

RFQ-845T2CI1

Quadro DVB-T/T2/C/S/S2/S2X to DVB-T2 HD remux modulator

User Manual

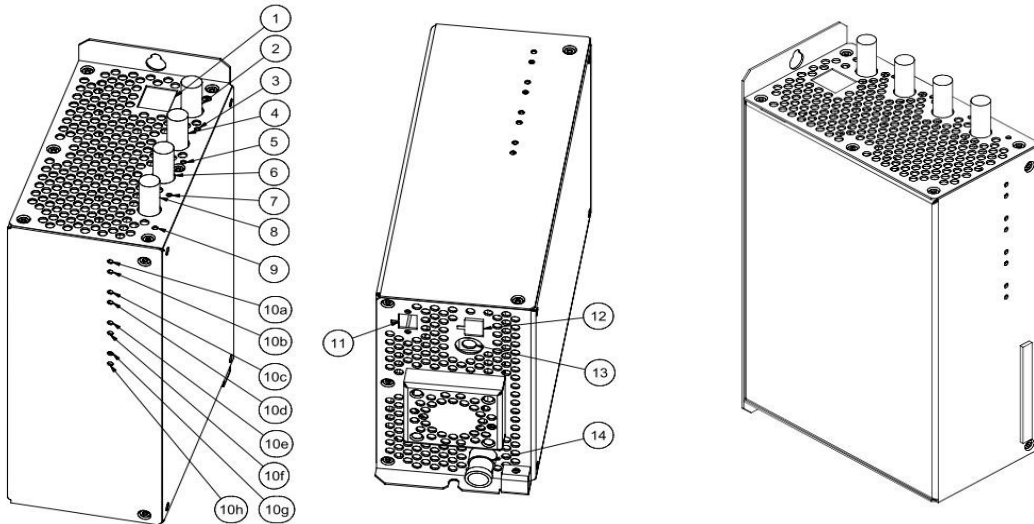


1. Purpose of use

RFQ-845T2CI1 is HD compatible remux modulator designed for a processing four DVB-S/S2/T/T2/C modulated TV signals into 1 DVB-T2 multiplex or 1 ... 4 COFDM/(DVB-T) multiplex.

2. Installation

The connections are shown in Fig 1.



1. RJ 45 connector to PC , factory default address: 192.168.0.145
2. Tuner 1 Input connector
3. Tuner 1 Lock LED
4. Tuner 2 Input connector
5. Tuner 2 lock LED
6. Tuner 3 Input connector
7. Tuner 3 lock LED
8. Tuner 4 Input connector
9. Tuner 4 lock LED
10. Modulator indication LEDs for
a= mod1error, b=mod1 ok, c=mod2 error and d=mod2 ok,
e= mod3 error, f=mod3 ok, g=mod4 error and h=mod4 ok,
11. DC Power IN/OUT
12. DC Power IN/OUT
13. DC Power IN/OUT
14. RF OUTPUT
15. CA-module slot

RFQ-845T2CI1 is mounted directly on the wall or RFB-804 base. Do not cover the air passage holes.

Signal from LNB or antenna is fed to F-female connectors A1,2,3 and 4.

Maximum total current of LNB connector is 250 mA.

NOTE! LNB supply voltage must be fed only from one tuner to each LNB. For other receivers must be selected Power OFF or use DC-blocked splitters.

Power voltage is connected to the left side AC connector.

PC is connected to RJ 45 connectors with ethernet cable.

3. Setting up the system

The system is programmed with PC via a Web browser.

1. Connect Ethernet cable from RJ 45 connector to computer.
2. Open the web browser like IE, Firefox, Chrome etc...
3. Write to address field 192.168.0.145 and then enter.
4. Unit asks the password.

