

TR 7837 MANUAL



1 OVERVIEW

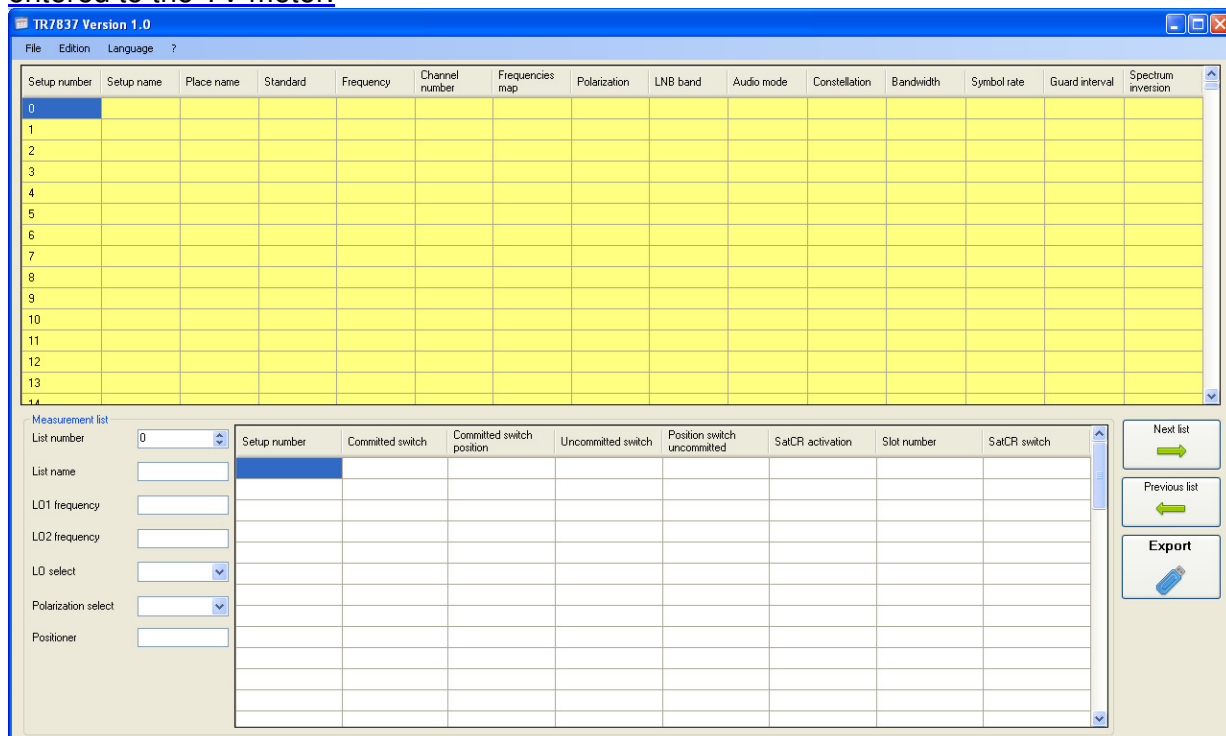
This software allows you to set more easily a TV meter

setup. The main page has three paragraphs:

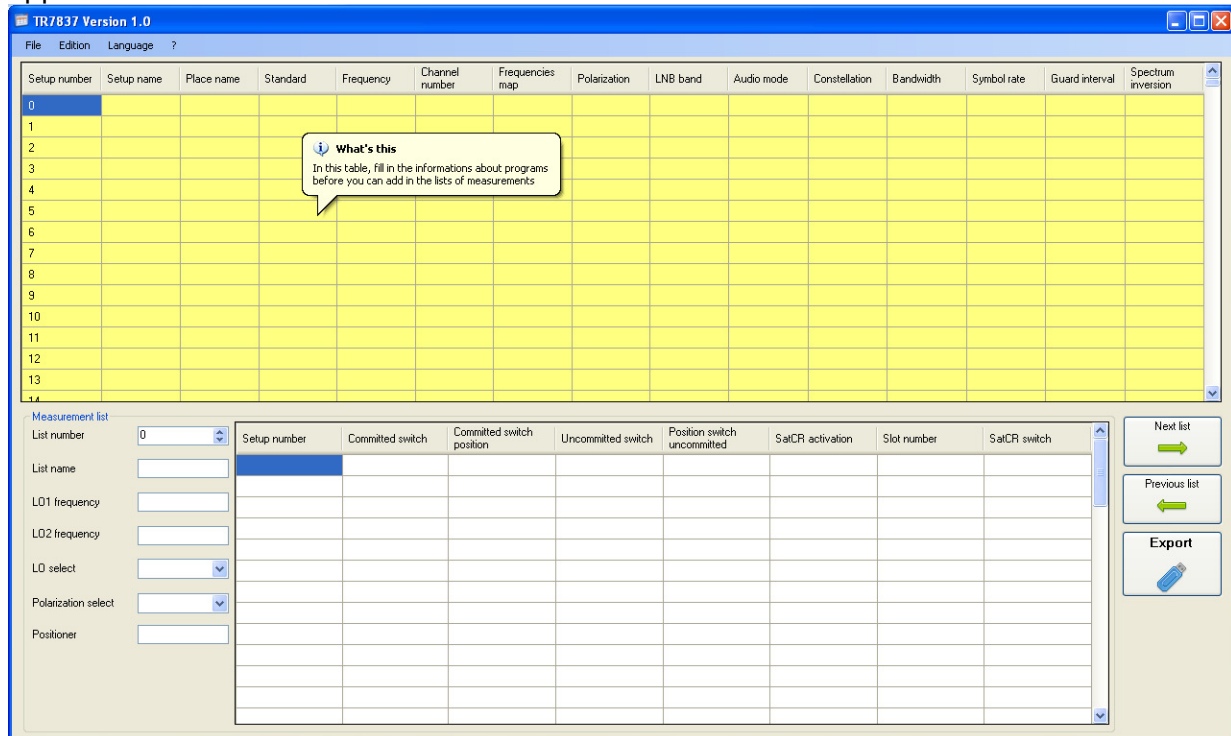
A menu which allows you to access the different functions ,

A first table, with a yellow background, has a list of setups

A second table, with a white background, has a list of measurements among the twenty possible measurements, on the left there's the parameters of each list, on the right 2 buttons allows you to browse among the lists and finally a third buttons allows you to export the values entered to the TV meter.



If the mouse pointer is paused on an active part of the page, information regarding the page will appear.



2 LIBRARY, LIST OF MEASUREMENTS

In order to make easier the recall of data in the field, the instrument uses a library of 1000 setups and 20 lists of measurements with 50 lines.

A setup corresponds to a terrestrial, cable or satellite broadcast, the parameters of a setup depend only on the broadcaster.

Example : in order to free a frequency band for the 4G (LTE) telephony the terrestrial frequencies had to be modified, the library has to be updated.

A list of measurements corresponds to a terrestrial, cable or satellite or mixed reception.

The parameters of a list depends on how the reception is performed and obviously on the setups which have to be received.

To create a list, you have to choose several setups previously entered in the library and then define the reception parameters.

Example : in the case of a two satellites ASTRA HOTBIRD reception you have to choose some ASTRA setups, some HOTBIRD setups, define the high and low frequencies of LNB, indicate the type of switch used and then assign in the table the ASTRA setups to a switch position and the HOT BIRD setups to another.

The same setup can be used in several lists of measurements.

A setup can use 2 satellite dishes : ASTRA 19.2 in DiSEqC position A and HOT BIRD 13 in DiSEqC position B.

Another can use 3 satellite dishes : ATLANTIC BIRD 3 in DiSEqC position A, ASTRA 1 in DiSEqC position B and HOT BIRD in DiSEqC position C.

The same setup can be used several times in the same list of measurements : ZDF SatCR slot 0, ZDF SatCR slot 1, ZDF SatCR slot 2, ZDF SatCR slot 3 the aim is to check quickly all the slots of a SatCR equipment.

If a parameter of a setup changes, for example a modification of rate or change from DVB-S to DVB-S2, only the setup inside the library should be updated, the lists of measurements which include this setup will be operational again.

3 LIBRARY OF SETUPS

A setup is made of :

- a setup name in characters
- a place name in 10 characters
- a standard
- a frequency
- a channel number in terrestrial or cable mode
- a frequency map in terrestrial or cable mode
- a vertical or horizontal polarization in satellite mode
- a low or high LNB band in satellite mode
- an analogical mono stereo or NICAM audio mode in terrestrial or cable mode
- a constellation type 64QAM 256QAM under DVB-C and MCNS
- a 5, 6, 7 or 8 MHz bandwidth under DVB-T and DVB-T2
- a symbol rate under DVB-C, MCNS, DVB-S, DVB-S2 or DSS
- a value for the guard interval under DVB-T and DVB-T2 the inversion or not of the spectrum under DVB-T

According to the terrestrial, cable or satellite band mode and to the standard, some parameters have no influence, they appear in grey in the table.

The place name may distinguish two distinct emitters, example TF1 Paris and TF1 Versailles.
The frequency map parameter associated with the setup allows inhabitants of neighboring countries to keep on using channel numbers.

