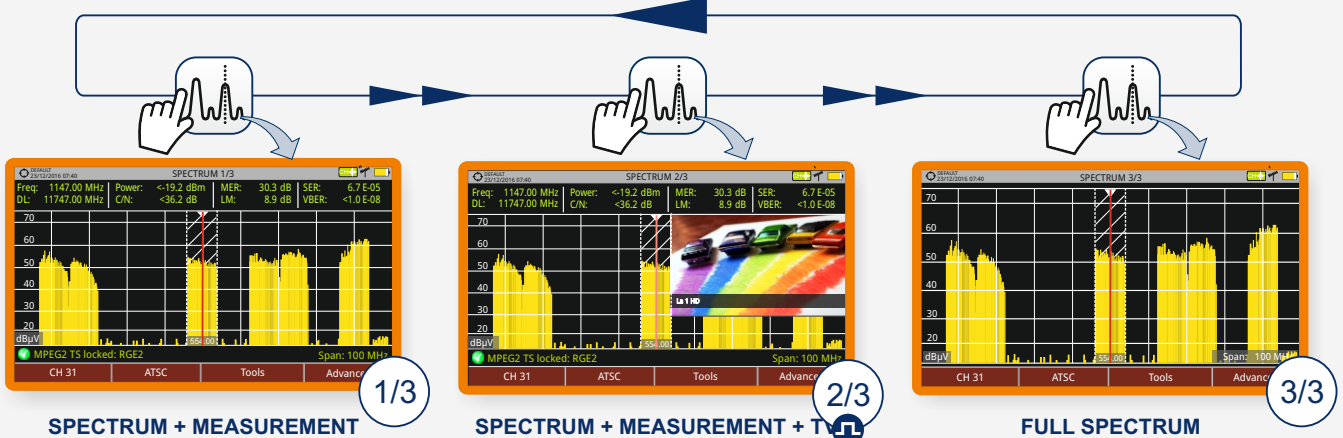


RF ► SCREENS

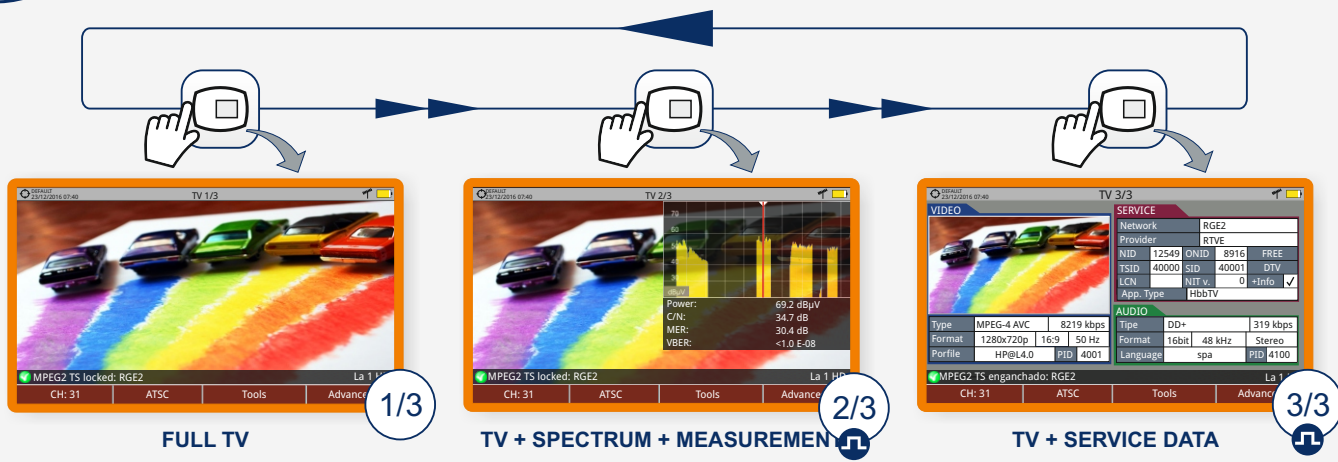
► MEASUREMENT



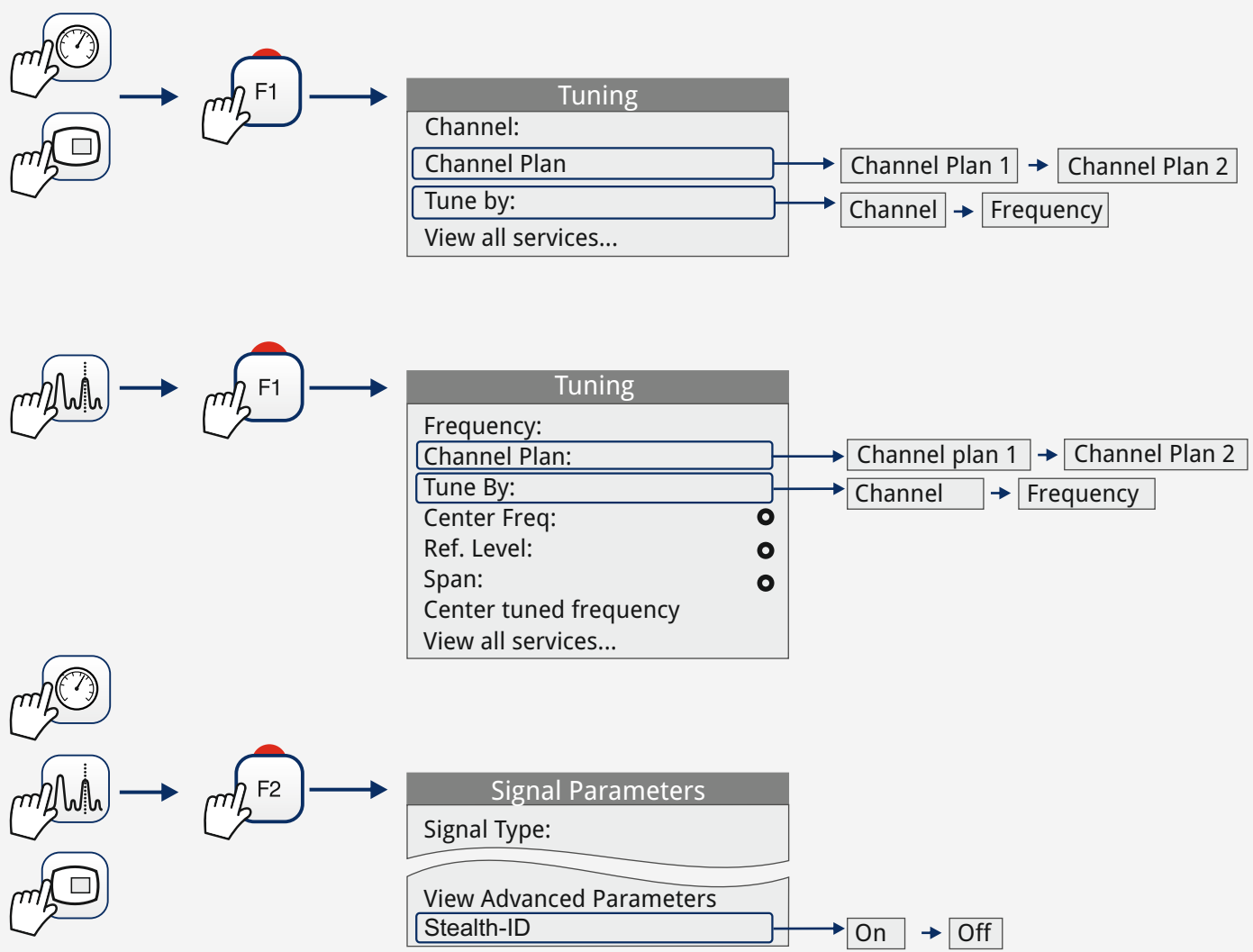
► SPECTRUM ANALYZER

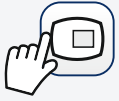


TV MODE



RF MENUS





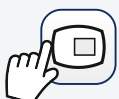
Tools

- Select Service...
- Signal Monitoring
- Explore Channel Plan
- Discover FM Stations
- Field Strength: Off On
- Datalogger New... Test & Go
- TS Analyzer
- TS Recording...
- Service Recording...
- Constellation
- Shoulder Attenuation
- LTE Ingress Test
- Attenuation Test
- Task Planner...
- Spectrogram
- Wi-Fi Configuration
- Analogue Input Antenna External



