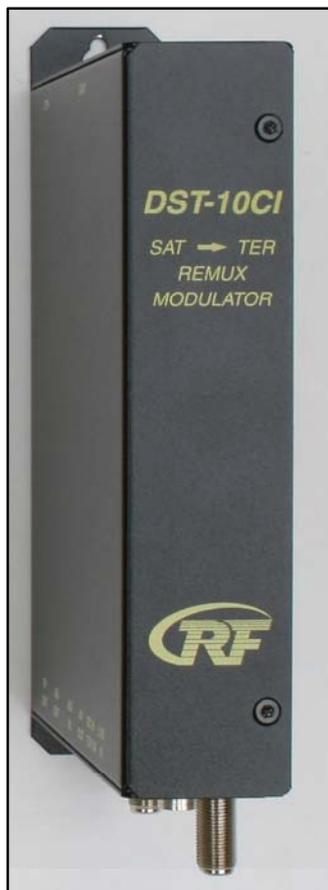


DST-10CI

DVB-S → DVB-T REMUX MODULATOR

User Manual

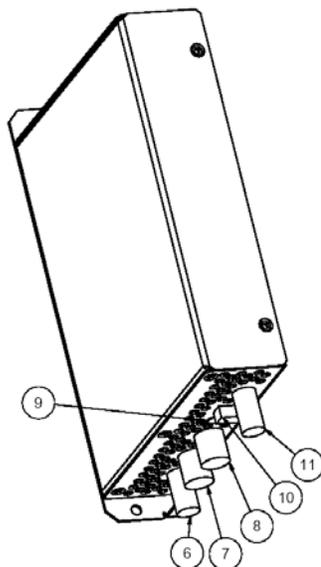
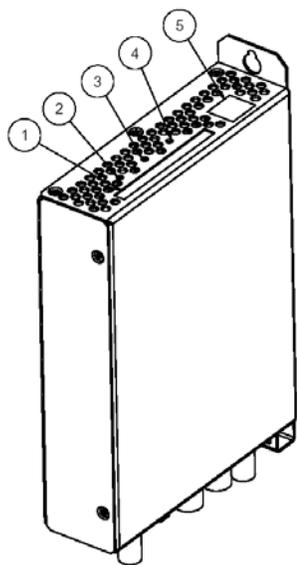


1. Purpose of use

DST-10CI remux modulator transforms satellite TV programs (QPSK) to DVB-T multiplex (COFDM). Then satellite TV programs can be received with DVB-T set-top-box. With one DST-10CI unit can be processed maximum 6 satellite TV programs depending on channel bit rate. Both SD and HD programs can be processed. DVB-T multiplex is transmitted to antenna network on frequency range from 50 to 858 MHz.

2. Installation

The connections and indications are shown in Fig 1.



1. CAM slot
2. Green light shows that the unit is powered
3. Red light indicates that receiver is not locked to satellite transponder
4. Red light indicates that smart card is not authorized, AV output is missing or other output error
5. Ethernet connector is for programming the unit
6. RF IN
7. DC IN
8. Video/Audio OUT
9. ASI IN
10. ASI OUT
11. RF OUT

DST-10CI mounted directly on the wall. Do not cover the air passage holes.

Signal from LNB is fed to RF IN connector (6.).

The power supply is connected to DC IN connector (7).

RF OUT (11) is connected to cable network.

ASI IN (9) and ASI OUT (10) connectors are used to combine programs from two or more satellite transponders to one COFDM output.

ETH (5) connector is connected to PC with the cross-wired ethernet cable.

3. Programming

3.1. PC settings

DST-10CI is programmed with the PC when is installed a standard web browser (IE Explorer, Firefox, Opera etc).

The factory set IP address of DST-10CI is 192.168.0.20. To communicate with DST-10CI the IP address of PC must be set to 192.168.0.19 and Net mask to 255.255.255.0.