4 LISTS OF MEASUREMENTS

A list of measurement is made of :

- a list name in 10 characters
- the low band frequency mixer of the LNB (LO1)
- the high band frequency mixer of the LNB (LO2)
- the selection mode low band / high band of the LNB
- the selection mode of the polarization
- the presence of the position number of the positioner (motorized satellite dish) 50 lines including each:
 - o a setup number corresponding to the setup list
 - o the presence and the functioning mode of the switch, committed type the position of the switch, committed type
 - o the presence and the functioning mode of the switch, uncommitted type the position of the switch, uncommitted type
 - o the presence of SatCR equipment the SatCR slot number
 - o the position of the SatCR switch

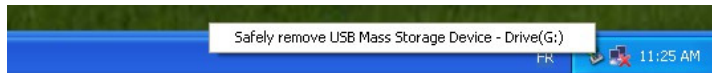
A few of these parameters are specific to the satellite band and have no influence in terrestrial and cable bands

5 EXPORTKEY

This key generates, on an USB memory stick, a setup file compatible with the TV meter. After entering all the data, click on this button



Finally eject the USB memory stick from the computer.



5.1 MCT 049 TV meters

Press the home key



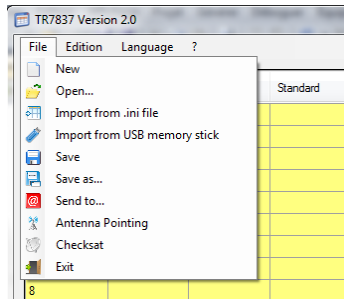
The Home page will appear:



Finally press the “Configuration import” key

6 MENUS

6.1 File Menu



New allows you to initialize all the parameters.

Open allows you to open a configuration file.

Import from .ini file allows you to import in the library the data from an .ini. file.

Import from USB memory stick allows you to import in the library, the lists and the Checksat, the data from the export of the TV meter configuration.

Save allows you to save the data previously entered in the current file.

Save as allows you to save the data previously entered in the desired file.

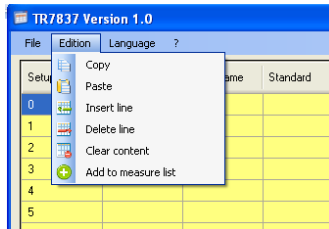
Send to allows you to attach the file to an email and to send it as attached document.

Antenna Pointing opens the table of the antenna pointing parameters.

Checksat opens the table of the checksat parameters.

Exit allows you to close the application.

6.1 Edition Menu



Copy allows you to copy in the clipboard the data selected with the mouse.

Paste allows you to paste the content of the clipboard to the location of the mouse cursor.

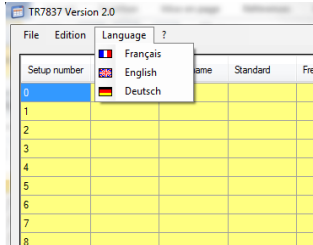
Insert line allows you to insert a line in the table above the cursor.

Delete line allows you to remove the line pointed by the cursor in the table.

Clear content allows you to erase the data selected with the mouse.

Add to measure list allows you to add the selected setup(s) from the library, to the place of the selected line of the list of measurements.

6.2 Language Menu



Français allows you to choose the French language for the software interface.

English allows you to choose then English language.

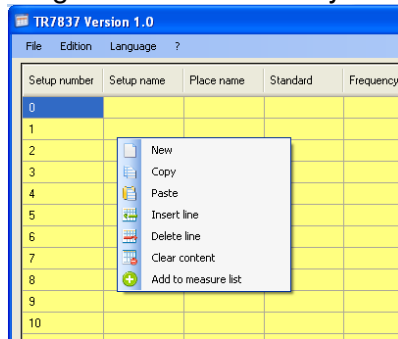
Deutsch allows you to choose then German language.

6.3 Help Menu ?

Allows you to display, like the F1 key, this help file.

6.4 Library popup menu

A right click on the library table will display the following menu :



New allows you to initialize the library setups only

Copy allows you to copy in the clipboard the selected data with the mouse.

Paste allows you to paste the content of the clipboard in the location of the cursor.

Insert line allows you to insert an empty line in the library above the cursor. **Delete line** allows you to delete the line pointed by the cursor in the library. **Clear content** allows you to clear the selected data with the mouse.

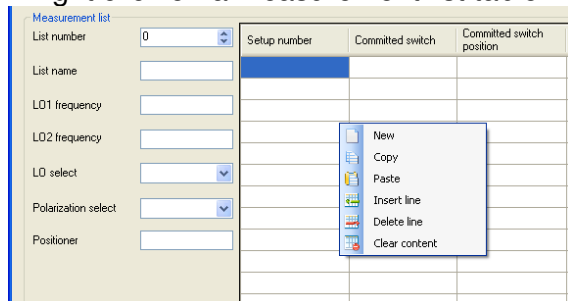
Add to measure list allows you to add the setup(s) selected from the library, to the place of the selected line of the list of measure.



When a line is inserted or deleted in the library, measure lists are updated automatically.

6.5 Measurement list popup menu

A right click on a measurement list table will display the following menu :



New allows you to initialize the setups of the measurement list only.

Copy allows you to copy in the clipboard the data selected with the mouse. **Paste** allows you to paste the content of the clipboard to the place of the cursor. **Insert line** allows you to insert an empty line in the list above the cursor.

Delete line allows you to delete the line pointed by the cursor in the library.

Clear content allows you to clear the data selected with the mouse.

7 SETUP LIBRARY TABLE

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

This table allows you to indicate the parameters of each setup Give a name to the setup

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1													
1														
2														

And a name to the place

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE												
1														
2														

Choose a standard from the list

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE												
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

When the standard is selected the unnecessary parameters will appear in grey:

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H											
1														
2														

Now two choices are possible : frequencies map or channel number capture Frequency capture in MHz

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610										
1														
2														

Or channel number capture

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H		38									
1														
2														

Then choose the frequencies map from the list

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	2,250	38									
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														

The frequency is updated automatically according to the standard, channel number and frequencies map.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France								
1														
2														

Choose the bandwidth from the list

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France								
1														
2														
3														
4														
5														

Then the value of the guard interval

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France					8 MHz			
1														
2														
3														
4														
5														

Finally the spectrum inversion or not

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France					8 MHz		auto	
1														
2														
3														

If several setups have common features the copy/paste function can be interesting, select the cells to copy, right click with the mouse, choose Copy.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France					8 MHz		auto	
1														
2														
3														
4														
5														
6														
7														
8														

Move the cursor of the mouse on the desired cell, choose Paste

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 (E38)	France					8 MHz		auto	
1														
2														
3														
4														
5														
6														
7														
8														
9														

Result

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610.000	38 (E38)	France					8 MHz		auto	
1	TNT-R1	ST-ETIENNE	DVB-T/H			France					8 MHz		auto	
2														
3														

Modify and add the missing values

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610.000	38 (E38)	France					8 MHz		auto	-
1	TNT-R2	ST-ETIENNE	DVB-T/H	658.000	44 (E44)	France					8 MHz		auto	-
2														
3														

Repeat the operation as many time as you want

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610.000	38 (E38)	France					8 MHz		auto	-
1	TNT-R2	ST-ETIENNE	DVB-T/H	658.000	44 (E44)	France					8 MHz		auto	-
2	TNT-R3	ST-ETIENNE	DVB-T/H	778.000	59 (E59)	France					8 MHz		auto	-
3	TNT-R4	ST-ETIENNE	DVB-T/H	626.000	40 (E40)	France					8 MHz		auto	-
4	TNT-HD	ST-ETIENNE	DVB-T/H	698.000	49 (E49)	France					8 MHz		auto	-
5	TNT-R6	ST-ETIENNE	DVB-T/H	674.000	46 (E46)	France					8 MHz		auto	-
6														
7														

Now it is possible to create another place using the previous one using copy/paste/modify. Copy

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610.000	38 (E38)	France					8 MHz		auto	-
1	TNT-R2	ST-ETIENNE	DVB-T/H	658.000	44 (E44)	France					8 MHz		auto	-
2	TNT-R3	ST-ETIENNE	DVB-T/H	778.000	59 (E59)	France					8 MHz		auto	-
3	TNT-R4	ST-ETIENNE	DVB-T/H	626.000	40 (E40)	France					8 MHz		auto	-
4	TNT-HD	ST-ETIENNE	DVB-T/H	698.000	49 (E49)	France					8 MHz		auto	-
5	TNT-R6	ST-ETIENNE	DVB-T/H	674.000	46 (E46)	France					8 MHz		auto	-
6														
7														
8														
9														
10														
11														
12														
13														

Paste

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 [E38]	France					8 MHz		auto	-
1	TNT-R2	ST-ETIENNE	DVB-T/H	658,000	44 [E44]	France					8 MHz		auto	-
2	TNT-R3	ST-ETIENNE	DVB-T/H	778,000	59 [E59]	France					8 MHz		auto	-
3	TNT-R4	ST-ETIENNE	DVB-T/H	626,000	40 [E40]	France					8 MHz		auto	-
4	TNT-HD	ST-ETIENNE	DVB-T/H	698,000	49 [E49]	France					8 MHz		auto	-
5	TNT-R6	ST-ETIENNE	DVB-T/H	674,000	46 [E46]	France					8 MHz		auto	-
6														
7	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 [E38]	France					8 MHz		auto	-
8	TNT-R2	ST-ETIENNE	DVB-T/H	658,000	44 [E44]	France					8 MHz		auto	-
9	TNT-R3	ST-ETIENNE	DVB-T/H	778,000	59 [E59]	France					8 MHz		auto	-
10	TNT-R4	ST-ETIENNE	DVB-T/H	626,000	40 [E40]	France					8 MHz		auto	-
11	TNT-HD	ST-ETIENNE	DVB-T/H	698,000	49 [E49]	France					8 MHz		auto	-
12	TNT-R6	ST-ETIENNE	DVB-T/H	674,000	46 [E46]	France					8 MHz		auto	-
13														

Modify

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	TNT-R1	ST-ETIENNE	DVB-T/H	610,000	38 [E38]	France					8 MHz		auto	-
1	TNT-R2	ST-ETIENNE	DVB-T/H	658,000	44 [E44]	France					8 MHz		auto	-
2	TNT-R3	ST-ETIENNE	DVB-T/H	778,000	59 [E59]	France					8 MHz		auto	-
3	TNT-R4	ST-ETIENNE	DVB-T/H	626,000	40 [E40]	France					8 MHz		auto	-
4	TNT-HD	ST-ETIENNE	DVB-T/H	698,000	49 [E49]	France					8 MHz		auto	-
5	TNT-R6	ST-ETIENNE	DVB-T/H	674,000	46 [E46]	France					8 MHz		auto	-
6														
7	TNT-R1	PILAT	DVB-T/H	650,000	43 [E43]	France					8 MHz		auto	-
8	TNT-R2	PILAT	DVB-T/H	658,000	44 [E44]	France					8 MHz		auto	-
9	TNT-R3	PILAT	DVB-T/H	778,000	59 [E59]	France					8 MHz		auto	-
10	TNT-R4	PILAT	DVB-T/H	626,000	40 [E40]	France					8 MHz		auto	-
11	TNT-HD	PILAT	DVB-T/H	698,000	49 [E49]	France					8 MHz		auto	-
12	TNT-R6	PILAT	DVB-T/H	674,000	46 [E46]	France					8 MHz		auto	-
13														

Only the place name and the R1 multiplex had to be modified for this example. For the cable setup follow the same method.

