

user manual **ProStreamer**

5202 / 5203 5210 / 5211 5230



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CONTENTS

1 INTRODUCTION

the ProStreamer range	4
package contents	5
safety instructions	6
accessories	8

2 INSTALLATION OF THE HARDWARE

19" rack mounting	9
wall mounting	10
inserting CAM slot	11
module overview	12

3 WEBGUI

setting the name of the device	
logging into the device	
general configuration	
└→ global	
└→ export configuration	
└→ factory reset	
└→ firmware upgrade	
configuration of the input	
→ DVB-S2 input: 5202/5203	
configuration of the output	
configuration of the MPEG setting	

4 TECHNICAL SPECIFICATIONS

	5202/5203 DVB-S2	26
	5210/5211 DVB-T	27
	5230 A/V	28
5	CONDITIONS OF WARRANTY	29
6	UHF FREQUENCY TABLE	30
	POWER CONVERSION TABLE	31
-		

1 INTRODUCTION

THE PROSTREAMER RANGE



DVB-S(2) » REF. 5202, 5203

4 SAT inputs with 4 active loop-through outputs

4 transponders over 4 tuner matrix

up to 16 FTA programs

up to 12 encoded programs: ref. 5203 (with associated multiservice CAM)



DVB-T » REF. 5210, 5211

1 RF input with active loop-through output

4 multiplexes over 4 tuner matrix

up to 16 FTA programs

up to 12 encoded programs: ref. 5211 (with associated multiservice CAM)



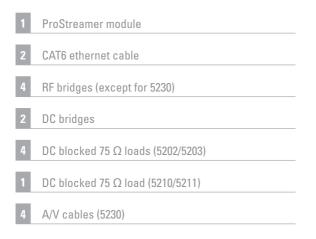
A/V encoder » REF. 5230

4 A/V stereo inputs

4 programs

PACKAGE CONTENTS

Be sure all items listed below are included:



SAFETY INSTRUCTIONS



Read these instructions carefully before connecting the unit



To prevent fire, short circuit or shock hazard:

- Do not expose the unit to rain or moisture.
- Install the unit in a dry location without infiltration or condensation of water.
- Do not expose it to dripping or splashing.
- Do not place objects filled with liquids, such as vases, on the apparatus.
- If any liquid should accidentally fall into the cabinet, disconnect the power plug.



- Install the unit in a well aery location and keep a minimum distance of 15 cm around the apparatus for sufficient ventilation.
- Do not place any items such as newspapers, table-cloths, curtains,... on the unit that might cover the ventilation holes.
- The unit must not be exposed to any source of heat (sun, heater,...).
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- Do not install the product in a dusty place.
- Use the apparatus only in moderate climats (not in tropical climates).
- Respect the minimum and maximum temperature specifications.



To avoid any risk of electrical shocks:

- Connect apparatus only to socket with protective earth connection.
- The mains plug shall remain readily operable.
- Pull out power plug to make the different connections of cables.
- To avoid electrical shock, do not open the housing of adapter.



Only use a dry soft cloth to clean the cabinet.



Do not use solvent.

For repairing and servicing refer to qualified personnel.



Dispose according your local authority's recycling processes

ACCESSORIES



Power Supply » REF. 5050

operating voltage: 15 V

max. output current: 10 A

can power up to 9 modules



19" sub-rack » REF. 5060

can contain up to 9 modules* + power supply

mounting in 19" rack or wall-mountable (bindings delivered)

delivered with 8 blank plates mounted

* depending on the configuration



Fan Unit » REF. 5062

voltage: 230 VAC

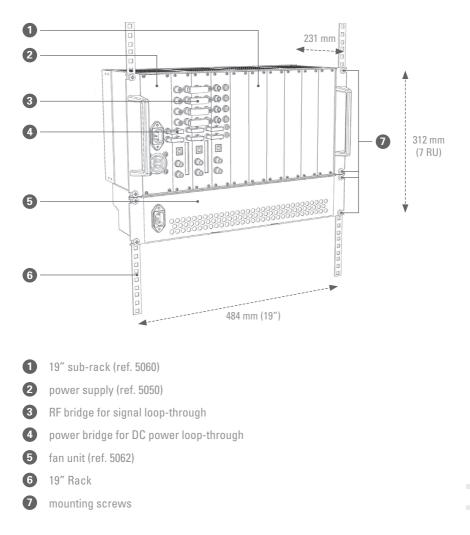
essential for proper functioning of the system

2 INSTALLATION OF THE HARDWARE

Before mounting, install all modules in the sub-rack. Place the power supply (ref. 5050) in the uppermost left slot of the rack (ref.5060).