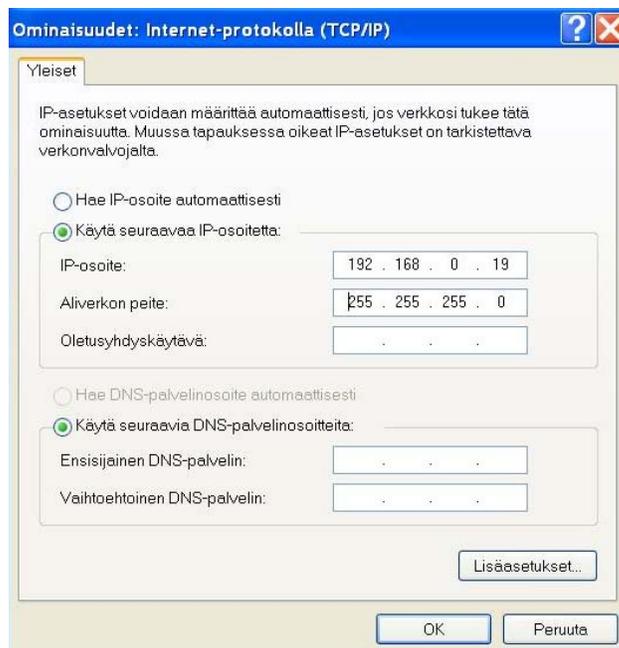
Set IP address of PC as following (Windows XP).

Select Control Panel/Network Connections and then Network and Internet settings.

Select Properties and then Internet Protocol. Select TCP/IP and then Properties.

Select Use this IP address and write 192.168.0.19. Write to Net mask field 255.255.255.0

Click OK and then Close.



3.2 Web Control Interface of DST-10CI

Connect PC to ETH connector of DST-10CI with the cross-wired ethernet cable.

Open the web browser (IE, Firefox, Opera) and write to address field 192.168.0.20. Press enter.

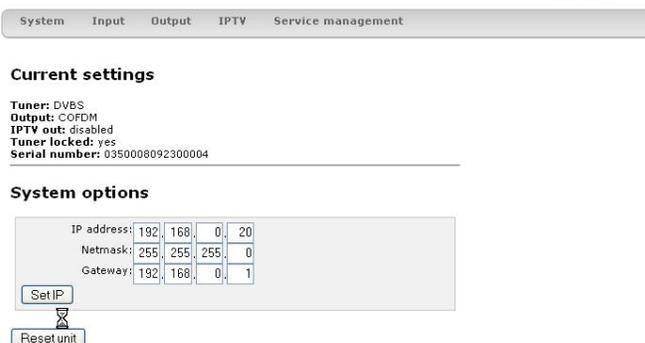
Below main (System) menu including basic information of the unit, should appear.

NOTE! Tuner locked (yes, no) shows if tuner is locked (or not) to selected transponder.

Main menu (SYSTEM) includes following sub menus.

- INPUT
- OUTPUT
- IPTV
- SERVICE MANAGEMENT

DST-10CI Web Control Interface



The unit can be reseted with RESET UNIT .

Static IP address can be changed with SET IP bush button. A recommendation is to use 192.168.0.20 or higher.



3.2.1 INPUT menu

In INPUT menu can be selected :

- QPSK, 8PSK, 16QAM
- LNB (Universal, Fixed)
- Polarization (HOR, VER)
- Standard (DVBS, DVBS2)
- LNB voltage (Auto, Off, 13V, 18V)
- FEC (Auto, 1/2, 3/4, 5/6, 7/8, 8/9, 3/5, 4/5)
- 22kHz tone (Auto, Off, On)
- Symbol rate (kB/s)
- Frequency (MHz)

DST-10CI Web Control Interface



System Input Output IPTV Service management

Tuner settings

Tuner locked: Yes

LNB:	Universal	Set
Polarisation:	Vertical	Set
System:	DVBS	Set
Voltage:	Auto	Set
FEC:	Auto	Set
22 kHz tone:	Auto	Set
Symbol rate(kBd):	24500	Set
Transponder frequency(MHz):	11341	Set

Available services

- TV4 Science Fiction
- TV4 Komedi
- TV4 Guld
- Eurosport 2
- TV-biljett 3
- TV-biljett 2
- TV-biljett 1
- Eurosport
- Adult

Select the values and press SET. Check from the SYSTEM menu that tuner is locked (Tuner locked: yes) to selected transponder.