For the satellite setups it is easier to modify from [Import from an .ini. file](#) but this method is also possible.

Enter the frequency of the two 9750 and 10600 MHz mixers in the case of a universal LNB.

Measurement list

List number:

List name:

LO1 frequency:


LO2 frequency:


LO select:


Polarization select:

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch

Next list 

Previous list 

Export 

Choose the band selections and the 22 kHz and 13/18 volts polarization, for a universal LNB.

Measurement list

List number:

List name:

LO1 frequency:


LO2 frequency:


LO select:


Polarization select:

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch

Next list 

Previous list 

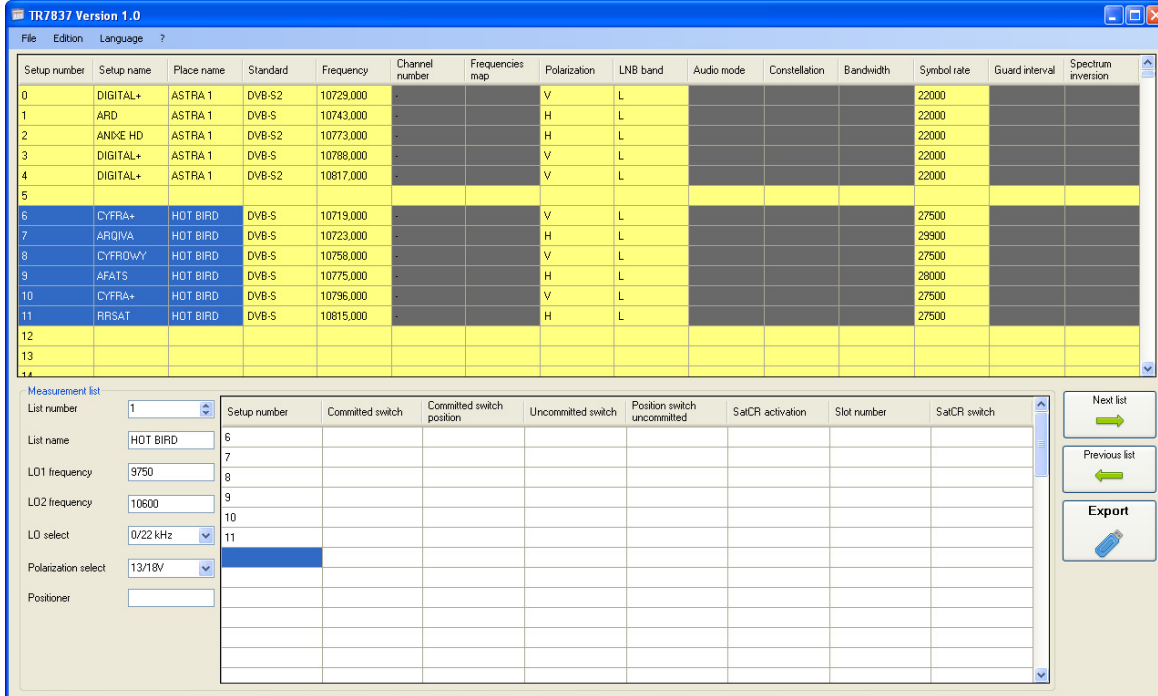
Export 

You just have to add setups in the measurement list from the library

Select the first six setups using the mouse, click right to choose Add to the measure list.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000	-		V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000	-		H	L				22000		
2	ANKE HD	ASTRA 1	DVB-S2	10773.000	-		H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10798.000	-		V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10813.000	-		V	L				22000		
5														
6	CYFRA+	HOT					V	L				27500		
7	ARQIVA	HOT					H	L				29900		
8	CYFROWY	HOT					V	L				27500		
9	AFATS	HOT					H	L				28000		
10	CYFRA+	HOT					V	L				27500		
11	RRSAT	HOT					H	L				27500		
12														
13														

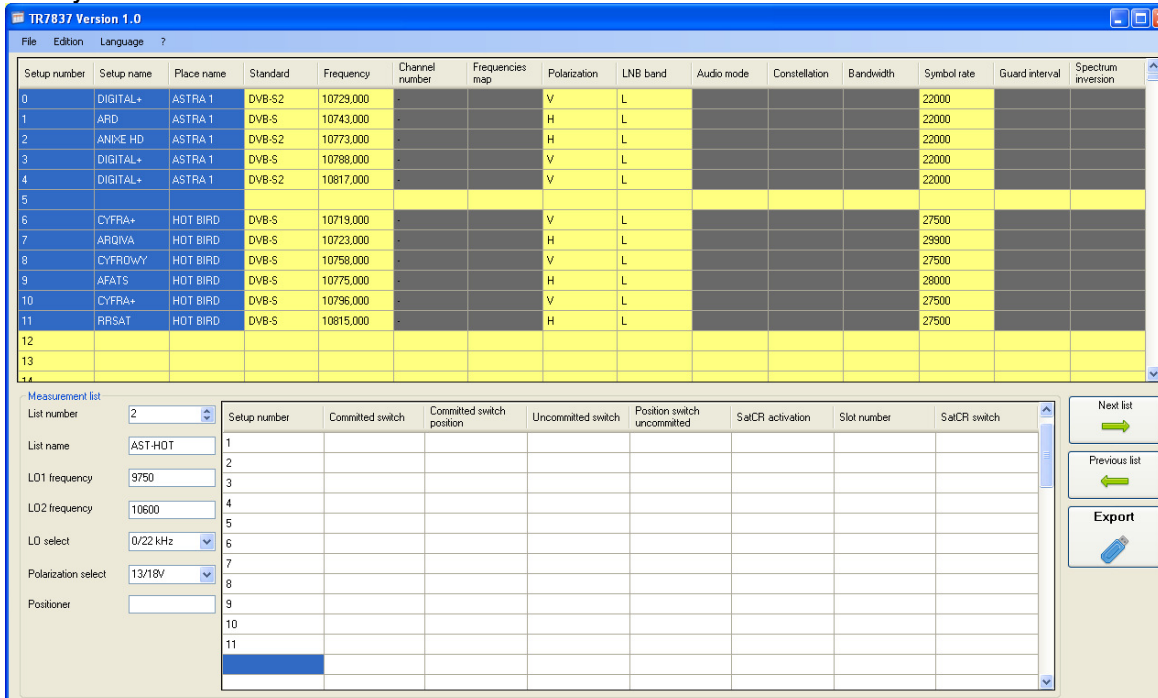
Repeat the previous operations by changing the name list and by selecting the six HOT BIRD setups.



The screenshot shows the TR7837 Version 1.0 software interface. The main table lists setups with columns: Setup number, Setup name, Place name, Standard, Frequency, Channel number, Frequencies map, Polarization, LNB band, Audio mode, Constellation, Bandwidth, Symbol rate, Guard interval, and Spectrum inversion. The 'Measurement list' panel on the left shows parameters for List number 1, List name HOT BIRD, LO1 frequency 9750, LO2 frequency 10600, LO select 0/22 kHz, Polarization select 13/18V, and Positioner. The 'Next list' button is visible on the right.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000			V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000			H	L				22000		
2	AND+E HD	ASTRA 1	DVB-S2	10773.000			H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10788.000			V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10817.000			V	L				22000		
5														
6	CYFRA+	HOT BIRD	DVB-S	10719.000			V	L				27500		
7	ARDIVA	HOT BIRD	DVB-S	10723.000			H	L				29900		
8	CYFROWY	HOT BIRD	DVB-S	10758.000			V	L				27500		
9	AFATS	HOT BIRD	DVB-S	10775.000			H	L				28000		
10	CYFRA+	HOT BIRD	DVB-S	10796.000			V	L				27500		
11	RRSAT	HOT BIRD	DVB-S	10815.000			H	L				27500		
12														
13														
14														

Click on the Next list button to create the last ASTRA and HOT BIRD list.
Repeat the previous operations by changing the name list and by selecting all the setups from the library.