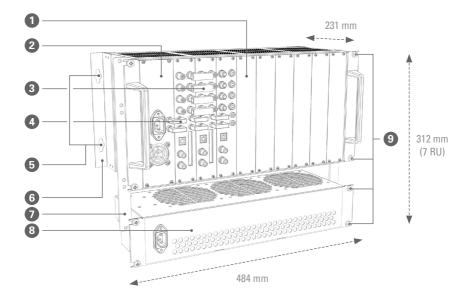
19" RACK MOUNTING

For rack mounting, attach the 19" sub-rack and the optional fan-unit in the rack as indicated by the picture.



WALL MOUNTING

When mounting the headend to a wall, attach the fan-unit to the sub-rack with the delivered bindings. Attach the mounting brackets on the back of the sub-rack for the mural mounting.

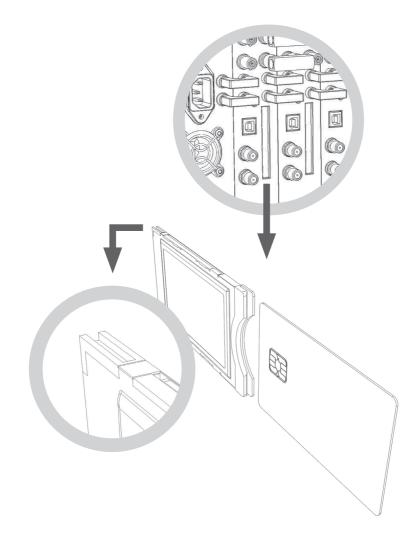


- 19" sub-rack (ref. 5060)
- 2 power supply (ref. 5050)
- 3 RF bridge for signal loop-through
- 4 power bridge for DC power loop-through
- **5** wall mounting holes
- 6 mounting brackets
- *i* bindings for attaching fan unit to the sub-rack
- 8 fan unit (ref. 5062)
- 9 mounting screws

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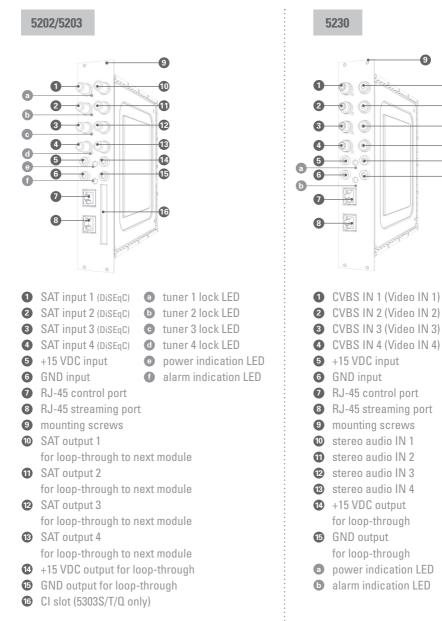
INSERTING CAM SLOT

Connect the RF and power bridges on consecutive modules to bridge the signal and power to the following modules. The CAM slot is inserted with the pit on the top as is indicated below. Insert the CAM card with the **chip pointing to the left side of the CAM module**.



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MODULE OVERVIEW



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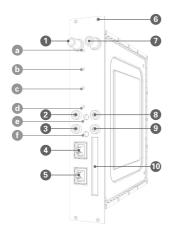
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5210/5211



- 1 Terrestrial input
- 2 +15 VDC input
- 3 GND input
- RJ-45 control port
- **5** RJ-45 streaming port**6** mounting screws
- thounding screws
 terrestrial output for loop-through to next module
- +15 VDC output for loop-through
- GND output for loop-through
- O Cl slot (5211 only)

- a tuner 1 lock LED
- b tuner 2 lock LED
- c tuner 3 lock LED
- d tuner 4 lock LED
- e power indication LED
- alarm indication LED

3 WEBGUI

SETTING THE NAME OF THE DEVICE

When first connecting the modules, be sure to follow this exact procedure!