The factory default password is **Ramsen8262**

5. After right password is fed following screen displays.

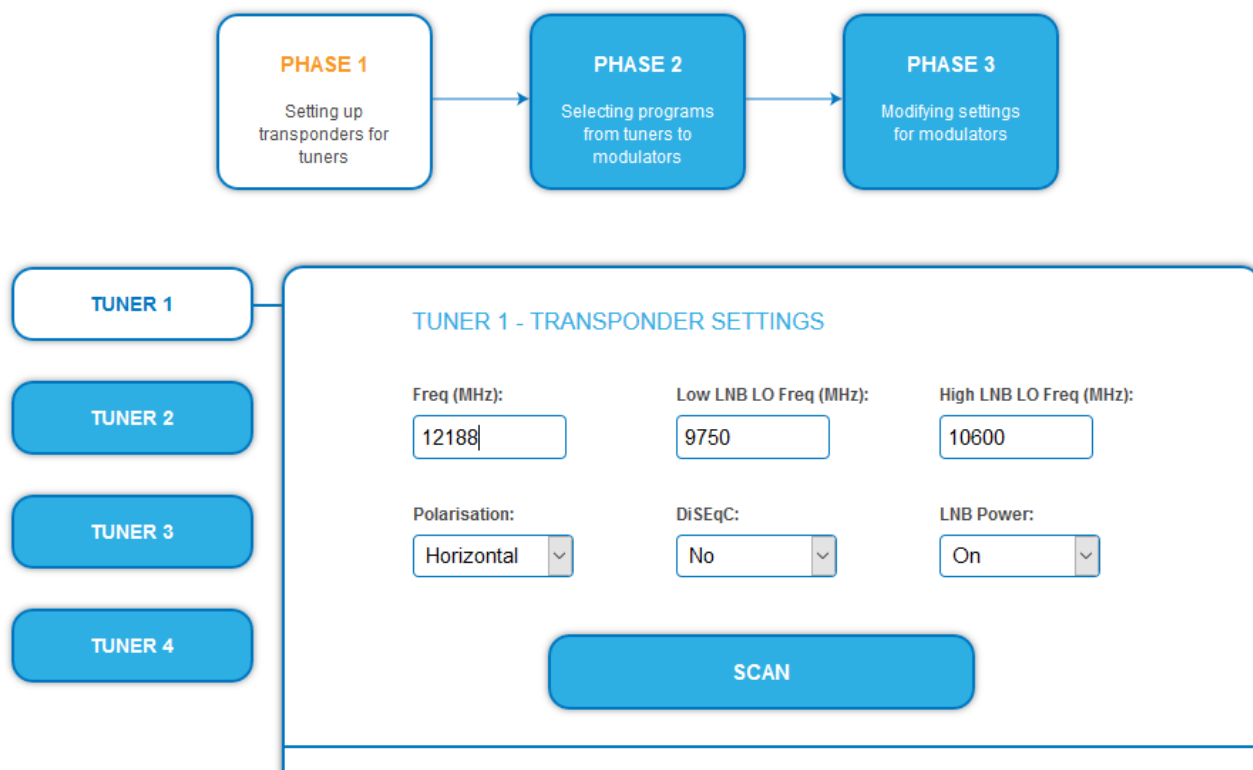


At the front page can be seen the status of receivers (input frequency, bitrate, BER, power level, C/N) and modulators (output frequency, bitrate, fullness degree) and select the menu language (EN or DE)

4. DVB configuration

4.1 Tuner

To set tuner parameters go to INITIALIZATION. For satellite signal set all parameters, for terrestrial/cable signal only frequency is needed.



Set the correct parameters for tuner 1. and select SCAN. Repeat same for tuners 2, 3 and 4.

4.2 Program selection

Select PHASE 2.

SAVE CHANGES

CANCEL CHANGES

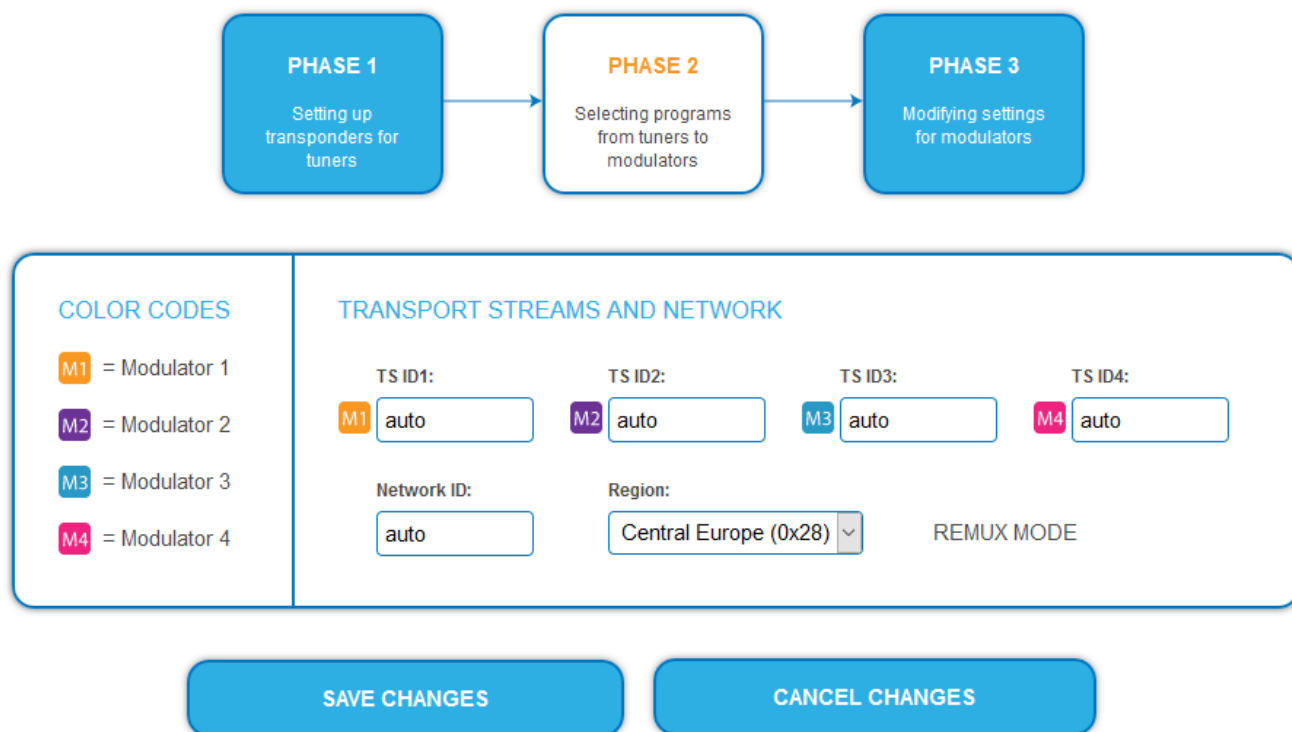
TUNER 1							
Modulator	LCN	Program Name	Type	Encryption	Decrypt	Service ID	Audio Lan
M1 M2 M3 M4	1	Das Erste	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		BR Fernsehen Süd	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		hr-fernsehen	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		BR Fernsehen Nord	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		WDR Köln	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		SWR Fernsehen BW	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>