Advanced

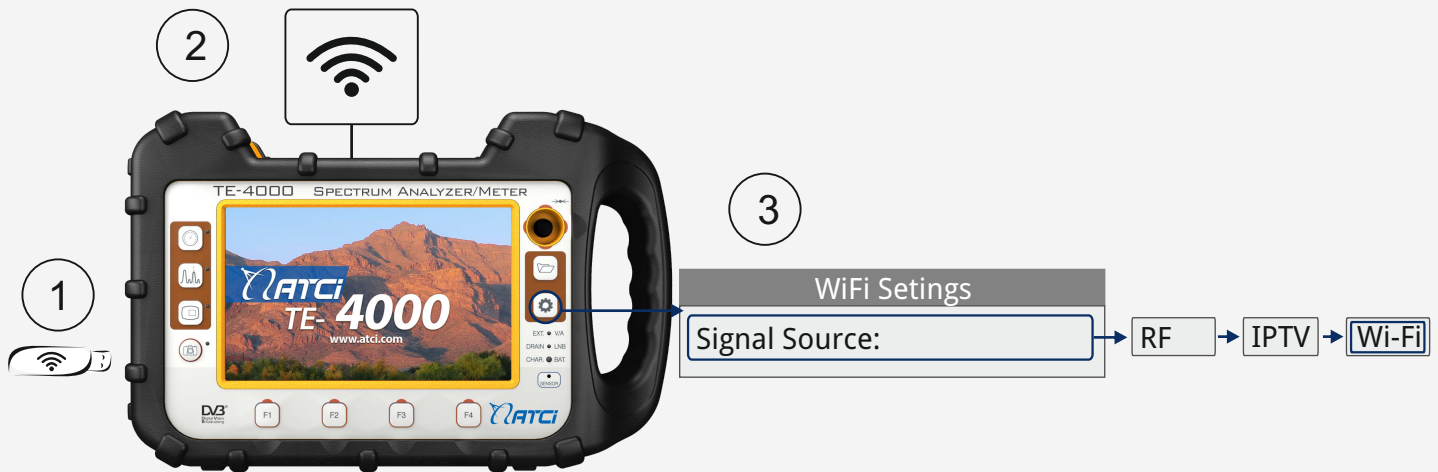
- Average:
- Spectrum Line: Outline Solid Transparency
- Tone Level: Off On
- Marker: Normal
- Marker Trace: Off Permanent Curtain
- Max.Hold: Off Permanent Curtain
- Min.Hold: Off On
- Persistence: PEAK RMS
- Detector Type:
- Resolution Bandwidth: 2 kHz → 10 kHz → 20 kHz → 40 kHz → 100 kHz
- Vertical Range: 10 dB/div → 5 dB/div → 2 dB/div → 1 dB/div
- Dashed BW: Off On
- Reference: Set Clear



Advanced

- Audio:
- Discovered URLs:
- TS Data:
- Aspect Ratio 4:3 16:9

WIFI ► SETTINGS



WIFI ► SCREENS

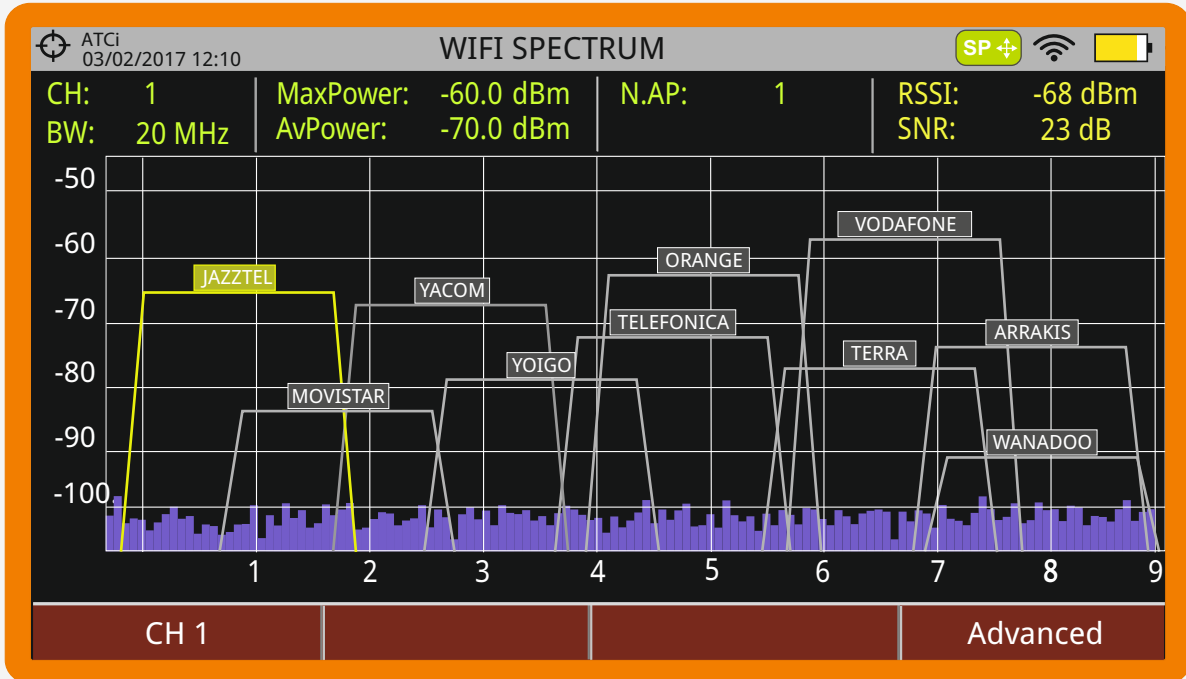
► SITE SURVEY

SSID	BSS	CH	RSSI(dBm)	Security	Device
JAZZTEL	01:23:45:67:89:ab	1	-86	WPA	Wireless Router...
MOVISTAR	aa:bb:cc:dd:ee:ff	2	-72	WPA2	WAP6969N
YACOM	98:76:54:32:10:fe	3	-84	WPE	
YOIGO	a1:b2:c3:d4:e5:f6	4	-74	None	
ORANGE	22:44:66:88:ab:cd	5	-70	WPA	
VODAFONE	13:57:92:46:80:31	6	-88	WPA	
ARRAKIS	ca:ac:ed:de:fb:bf	7	-78	WPA	
TELEFONICA	57:26:21:44:a6:89	8	-76	WPA	
TERRA	11:85:e5:74:0c:53	9	-80	WPA	
WANADOO	b4:07:32:41:a6:1c	10	-82	WPA	