The screenshot shows the TR7837 Version 1.0 software interface. The main table lists setups with columns: Setup number, Setup name, Place name, Standard, Frequency, Channel number, Frequencies map, Polarization, LNB band, Audio mode, Constellation, Bandwidth, Symbol rate, Guard interval, and Spectrum inversion. The 'Measurement list' panel on the left shows parameters for List number 2, List name AST-HOT, LO1 frequency 9750, LO2 frequency 10600, LO select 0/22 kHz, Polarization select 13/18V, and Positioner. The 'Next list' button is visible on the right.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000			V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000			H	L				22000		
2	AND+E HD	ASTRA 1	DVB-S2	10773.000			H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10788.000			V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10817.000			V	L				22000		
5														
6	CYFRA+	HOT BIRD	DVB-S	10719.000			V	L				27500		
7	ARDIVA	HOT BIRD	DVB-S	10723.000			H	L				29900		
8	CYFROWY	HOT BIRD	DVB-S	10758.000			V	L				27500		
9	AFATS	HOT BIRD	DVB-S	10775.000			H	L				28000		
10	CYFRA+	HOT BIRD	DVB-S	10796.000			V	L				27500		
11	RRSAT	HOT BIRD	DVB-S	10815.000			H	L				27500		
12														
13														
14														

Click on the line 5, right click to choose Clear content or Delete line

Measurement list

List number: 2

List name: AST-HOT

LO1 frequency: 9750

LO2 frequency: 10600

LO select: 0/22 kHz

Polarization select: 13/18V

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

Context menu options: New, Copy, Paste, Insert line, Delete line, Clear content

Buttons: Next list, Previous list, Export

You have to indicate the switch, choose DiSEqC in the Committed switch column.

Measurement list

List number: 2

List name: AST-HOT

LO1 frequency: 9750

LO2 frequency: 10600

LO select: 0/22 kHz

Polarization select: 13/18V

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

Dropdown menu options: ToneBurst, 0/22 kHz, DiSEqC

Buttons: Next list, Previous list, Export

Choose position A in the Switch committed position column

Measurement list

List number: 2

List name: AST-HOT

LO1 frequency: 9750

LO2 frequency: 10600

LO select: 0/22 kHz

Polarization select: 13/18V

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch
1	DiSEqC						
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

Dropdown menu options: Pos A, Pos B, Pos C, Pos D

Buttons: Next list, Previous list, Export

Copy/Paste for all the other setups of the list

Measurement list

List number:

List name:

LO1 frequency:

LO2 frequency:

LO select:

Polarization select:

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch
1	DiSEqC	Pos A					
2	DiSEqC	Pos A					
3	DiSEqC	Pos A					
4	DiSEqC	Pos A					
6	DiSEqC	Pos A					
7	DiSEqC	Pos A					
8	DiSEqC	Pos A					
9	DiSEqC	Pos A					
10	DiSEqC	Pos A					
11	DiSEqC	Pos A					

Next list

Previous list

Export

Modify the position of the switch for HOT BIRD to position B.

TR7837 Version 1.0

File Edition Language ?

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000	-		V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000	-		H	L				22000		
2	AND-E HD	ASTRA 1	DVB-S2	10773.000	-		H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10788.000	-		V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10817.000	-		V	L				22000		
5														
6	CYFRA+	HOT BIRD	DVB-S	10719.000	-		V	L				27500		
7	ARIQVA	HOT BIRD	DVB-S	10723.000	-		H	L				29900		
8	CYFROWY	HOT BIRD	DVB-S	10758.000	-		V	L				27500		
9	AFATS	HOT BIRD	DVB-S	10775.000	-		H	L				28000		
10	CYFRA+	HOT BIRD	DVB-S	10796.000	-		V	L				27500		
11	RRSAT	HOT BIRD	DVB-S	10815.000	-		H	L				27500		
12														
13														

Measurement list

List number:

List name:

LO1 frequency:

LO2 frequency:

LO select:

Polarization select:

Positioner:

Setup number	Committed switch	Committed switch position	Uncommitted switch	Position switch uncommitted	SatCR activation	Slot number	SatCR switch
1	DiSEqC	Pos A					
2	DiSEqC	Pos A					
3	DiSEqC	Pos A					
4	DiSEqC	Pos A					
6	DiSEqC	Pos B					
7	DiSEqC	Pos B					
8	DiSEqC	Pos B					
9	DiSEqC	Pos B					
10	DiSEqC	Pos B					
11	DiSEqC	Pos B					

Next list

Previous list

Export



When a line is selected in the measurement list, the corresponding setup is pointed automatically

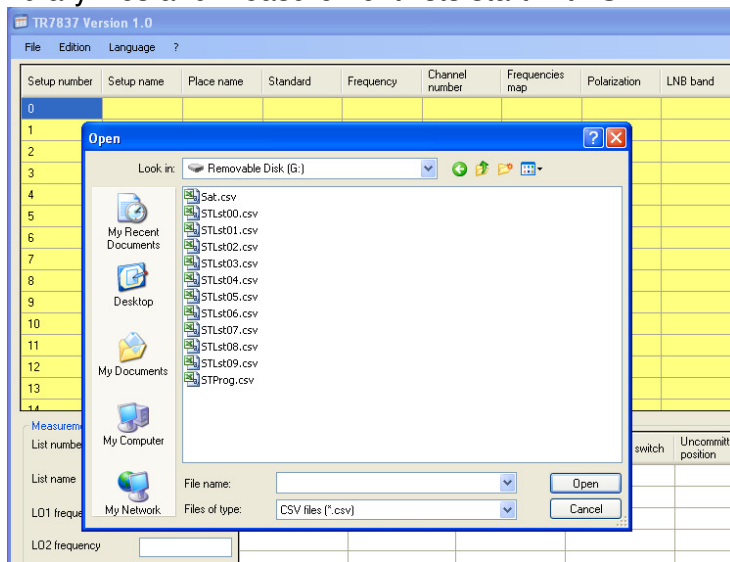
9 OPEN A FILE

The software works from CSV files, those files are tabulated text files, the different values are separated by semi-colon.

Depending on the software version of the TV meter the setup export will generate on the USB flash drive a setup file and a checksat file or 22 separated files : a checksat file, a library file and 20 files corresponding to the 20 measurements lists.

The software allows you to open and modify each of these files.

Files resulting of the setup export of a device covering the satellite and terrestrial bands : library files and measurement lists start with ST.

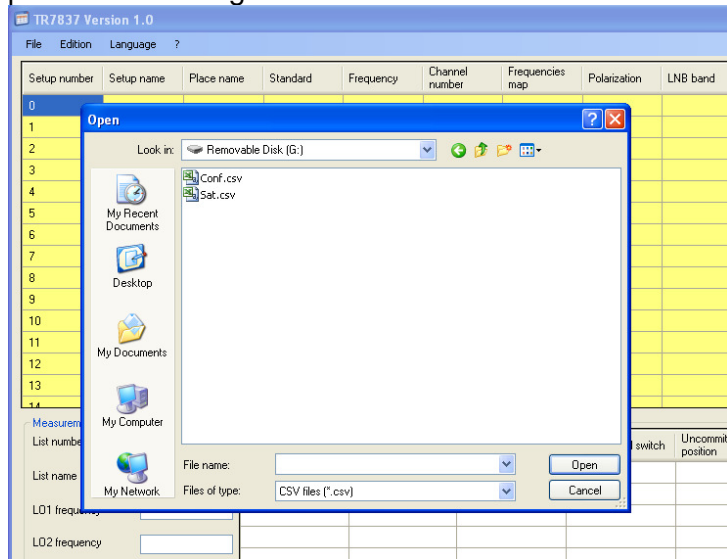


The Sat.csv file is for the checksat function

The STLst00.csv, STLst01.csv, STLst02.csv files... is for the measurement lists

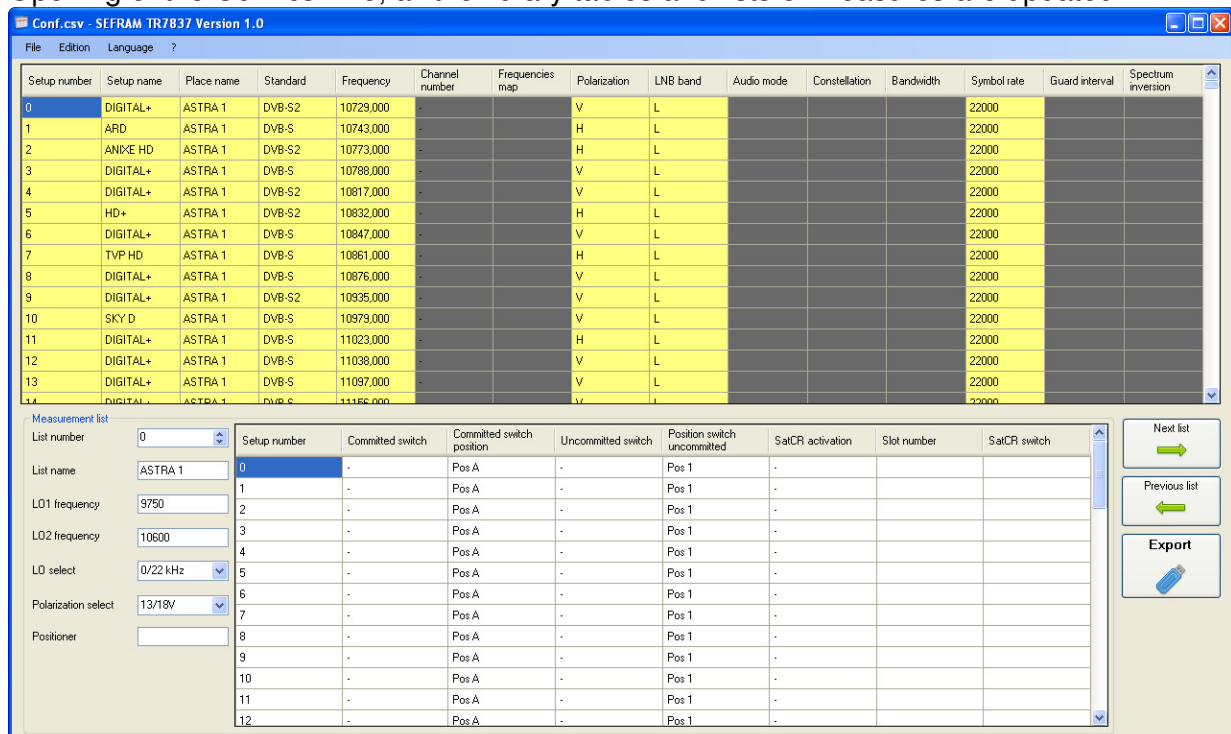
0, 1, 2... The STProg.csv file is for the setups library

Files resulting of the setup export of a device which has a new software version which produces a configuration file and a checksat file.