Select firstly frequency (press SET) and then symbol rate (press SET).

NOTE! When DVBS standard is selected, the modulation is QPSK. When DVBS2 standard is selected, the modulation 8PSK or 16QAM can be selected.

3.2.2 OUTPUT menu

In OUTPUT can be selected:

- Bandwidth 6, 7 tai 8 MHz
- Output level.
Set attenuation value 0...30 dB
- Output channel/frequency

Select the values and press SET.

DST-10CI Web Control Interface



System Input Output IPTV Service management

Output

Output mode:
 ASI
 COFDM

Note: Switching output modes may take a few seconds.

COFDM options

Bandwidth (MHz):	8	Set
Attenuation (dB):	0	Set
Channel name:	E4c	Set
Frequency (MHz):	626	Set

3.2.3 IPTV menu

Set address and port. Default values are 239.192.0.10 and 1234.

Click START to get IPTV stream on the output (RJ 45 connector).

To check IPTV stream you can use e.g. VLC Player.

DST-10CI Web Control Interface



System Input Output IPTV Service management CI

IPTV output

Address:	239	192	0	10
Port:	1234			

Start



DST-10CI Web Control Interface



System Input Output IPTV Service management

Service management

Available services

Name	Provider	ID	Source	Dig	Ana	CI
TV4 Science Fiction	Telenor	2115	Tuner			
TV4 Komedí	Telenor	2114	Tuner			
TV4 Guld	Telenor	2113	Tuner			
Eurosport 2	Telenor	1608	Tuner	X	X	X
TV-biljett 3	Telenor	2109	Tuner			
TV-biljett 2	Telenor	2105	Tuner			
TV-biljett 1	Telenor	2104	Tuner			
Eurosport	Telenor	905	Tuner	X		
Adult	Telenor	227	Tuner			
EinsExtra	ARD	28721	ASI	X		
EinsFestival	ARD	28722	ASI			
EinsPlus	ARD	28723	ASI			
arte	ARD	28724	ASI			
Phoenix	ARD	28725	ASI			

Output:

Decryption:

Digital output

Outgoing data rate: 16.40 MBit/s

Name	Provider	ID	Source	Options
EinsExtra	ARD	28721	ASI	+
Eurosport 2	Telenor	1608	Tuner	+
Eurosport	Telenor	905	Tuner	+

The programs are selected in Service Management menu. Programs can be selected either from tuner or ASI IN list.

Select a service and press Set digital or Set analogue push button.

If you want to select programs for digital output (Output: Set digital) from two or more satellite transponders, connect DST-10CI units together using ASI IN and ASI out connectors.

To descramble program select CI and press Decryption: Enable

When required programs are selected check from that the maximum bit rate is not exceeded (Outgoing data rate: max 30 Mbit/s). As the bit rate of programs is varied, do not select programs so that bit rate is too near maximum (30 Mbit/s).

If OUTGOING DATA RATE is not shown, reset a unit. Then OUTGOING DATA RATE appears.

NOTE ! Select always one analogue program for Output: Set analogue.

When you have finished programming, reset the unit by taking power OFF and again ON.



4. Technical specification

QPSK/8PSK VASTAANOTIN

Input frequency	950 - 2150 MHz
Input level	-65 ... -25 dBm
Demodulation	QPSK, 8PSK, 16 QAM
Max. input TS rate	90 Mbit/s, S2 ja 8PSK 72 Mbit/s, S ja QPSK
DVB yhteensopivuus	DVB-S (EN 300421) DVB-S2 (EN 302307)
Teletext	VBI
Subtitling	DVB or teletext
CAM slots	1

COFDM MODULATOR

Standard	DVB-T (ETS 300 744)
Modulation	2k
Output frequency	50-858 MHz
Bandwidth	6, 7, 8 MHz
Constellation	64 QAM
Guard Interval	1/32
Output level	72 ... 102 dBuV
Max. bit rate	32 Mbit/s

ASI INPUT/OUTPUT

Max. input bit rate	270 Mbit/s
Max. output bit rate	100 Mbit/s

General

Power consumption	5-9 VDC/1,3A
Dimensions	W*H.*D 35 mm*194 mm*130 mm



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.