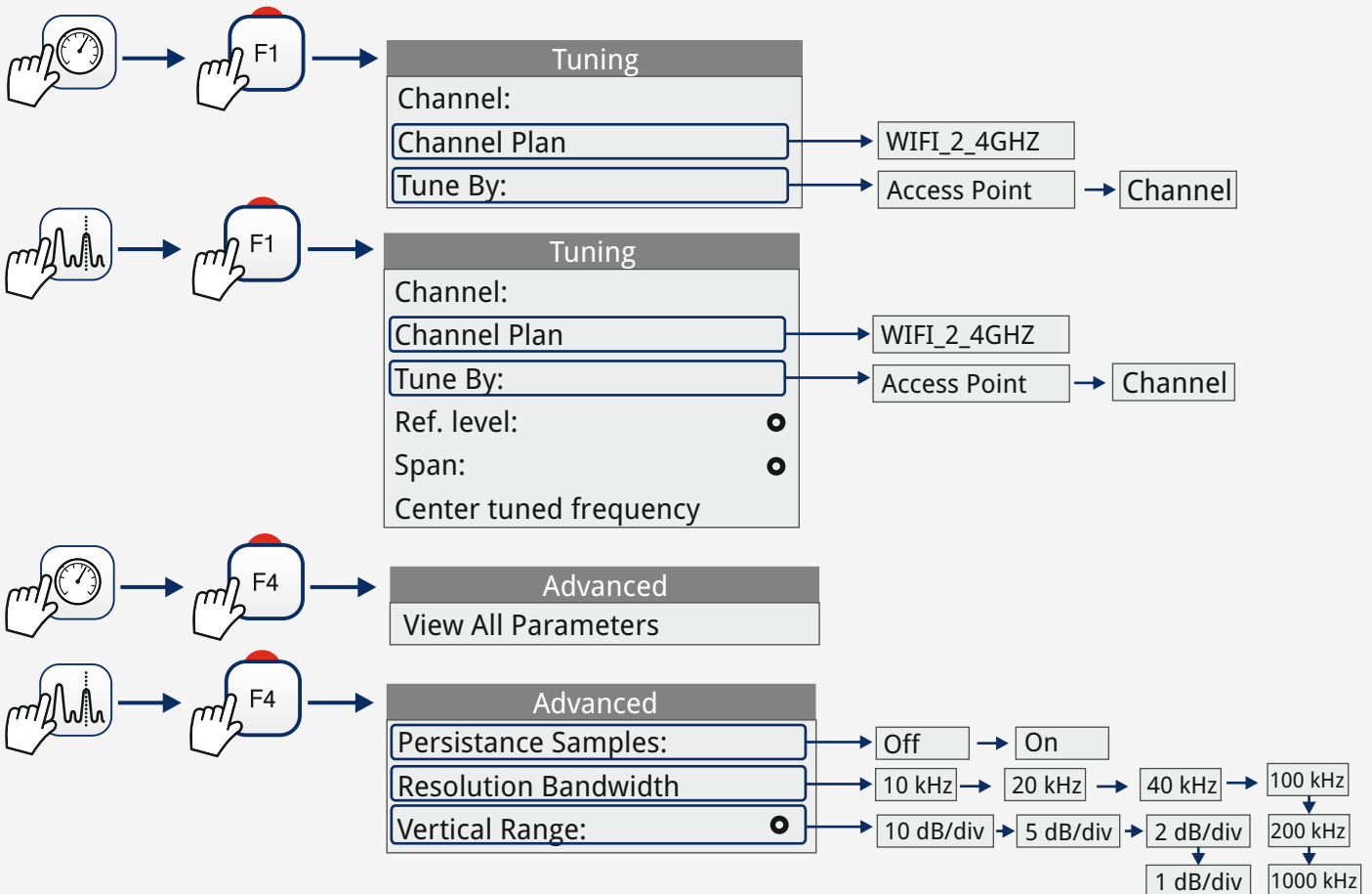
CH 1 | Advanced



WIFI SPECTRUM



WIFI MENUS



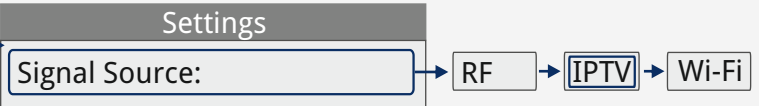
IPTV ip.tv ▶ SETTINGS

1

ip.tv



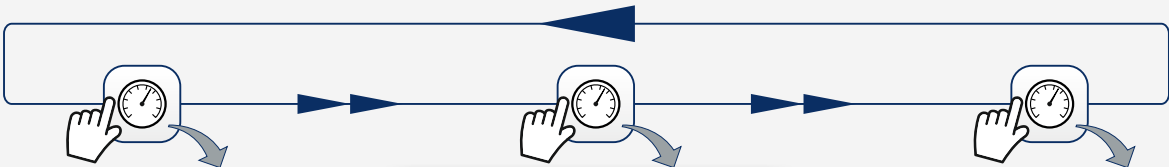
2



IPTV ip.tv ▶ SCREENS



▶ IP MEASUREMENTS



IP MEASUREMENTS 1/3

Buffer Usage:	0 %	Multicast Reception	Received Packets: 9729
TS Bitrate: TS:	4.90 Mbps	RTP Missing Packets:	0
		FEC Fixed Packets:	0
		Buffer Usage:	0 %
		Stable Reception:	No
		TS Bitrate:	4.90 Mbps
Delay Factor (MDI):	0.0 ms	Received Traffic	Network Bitrate: 19.73 Mbps
Media Loss Rate (MDI):	<1E-6 pkts/s	IP packets w/errors:	0
Resources Busy:	0 %	IPER:	0 %

Multicast: 239.192.0.1

1/3

IP MEASUREMENTS 2/3

	Multicast Reception	Received Packets: 41145	
	RTP Missing Packets:	0	
	FEC Fixed Packets:	0	
	Buffer Usage:	0 %	
	Stable Reception:	No	
	TS Bitrate:	5.66 Mbps	
Delay Factor (MDI):	239.192.0.1	Received Traffic	
Media Loss Rate (MDI):	1234	Network Bitrate: 19.54 Mbps	
Resources Busy:	0 %	IP packets w/errors:	0
	UDP	IPER:	0 %

Multicast: 239.192.0.1

2/3

IP MEASUREMENTS 3/3

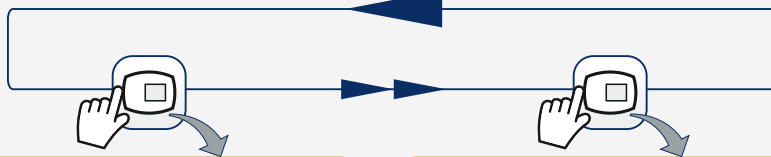
IP Parameters	Ethernet Speed: 1 Gbps	Multicast Reception	Received Packets: 48829
JGMP Version:	Off	RTP Missing Packets:	0
Multicast Address:	239.192.0.1	FEC Fixed Packets:	0
Protocol:	UDP	Buffer Usage:	0 %
FEC Status:	Inactive	Stable Reception:	No
FEC Rows(s):	-----	TS Bitrate:	3.89 Mbps
FEC Column(s):	-----	Received Traffic	Network Bitrate: 19.59 Mbps
TS Packets/IP Frame:	7	IP packets w/errors:	0
		IPER:	0 %