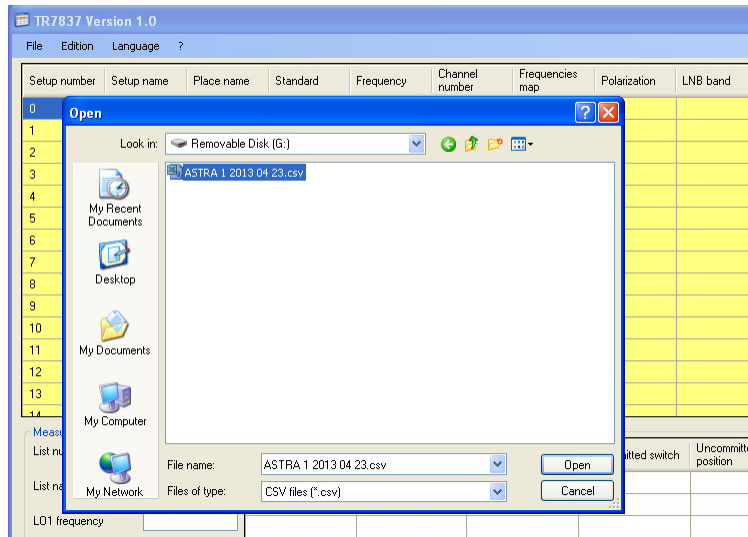
The Conf.csv file is made of the global configuration of the device, the library of setups and the 20 lists of measures.

Opening of the Conf.csv file, all the library tables and lists of measures are updated



Opening of a file previously saved from this software

The name file is the one chosen during the saving process, it is a unique file made of the device configuration, all the tables will be updated.



The name of the last file opened appears in the caption

10 IMPORT INI FILES

What is an « .INI. » file ?

An “.ini.” file is made of the parameters of a place (satellite). The data of this file are importable directly to the setup library.

The import files of the satellite setups receivable in Europe (Ku band) can be downloaded on the website <http://en.kingofsat.net/>, in the file «Satellite directory ». These files are updated regularly : we recommend you to check regularly this website for the latest details.

How to do?

Click on the following link <http://en.kingofsat.net/satellites.php> to access to the website.

The following page will display, do not check « Generate .ini files with frequencies in kHz ».

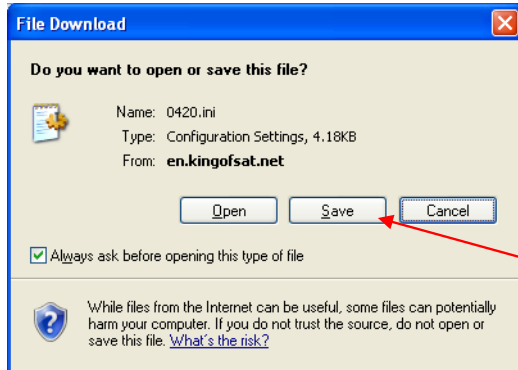
Satellite directory - KingOfSat - Windows Internet Explorer

<http://en.kingofsat.net/satellites.php>

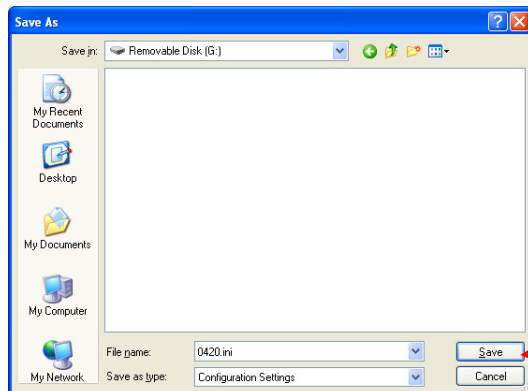
Generate .ini files with frequencies in kHz (allow more complete scans for low SRs, compatibility depending on software used)

Orbital position	News	.ini	Total Ku	Total C	Free To Air only	TV (TVI)	Radios (CJ)	Data (Data)	Satellite	Longitude Now	Declination Now - Max	Total	Free To Air only	Last updated
75.0°E			98	0	40	92	6	0	ABS-1	74.99°E	-0.04° 0.06°	98	40	2013-01-26 13:28
70.5°E			6	0	2	2	4	0	Eutelsat 70B	70.47°E	0.02° 0.02°	6	2	2013-02-10 09:21
68.5°E			136	265	231	286	108	7	Intelsat 7 (IS-7)	68.65°E	-0.05° 0.06°	-	-	2012-12-30 17:45
66.0°E			18	121	96	127	12	0	Intelsat 20 (IS-20)	68.56°E	-0.01° 0.01°	401	231	2013-04-28 03:25
64.2°E			0	28	14	28	0	0	Intelsat 17	65.99°E	-0.04° 0.04°	139	96	2013-03-14 19:35
62.0°E			1	1	2	2	0	0	Intelsat 906	64.17°E	0.01° 0.03°	28	14	2012-12-30 17:52
60.0°E			2	0	2	2	0	0	Intelsat 902	61.98°E	0.00° 0.02°	2	2	2012-11-11 18:57
57.0°E			6	77	63	39	40	4	Intelsat 904	59.98°E	0.00° 0.02°	2	2	2012-04-02 18:46
56.0°E			0	0	0	0	0	0	NSS 12	57.01°E	-0.05° 0.07°	83	63	2013-04-24 13:40
53.0°E			63	0	49	45	16	2	DirectTV 1R	55.81°E	-0.64° 0.74°	-	-	2012-12-31 09:20
52.5°E			49	0	40	49	0	0	Express AM22	53.08°E	0.02° 0.02°	63	49	2013-04-23 15:39
50.5°E			0	0	0	0	0	0	Yahsat 1A	52.56°E	0.01° 0.01°	49	40	2013-04-10 13:58
49.0°E			0	61	52	38	23	0	NSS 5	50.48°E	-0.73° 0.80°	-	-	2012-06-12 08:50
48.0°E			0	0	0	0	0	0	Yamal 202	48.98°E	0.02° 0.02°	61	52	2012-07-13 21:32
47.5°E			1	0	0	1	0	0	Eutelsat 48C	47.99°E	-0.37° 0.39°	-	-	2012-12-29 15:03
46.0°E			0	0	0	0	0	0	Intelsat 10 (IS-10)	47.49°E	-0.01° 0.01°	1	-	2013-04-16 23:13
45.0°E			142	0	44	118	22	2	Azerspace-1	46°E	-0.04° 0.04°	-	-	2013-02-23 18:17
42.0°E			633	0	496	416	164	53	Intelsat 12 (IS-12)	45.04°E	-0.01° 0.03°	142	44	2013-05-01 18:51
40.0°E			0	0	0	0	0	0	Turksat 2A	42.03°E	0.02° 0.03°	280	189	2013-04-29 13:26
39.0°E			285	0	73	232	26	27	Turksat 3A	42°E	-0.06° 0.06°	353	307	2013-05-01 16:30
38.0°E			0	49	44	48	1	0	Express AM1	40.04°E	-2.34° 2.51°	-	-	2012-05-23 23:35
36.0°E			345	0	63	275	46	24	Hellas Sat 2	38.97°E	-0.04° 0.04°	285	73	2013-05-01 18:03
33.1°E			0	0	0	0	0	0	Paksat 1R	37.99°E	-0.06° 0.06°	49	44	2013-03-11 18:38
33.0°E			57	0	20	28	12	17	Eutelsat 36A	36.09°E	0.02° 0.07°	35	12	2013-01-01 09:36
									Eutelsat 36B	35.9°E	0.02° 0.07°	310	51	2013-05-02 07:38
									Nilesat 101	33.11°E	-0.02° 0.23°	-	-	2013-03-11 20:50
									Eutelsat 33A	33.08°E	-0.03° 0.06°	57	20	2013-02-24 18:41
									Intelsat 702	33.01°E	-1.52° 1.54°	-	-	2011-09-26 23:50

For example, to download the « .ini » file of the TURKSAT satellite, click here.