TUNER 2							
Modulator	LCN	Program Name	Type	Encryption	Decrypt	Service ID	Audio Lan
M1 M2 M3 M4		SAT.1	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		ProSieben	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4	2	kabel eins	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		N24	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>
M1 M2 M3 M4		SAT.1 Gold	TV	FTA	<input type="radio"/> Yes <input checked="" type="radio"/> No		ALL <input type="button" value="v"/>

Select the programs to output by pressing the symbol of wanted modulator 1 – 4. Then the symbol is highlighted.

Then set the wanted LCN and audio language. LCN setting works only in the set-top-boxes which support LCN function.

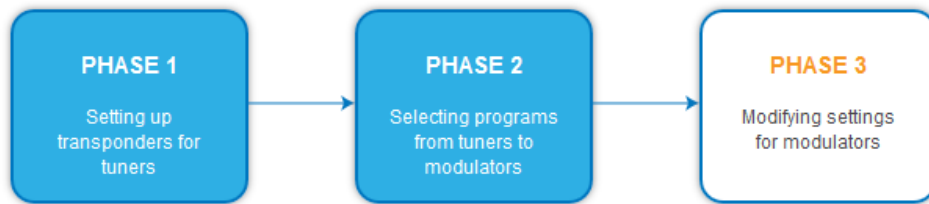
You can set also TS ID and NETWORK ID. Region selection may be needed for some set-top-boxes for LCN setting to work properly.



When all parameters are selected press SAVE CHANGES.

6. Modulator setup:
DVB-T device (modulation mode can be selected between DVB-T2 or 4*DVB-T on Maintenance page)

Go to PHASE 3.




MODULATOR 1

MODULATOR 1 SETTINGS

Norm:	Output Channel:	DVB-T Constellation:
CCIR	21	QAM64
DVB-T FEC Coderate:	DVB-T Bandwidth:	DVB-T Guard Interval:
7/8	8 MHz	1/32
DVB-T Transmission Mode:	Output Level:	Fine Tune:
8k	20 dB	0.0 MHz

FILL

474.00 MHz

Modulator 1:  54%

Here you can select output channel, constellation, FEC coderate, bandwidth, guard interval, transmission mode and output level. If necessary you can also fine tune output frequency.

You can see also fullness degree of each modulator.

7. Technical specification

QPSK/8PSK/QAM/COFDM INPUT

Tuners	4
Input frequency range	48 - 2150 MHz
Input level	-65 ... -25 dBm
Waveform	QPSK , 8PSK, QAM, COFDM
Symbol rate	4-45 MS/s
FEC decoder	Automatic
Transport stream	MPEG-2 ISO/IEC 13818

COFDM OUTPUT

Modulation	QAM 16, 64, 256 (DVB-T2 only)	
Band width	7 or 8 MHz	
Output frequency range	114 MHz - 858 MHz	
Output level	82 - 102 dBuV	
Data interface	RJ-45	
Input connectors	F-female 75 ohm	
Output connectors	F-female 75 ohm	
Power consumption	16VDC/20W	
Dimensions	W*H*D	72mm*218mm*129mm



This symbol on the product or on its packing means that within the European Union the product must be taken to separate collection at the product-end-of life.

Do not dispose of these products as unsorted municipal waste.

For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your house disposal service or the shop where you purchased the product.