Multicast: 239.192.0.1

3/3



▶ IPTV



TV 1/3

Multicast: 239.192.0.1

1/3

TV 3/3

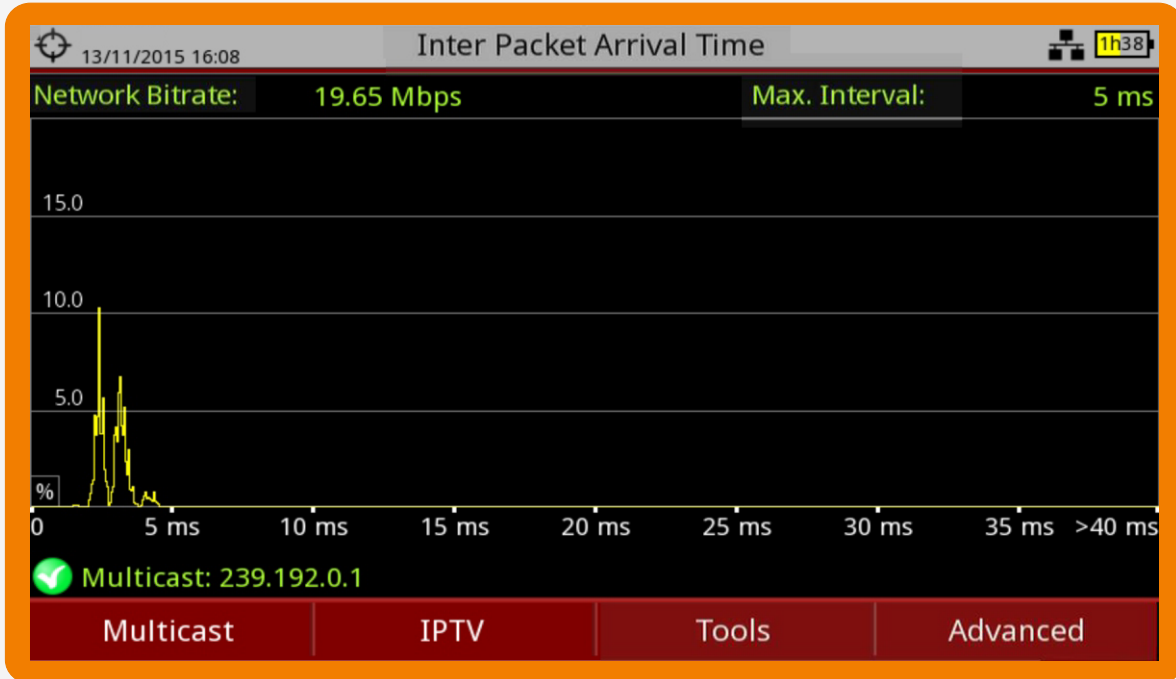
SERVICE	
Network:	RGE2
Provider:	RTVE
NID:	12549
ONID:	8216
LIBRE:	
TSID:	40000
SID:	40001
DTV:	
LCN:	Info
App. Type:	HbbTV
AUDIO	
Type:	DD+
Format:	1280x720p
Profile:	HP@L4.0
Format:	16bit
Idiom:	spa
Type:	DD+
Format:	16bit
Idiom:	spa

Multicast: 239.192.0.1

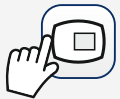
3/3



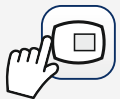
INTER PACKET ARRIVAL TIME



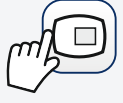
IPTV ip.tv ► MENUS



Multicast
Multicast Address
UDP Port:
Recent Multicast Addresses
Discovered Multicast Addresses
IGMPv3 Server Sources



IP Parameters



Tools

- Select Service...
- TS Analyzer
- TS Recording...
- Service Recording...
- View IP Network Log...
- Inter Packet Arrival Time
- Packet Rate
- IP Ethernet Frame Viewer
- Wi-Fi Configuration
- Ping and delay measurements..
- Task Planner...



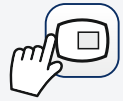
Advanced

- Reset IP measures



Advanced

- Span
- Resolution
- Restart analysis



Advanced

- Audio
- Discovered URLs
- TS Data



▶ PREFERENCES MENU



(1s)

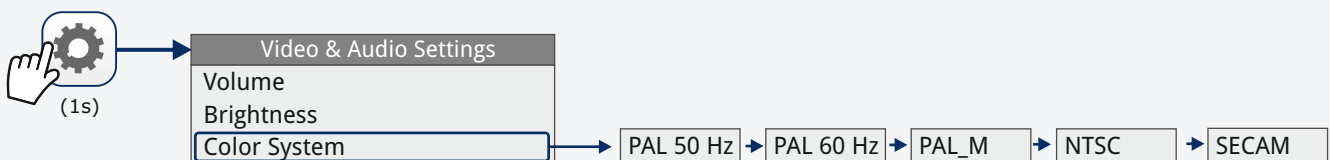
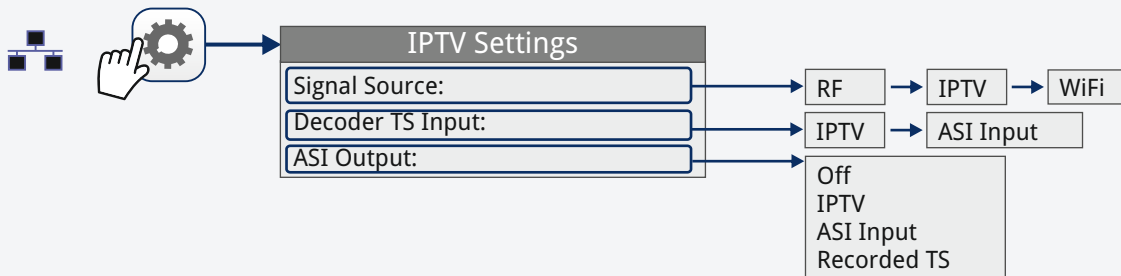
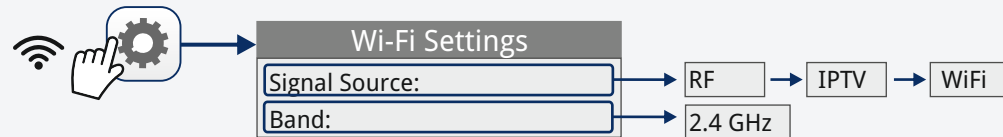
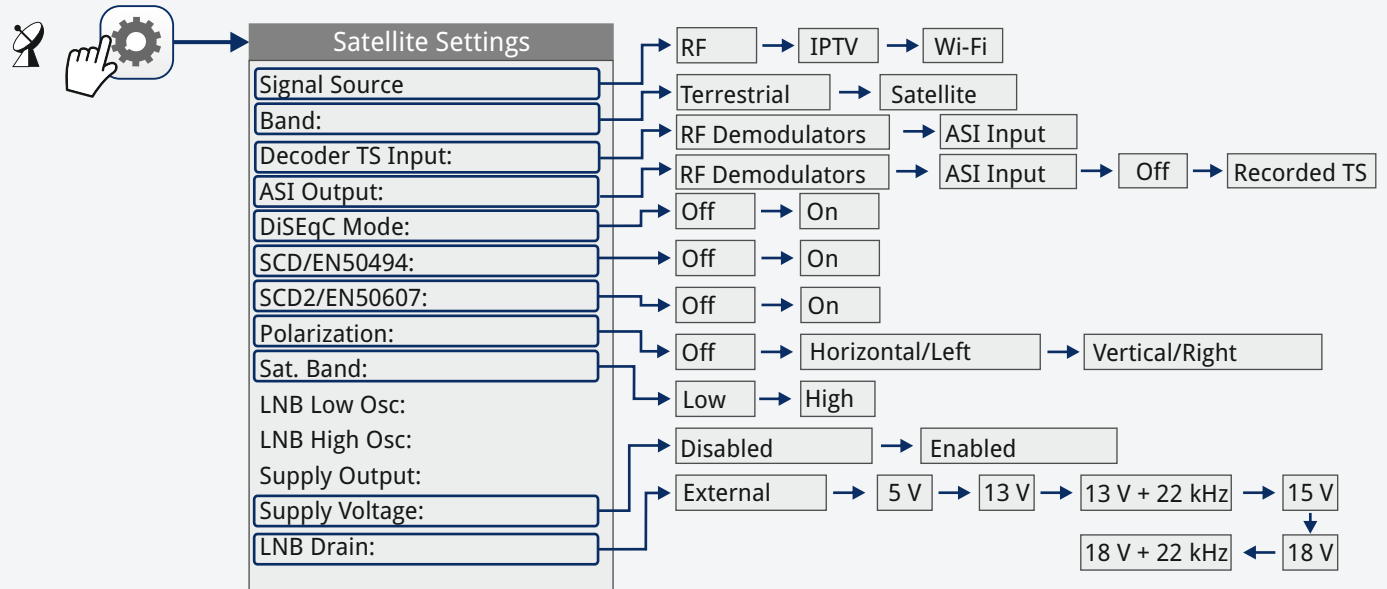
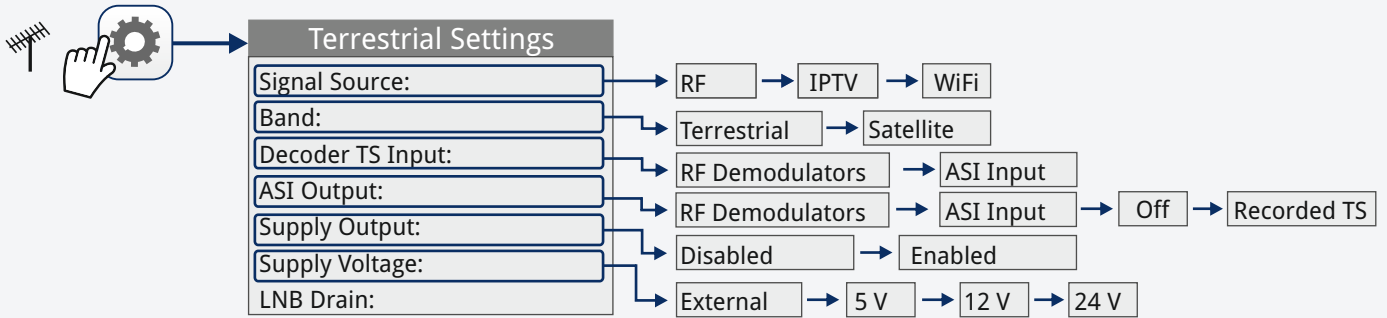
Preferences