Click then on "Save"

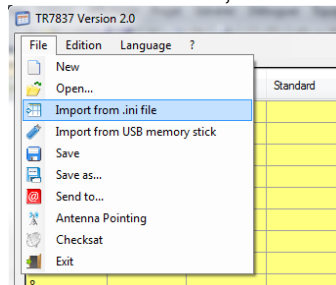


Select the file desired then click on Save

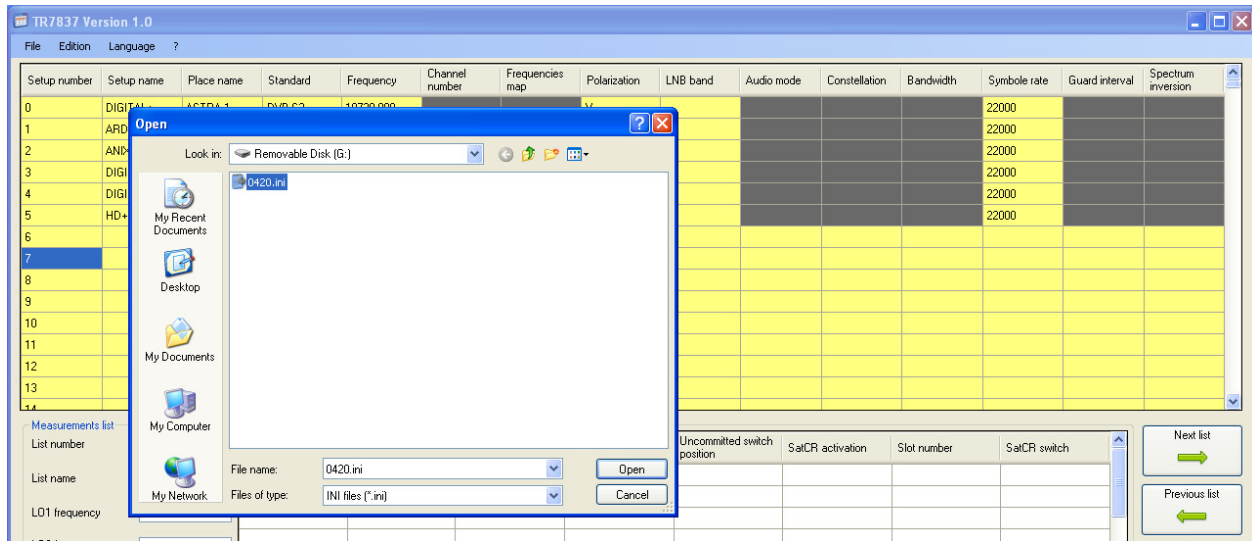
In the table of the setup library select the line from which the data will be imported.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000	-		V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000	-		H	L				22000		
2	AND+E HD	ASTRA 1	DVB-S2	10773.000	-		H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10788.000	-		V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10817.000	-		V	L				22000		
5	HD+	ASTRA 1	DVB-S2	10832.000	-		H	L				22000		
6														
7														
8														
9														

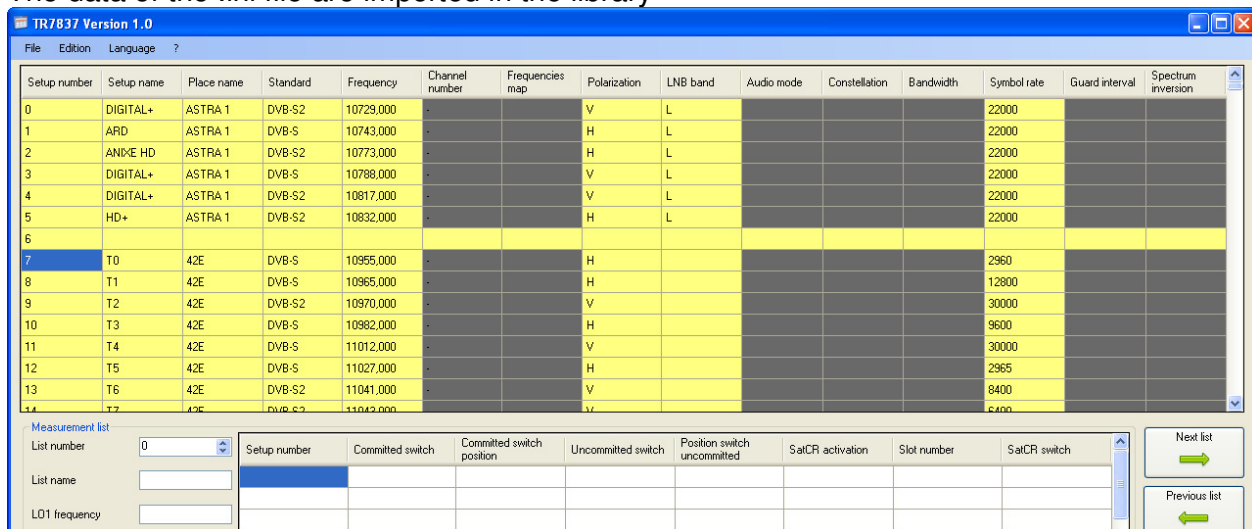
In the File menu, click on Import from .ini file



Click on open



The data of the .ini file are imported in the library



The TURKSAT satellite is made of 4 beams, only one of them is pointed at Europe. With the Delete line function it is possible to clear the transponders which cannot be received. The first transponder diffuse on Central Asia, it can be deleted.

The screenshot shows the TR7837 Version 1.0 application window. The main area contains a table with columns: Setup number, Setup name, Place name, Standard, Frequency, Channel number, Frequencies map, Polarization, LNB band, Audio mode, Constellation, Bandwidth, Symbol rate, Guard interval, and Spectrum inversion. A right-click context menu is open over row 12, listing options: New, Copy, Paste, Insert line, Delete line (highlighted), Clear content, and Add to measure list.

Setup number	Setup name	Place name	Standard	Frequency	Channel number	Frequencies map	Polarization	LNB band	Audio mode	Constellation	Bandwidth	Symbol rate	Guard interval	Spectrum inversion
0	DIGITAL+	ASTRA 1	DVB-S2	10729.000	-		V	L				22000		
1	ARD	ASTRA 1	DVB-S	10743.000	-		H	L				22000		
2	ANIKHE HD	ASTRA 1	DVB-S2	10773.000	-		H	L				22000		
3	DIGITAL+	ASTRA 1	DVB-S	10788.000	-		V	L				22000		
4	DIGITAL+	ASTRA 1	DVB-S2	10817.000	-		V	L				22000		
5	HD+	ASTRA 1	DVB-S2	10832.000	-		H	L				22000		
6														
7	TÜ	42E	DVB-S	10955.000	-		H					2960		
8			DVB-S	10965.000	-		H					12800		
9			DVB-S2	10970.000	-		V					30000		
10			DVB-S	10982.000	-		H					9600		
11			DVB-S	11012.000	-		V					30000		
12			DVB-S	11027.000	-		H					2965		
13			DVB-S2	11041.000	-		V					8400		
14			DVB-S2	11042.000	-		V					6400		

- New
- Copy
- Paste
- Insert line
- Delete line
- Clear content
- Add to measure list

Below the table is a "Measurement list" section with input fields for List number (0), List name, and LO1 frequency. To the right is another table with columns: Setup number, Committed switch, Committed switch position, Uncommitted switch, Position switch uncommitted, SaICR activation, Slot number, and SaICR switch. At the bottom right are buttons for "Next list" and "Previous list".

Repeat the operation as many time as necessary. Moreover it is not necessary to keep all the transponders otherwise the library will be quickly saturated. Keep 2 or 3 transponders for each band and polarization, preferably with high L frequencies to confirm the losses in the dish cable or, why not, those transporting the most popular emissions.

11 IMPORT FROM A USB MEMORY STICK

It is necessary to export the TV meter configuration in a USB memory stick.

11.1 MCT 049 TV meters

Press the home key,

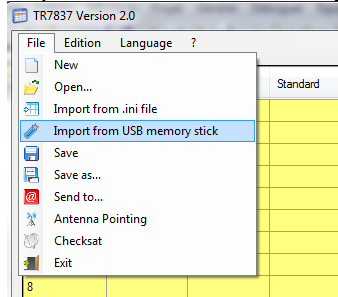


The Home page will appear:

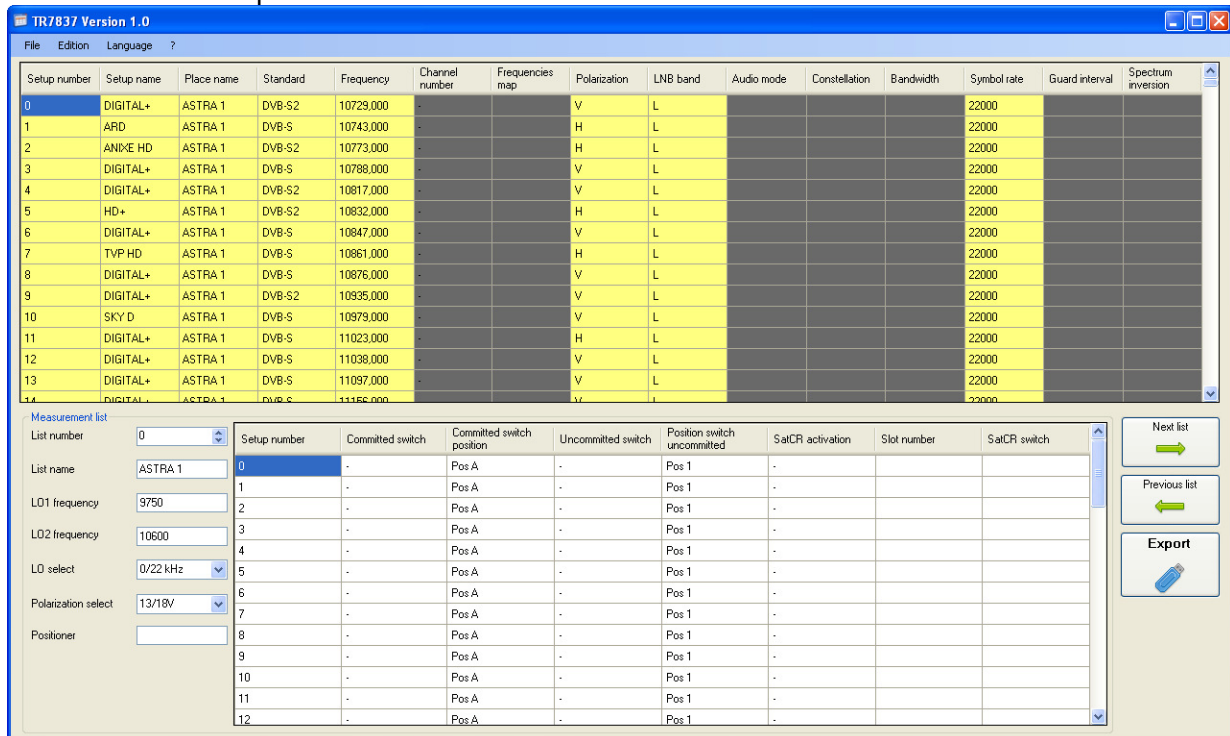


Finally press the “Configuration export” key

Disconnect the memory stick from the TV meter et connect it to the computer, launch the Import from USB memory stick function.