- Equipment
- Appearance
- Time & Date
- Measures
- Tools
- Stealth-ID
- Security
- IPTV
- Network

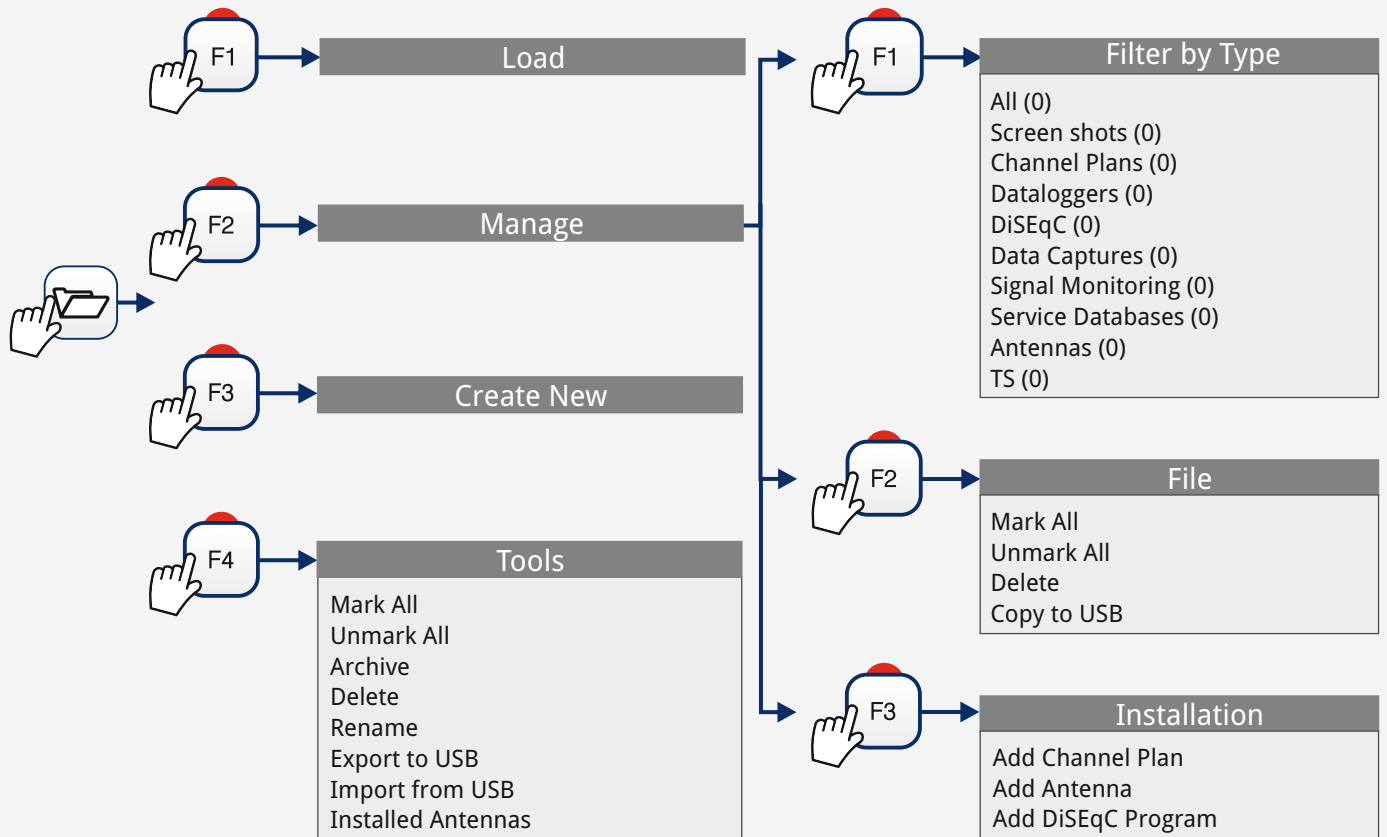
Provider Name	SN Release	Date	Free System Memory	Free Data Memory	User
Language	Power Off	Background	TFT Screen	Boot screen	
Skin	Brightness	Batt. time	Color System	Values Format	
Date: Time: Date Format: Time Zone:					
Terrestrial Units:		Sat. Band:	Min. TER. Power:	Min. FM. Level:	
Satellite Units:		Ref. Level:	Min. SAT. Power:	Inp. Impedance:	
Optical Units:		Terr. Downlink:	Min. TER. Level:		
Datalogger PSI:		Export button:	LTE Filter F. Max:		
Database services:		LTE Filter F. Min:	Center Freq:		
Analog Terrestrial	<input type="checkbox"/> ANALOG	<input type="checkbox"/> FM			
Digital Terrestrial	<input type="checkbox"/> DVB-C	<input type="checkbox"/> J83 AnnexB	<input type="checkbox"/> ATSC		
Digital Satellite	<input type="checkbox"/> DVB-S	<input type="checkbox"/> DVB-S2	<input type="checkbox"/> DSS		
PIN Code 1234					
MAC:	DHCP:	IP Address:	Mask:	Gateway:	IGMP Version
MAC:	DHCP:	IP Address:	Mask:	Gateway:	