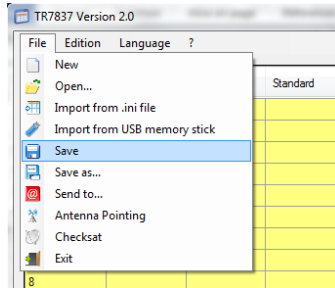


All the tables are updated



12 SAVE

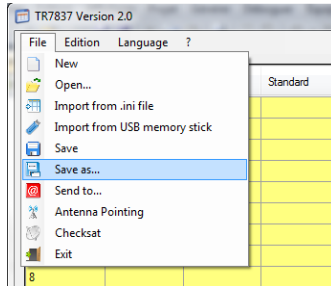
The Save function allows you to save all the table data in the current file.



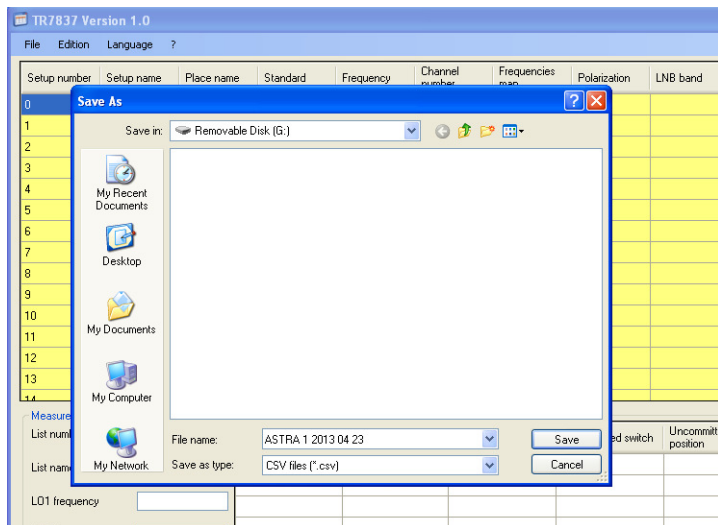
If the current file does not exist, Save as will be launched

13 SAVE AS

The Save as function allows you to save all the data of the tables in a new file or a file of your choice.

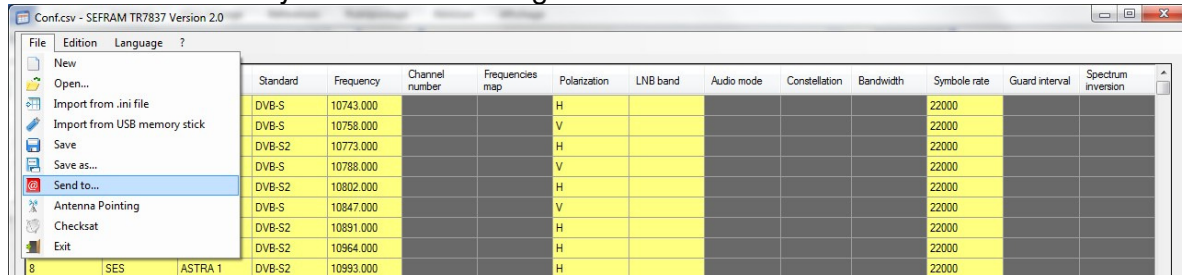


The dialog box Save as allows you to choose an existing file or to enter a new file name.

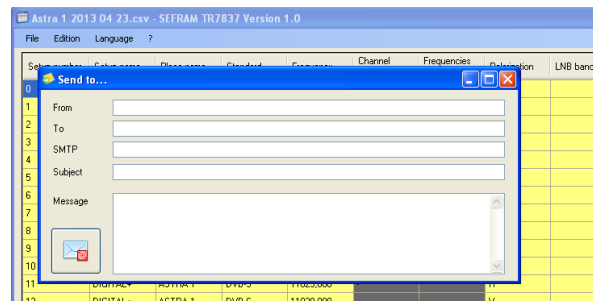


14 SENDTO

This function allows you to send a configuration file as attached file in an email.



The following dialog box appears:



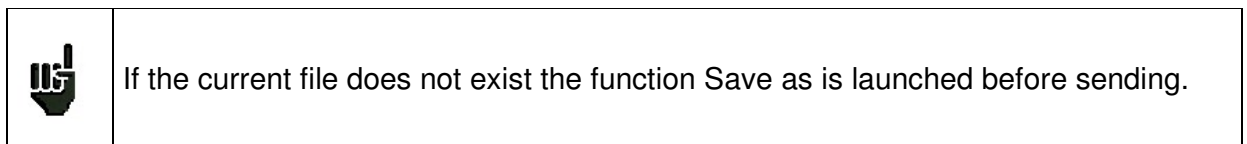
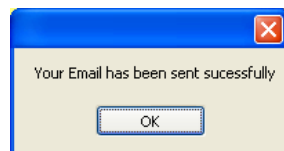
Enter the recipient's addressee and the name of your mailbox SMTP server, the other fields are optional : sender addressee, message subject and message text.

The current file is automatically attached to the

email. Click on the mail key

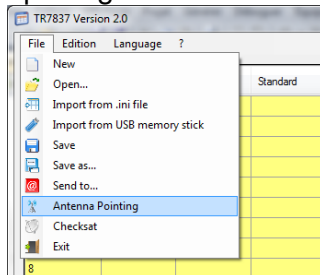


A message warns you that the email has been sent successfully, click on OK.

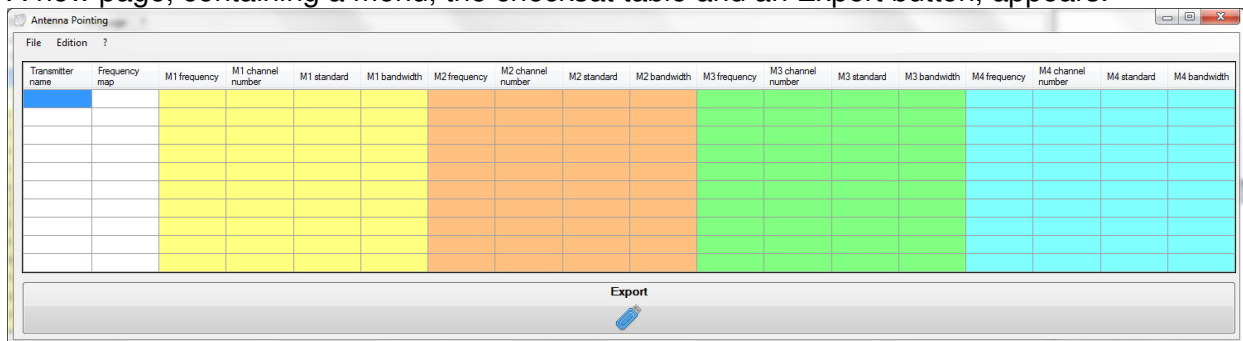


15 ANTENNA POINTING (MCT 049 ONLY)

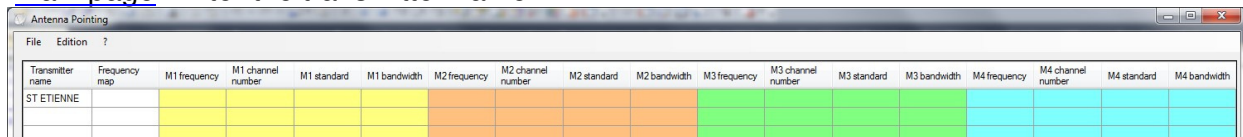
The access at the antenna pointing table is performed from the Antenna Pointing menu or by opening a Ter.csv file.



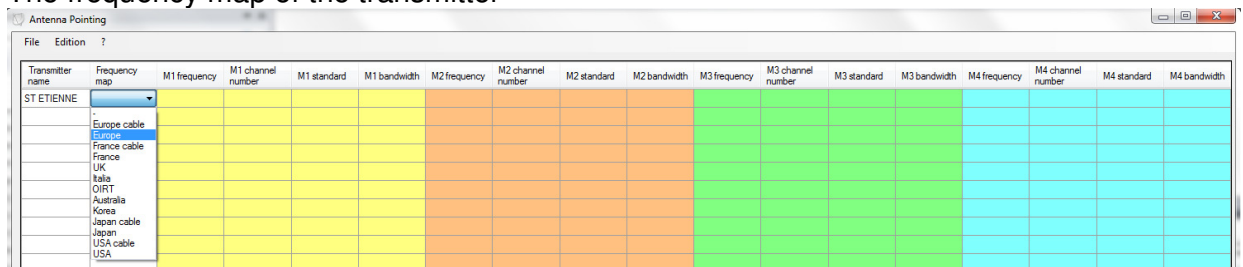
A new page, containing a menu, the checksat table and an Export button, appears.