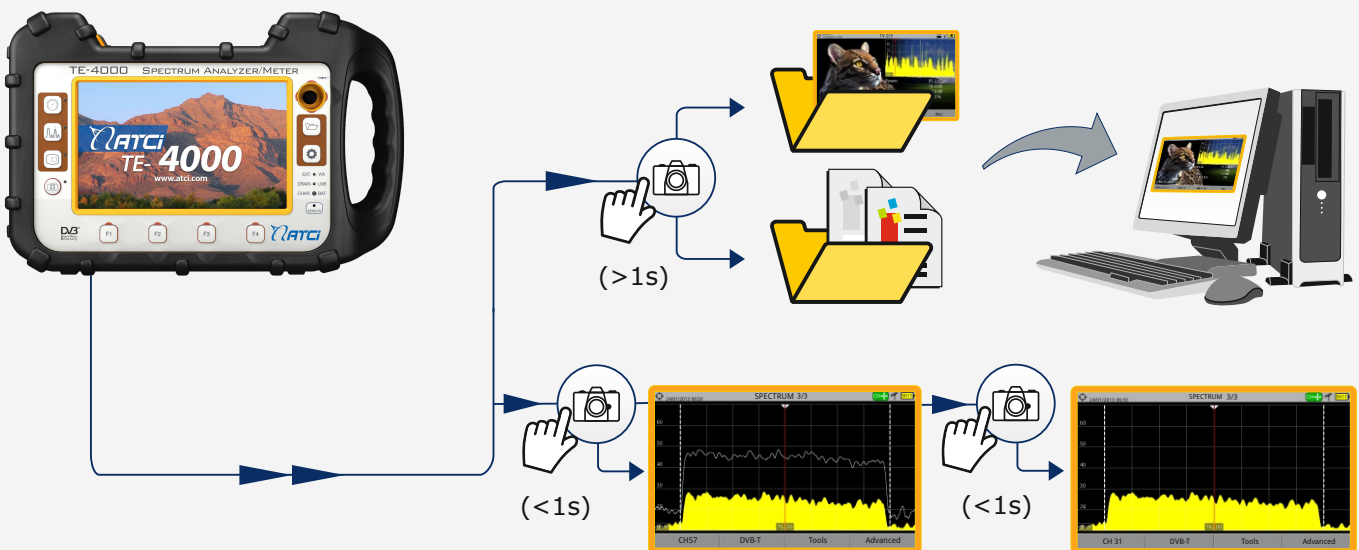
SETTINGS MENU



INSTALLATION MANAGEMENT



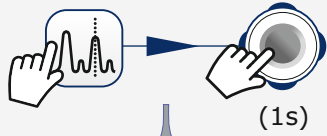
EXPORT* IMAGE / DATA / SPECTRUM



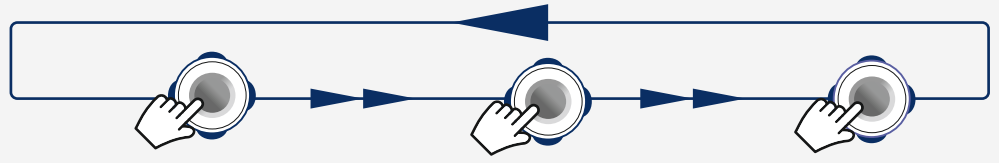
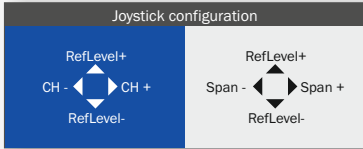
* Export settings in Preferences



▶ JOYSTICK



(1s)



AP
Access Point
change



FR
Frequency
tuning



CH
Channel
tuning

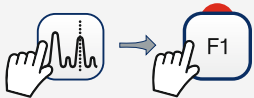


SP
SPAN
Change



MK
Marker moving
(Marker ON)

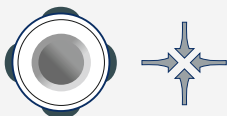
PARAMETER EDITION



Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.00 MHz ●



Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.00 MHz ●



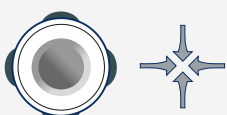
Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.00 MHz ●



Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.00 MHz ●

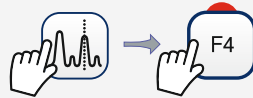


Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.10 MHz ●



Tuning	
Channel:	44
Channel Plan	CCIR ▶
Tune By:	Channel ▶
Center Freq:	658.10 MHz ●

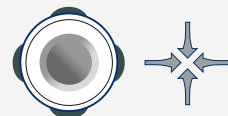
PARAMETER SELECTION



Advanced	
Average	0 ●
Spectrum Line	Outline ▾



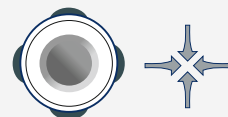
Advanced	
Average	0 ●
Spectrum Line	Outline ▾



Advanced	
Average	0 ●
Spectrum Line	Outline ▾
	Outline
	Solid
	Trans.



Advanced	
Average	0 ●
Spectrum Line	Outline ▾
	Outline
	Solid
	Trans.

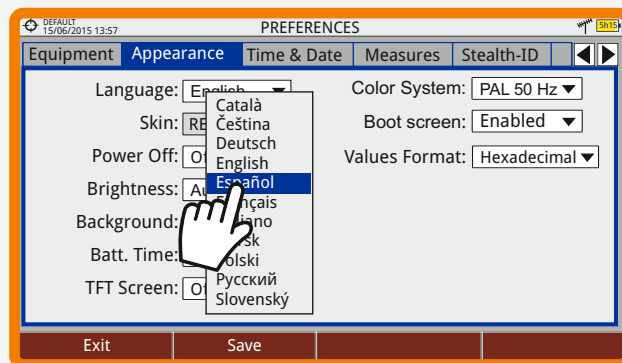
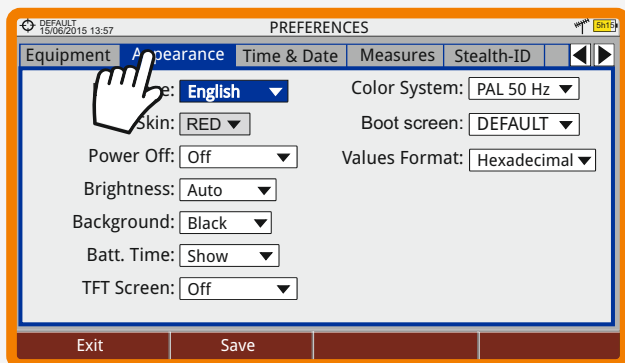


Advanced	
Average	0 ●
Spectrum Line	Solid ▾

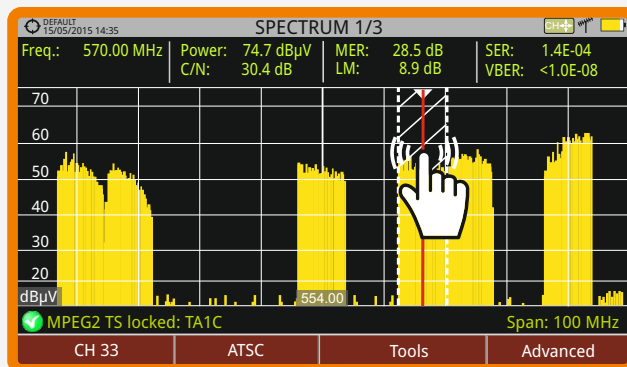
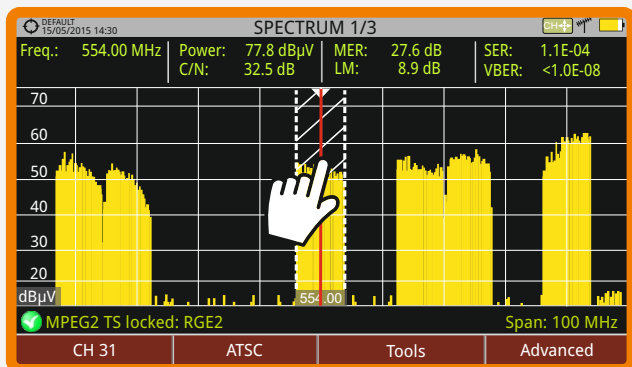


TOUCH SCREEN

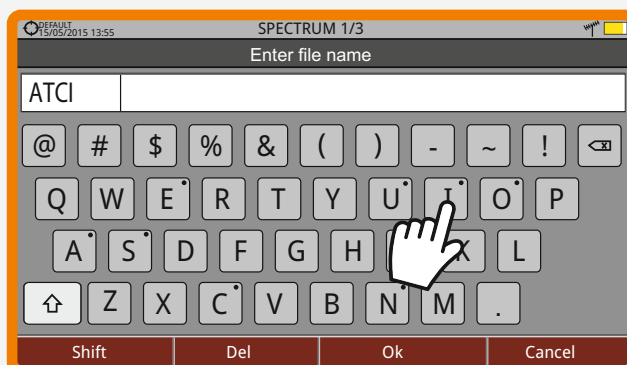
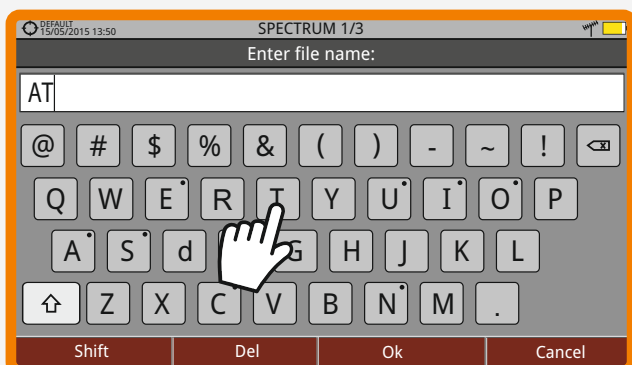
▶ MENU SELECTION



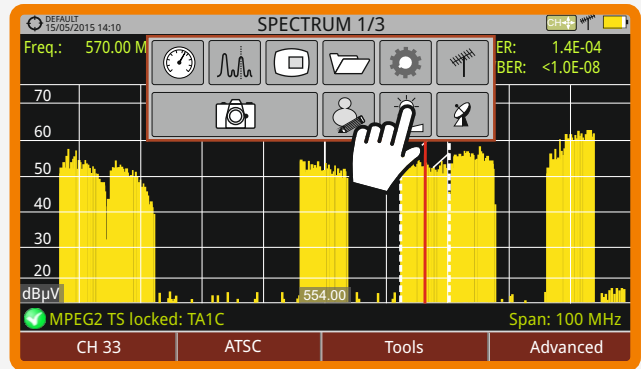
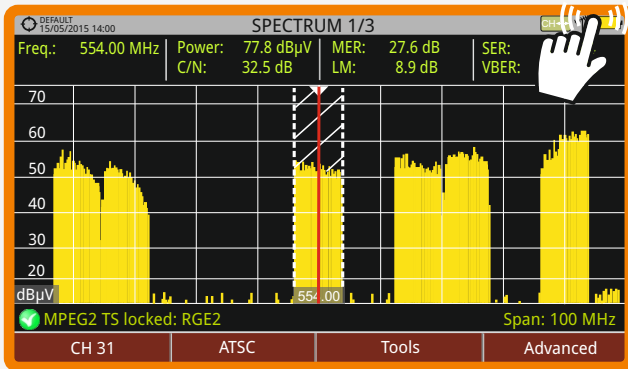
▶ FREQUENCY SELECTION



▶ VIRTUAL KEYBOARD WRITING



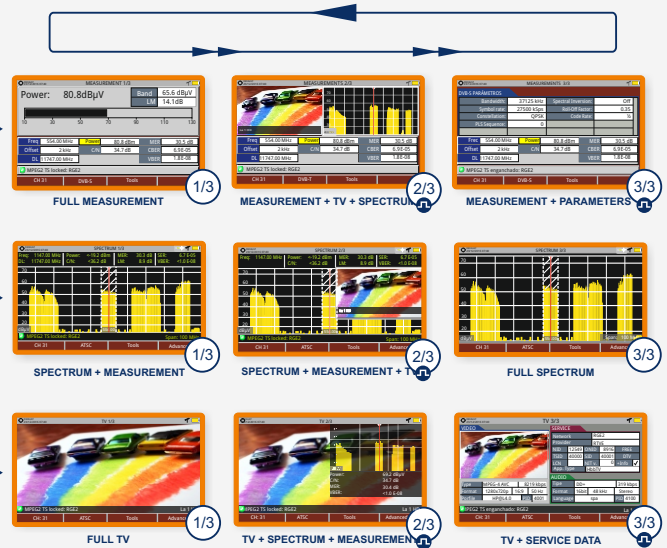
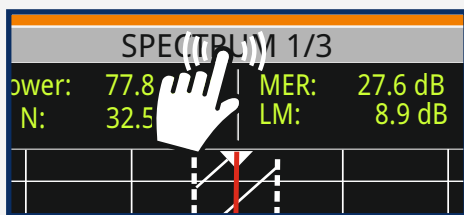
▶ TOOLBAR



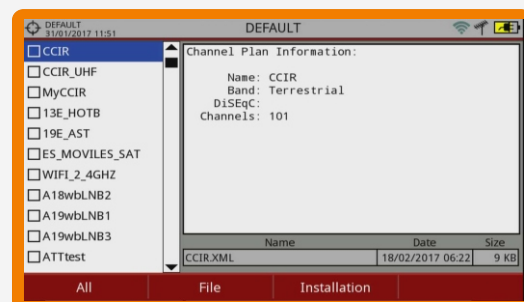
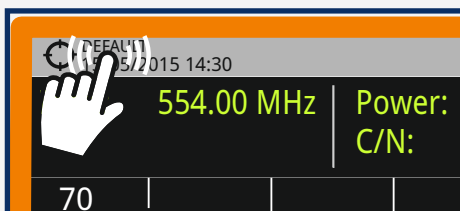
TOOLBAR ICONS

- Measurement Mode
- Settings
- Video & Audio Settings
- Spectrum Analyzer Mode
- Terrestrial Band
- Preferences
- TV Mode
- Satellite Band
- Screen Capture
- Installations Management