10 different transmitters are possible; each transmitter is made of 4 multiplexes. The menu of this page and the popup menu (right click) are similar to [those from the main page](#). Enter the transmitter name

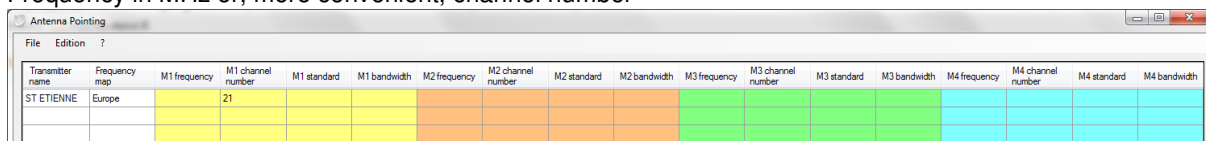


The frequency map of the transmitter

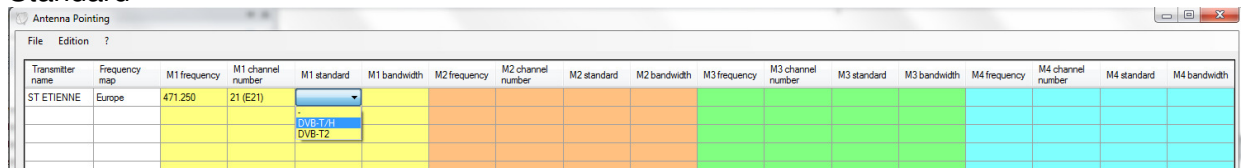


Parameters of each multiplex

Frequency in MHz or, more convenient, channel number

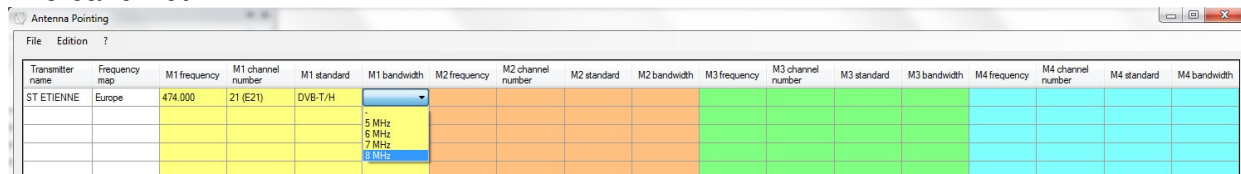


Standard



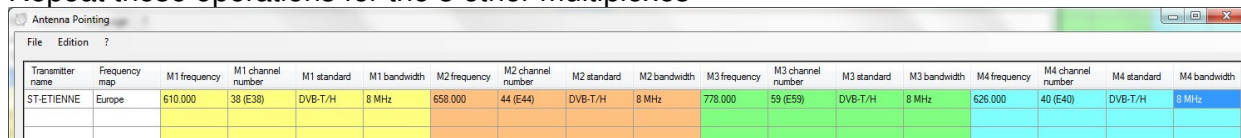
Transmitter name	Frequency map	M1 frequency	M1 channel number	M1 standard	M1 bandwidth	M2 frequency	M2 channel number	M2 standard	M2 bandwidth	M3 frequency	M3 channel number	M3 standard	M3 bandwidth	M4 frequency	M4 channel number	M4 standard	M4 bandwidth
ST ETIENNE	Europe	471.250	21 (E21)	DVB-T/H													

The bandwidth



Transmitter name	Frequency map	M1 frequency	M1 channel number	M1 standard	M1 bandwidth	M2 frequency	M2 channel number	M2 standard	M2 bandwidth	M3 frequency	M3 channel number	M3 standard	M3 bandwidth	M4 frequency	M4 channel number	M4 standard	M4 bandwidth
ST ETIENNE	Europe	474.000	21 (E21)	DVB-T/H	5 MHz												

Repeat these operations for the 3 other multiplexes



Transmitter name	Frequency map	M1 frequency	M1 channel number	M1 standard	M1 bandwidth	M2 frequency	M2 channel number	M2 standard	M2 bandwidth	M3 frequency	M3 channel number	M3 standard	M3 bandwidth	M4 frequency	M4 channel number	M4 standard	M4 bandwidth
ST-ETIENNE	Europe	610.000	38 (E38)	DVB-T/H	8 MHz	658.000	44 (E44)	DVB-T/H	8 MHz	778.000	59 (E59)	DVB-T/H	8 MHz	626.000	40 (E40)	DVB-T/H	8 MHz

Repeat these operations for other transmitters

This table can be saved with the device configuration; it can also be [exported to a USB memory stick](#) to be imported in the TV meter.

TR7837 Version 2.0

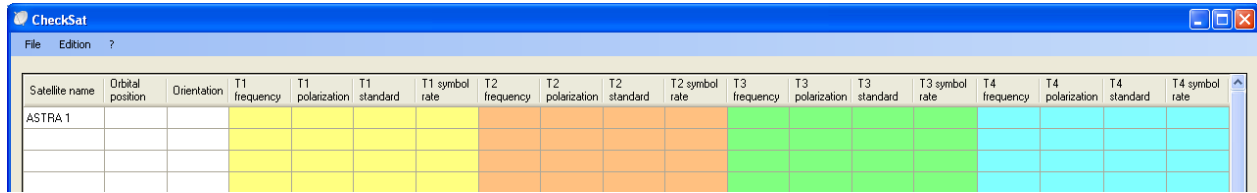
File Edition Language ?

- New
- Open...
- Import from .ini file
- Import from USB memory stick
- Save
- Save as...
- Send to...
- Antenna Pointing
- Checksat**
- Exit

Standard

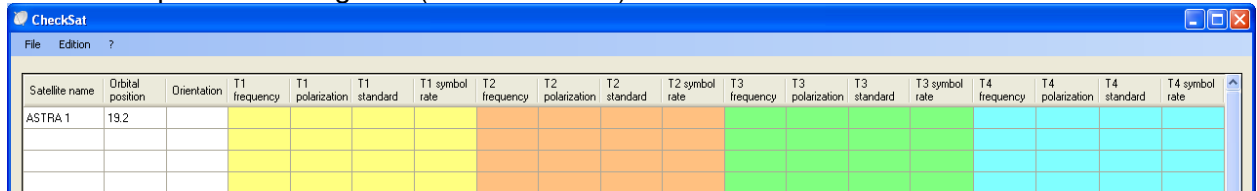
[illegible]

Enter the satellite name



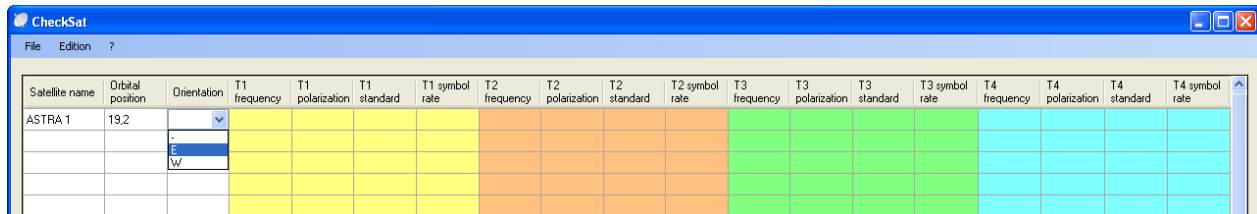
Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1																		

The orbital position in degrees (from 0 to 180°)



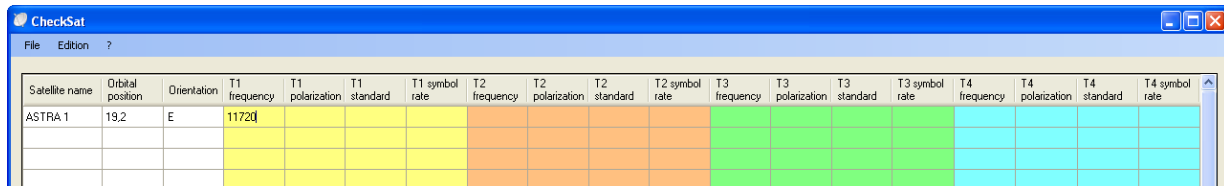
Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2																	

The orientation in relation to the Greenwich meridian: East or West.



Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E																

Parameters of each transponder Frequency in MHz



Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E	11720															

Vertical or horizontal polarisation

Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E	11720	V														
				H														

Standard

Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E	11720	H														
					DVB-S													
					DSS													
					DVB-S2													

The symbol rate in kilo baud

Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E	11720	H	DVB-S	27500												

Repeat these operations for the 3 other transponders

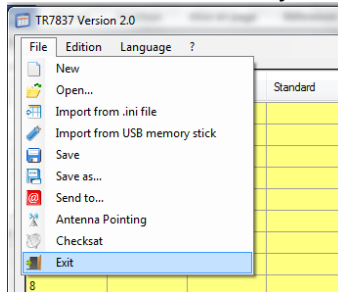
Satellite name	Orbital position	Orientation	T1 frequency	T1 polarization	T1 standard	T1 symbol rate	T2 frequency	T2 polarization	T2 standard	T2 symbol rate	T3 frequency	T3 polarization	T3 standard	T3 symbol rate	T4 frequency	T4 polarization	T4 standard	T4 symbol rate
ASTRA 1	19.2	E	11720	H	DVB-S	27500	12515	H	DVB-S	22000	10979	V	DVB-S	22000	12363	V	DVB-S	27500

Repeat these operations for other satellites

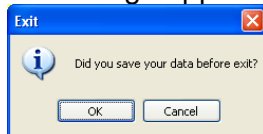
This table can be saved with the device configuration; it can also be exported to a USB memory stick to be imported in the TV meter.

17 EXIT

This function allows you to exit the software



A message appears



If the data have not been saved, click on Cancel otherwise confirm the exit.