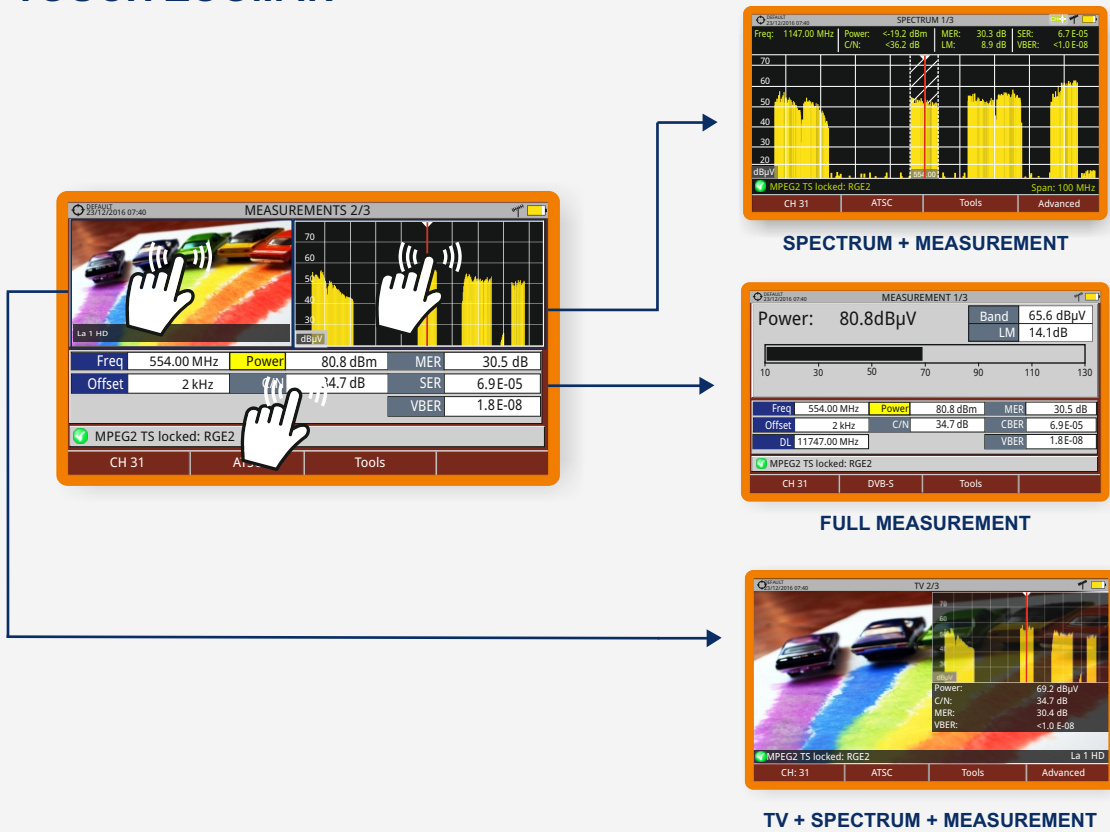
▶ MODE SCREENS



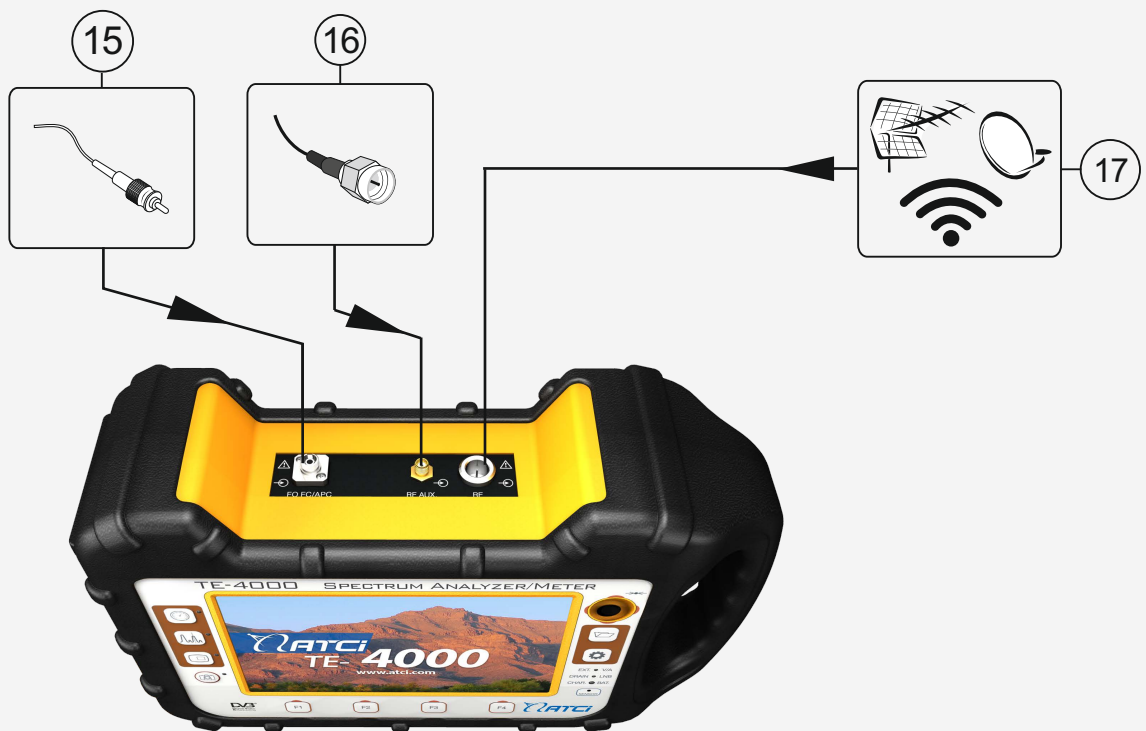
▶ INSTALLATIONS MANAGEMENT



▶ ONE-TOUCH ZOOM IN



TOP VIEW



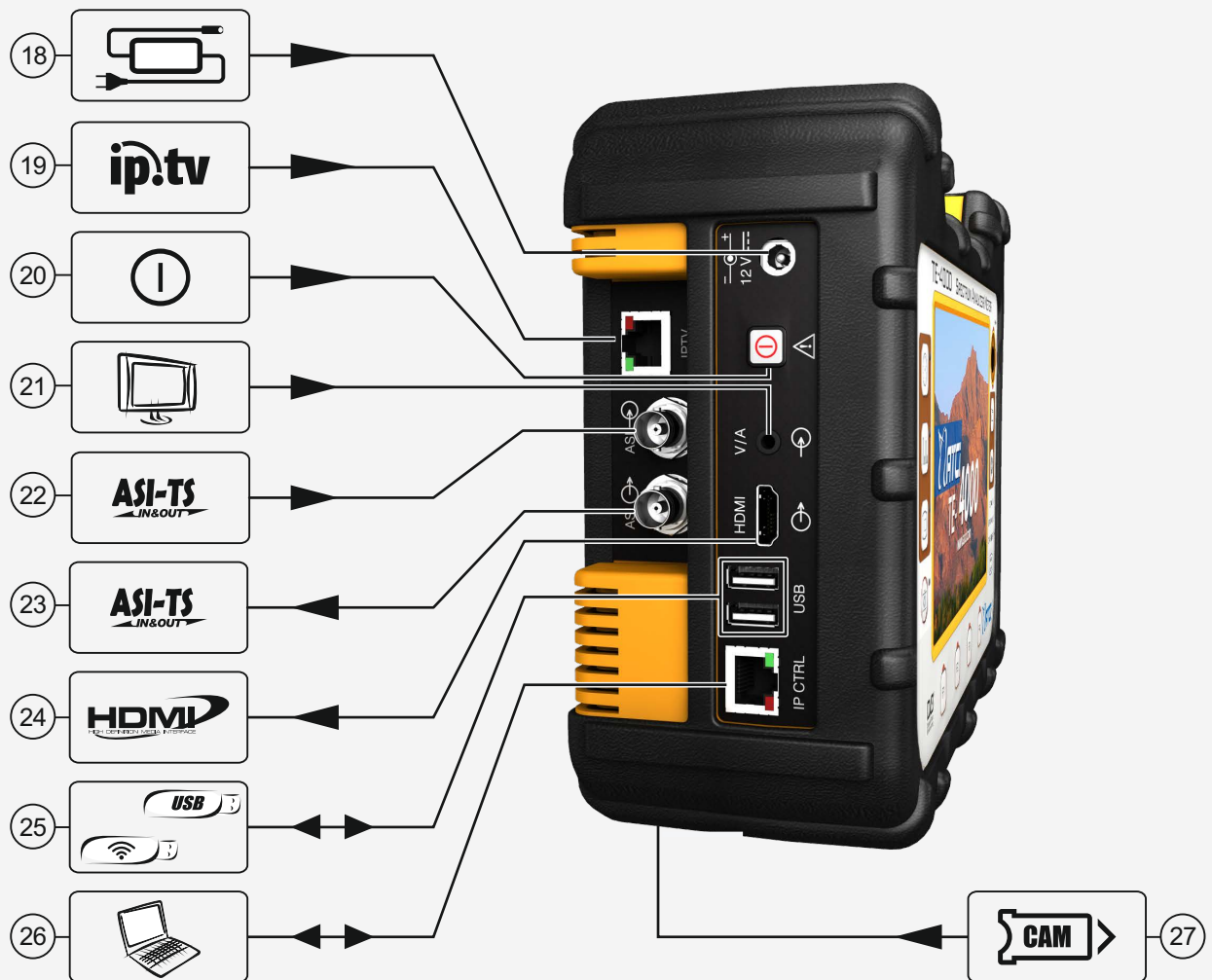
15 FC-APC connector
(optical signal input) *

16 SMA connector (RF aux. Input signal) *

17 RF input connector

* Optical Option. Refer annex on the User's manual.

SIDE VIEW



- 18 Power input connector
- 19 ETHERNET connector
- 20 ON/OFF button
- 21 Video/Audio input
- 22 ASI-TS input

- 23 ASI-TS output
- 24 HDMI output
- 25 USB connectors
- 26 ETHERNET connector for PC (NetUpdate)
- 27 Input connector for CAM module *

* not included



RESET

If the device crashes, press the ON/OFF button for 10 seconds. If the device does not respond then press the F4 key for 6 seconds and then release to reset (see user's manual for more information).