• Connect the first module in the rack with your PC, using an RJ-45 Ethernet cable (without using a switch!).



• Open a browser and surf to START



• You will now enter the webGui. Go to the Configuration → Global menu:

0 johansson		Language: en 🗸 Alarm: 🗣
DMH web interface 1.2.4.Re	lease	5203 - ProStreamer IP DVB-S2 (CI)
Summary Configuration Global Export configuration Factory reset Firmware upgrade	Host name: DMH IP address: 169 254 221 78	
DVB-S2 inputs IP output MPEG settings		
	Copyright © 2011 UNITRON n.v.	

- Change the name START to another name. Be sure to choose a logical name and **don't forget this name!** This name is the only way to connect to the module later on! It's advisable to print this name, and label the devices.
- After you press *APPLY*, the module will restart. This will take about 25 seconds. Afterwards, you can surf to the new name you just entered, to connect to the module.
- Repeat this procedure with the next modules (1 at a time).
- When all modules have a new name, you can connect all modules to the same network. The modules will now get a new IP address, but you can connect by surfing to the right name (the unique name you gave the module in the previous steps).

LOGGING IN TO THE DEVICE

Open your network browser, and surf to the name of the module. You will now log in to the module. After logging in, the Summary window appears.

J johansson DMH web interface 1.2.4.	Release	ices	Language: en - Alarm: • 5203 - Prostreamer IP DVB-52 (Cl)	-	status 'LED'
Configuration DVB-52 inputs IP output MPEG settings	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6 FI	ame LMBOX HD ISTORY HD OVY HD B0 HD Pedtum HD Zavel Channel HD VE Zavel Channel HD CE ISTORY HD BG		
			Copyright © 2011 UNITRON n.v.		

On this screen, you see all the services, streamed by this module. The type of module, the status and the language are visible on every screen. In the picture above, the status 'LED' is green, indicating that there are no alarms. The alarm status is shown when you move over the status 'LED' with your mouse.

0 johansson				Language:	en 👻	Alarm: 🔵		
DMH web interface 1.2.4.	Release			203 - ProStre		No alarms	a	
Summary	Active set	vices						
Configuration	Туре		Name					
DVB-S2 inputs	TV.	â	FILMBOX HD					
IP output	tv)		HISTORY HD					
MPEG settings	EV.		NOVY HD					
		Ê	HBO HD					
	EV.	Ê	Spektrum HD					
	tv)	1	Travel Channel HD WE					
	tv	Ê	Travel Channel HD CE					
		û	HISTORY HD BG					
	Copyright © 2011 UNITRON n.v.							

GENERAL CONFIGURATION

GLOBAL

Here you can configure the hostname of the module. This name can be used to access the module by simply typing it into your browser as the address and surf to it. This is more convenient than using the IP address.

Openansson Language: en Alarm DMH web interface 1.2.4.Release 5203 - ProStreamer IP DVB-S 5203 - ProStreamer IP DVB-S					
Summary Configuration Global Export configuration Factory reset Firmware upgrade DVB-S2 inputs IP output MPEG settings	Global Host name:	DMH 189 254 221 78			
Copyright © 2011 UNITRON n.x.					

Just enter 'http://hostname' into your favorite browser (not case sensitive) and press enter:



EXPORT CONFIGURATION

The configuration can be exported as an .xml-file.

0 johansson		Language: en 👻 Alarm; 🔍		
DMH web interface 1.2.4	1.Release	5203 - ProStreamer IP DVB-S2 (CI)		
Summary Configuration Global Export configuration Factory reset Firmware upgrade DVB-S2 inputs IP output IP output MPEG settings	The export file is ready and svallable: <u>Cowhioad</u>			
Copyright © 2011 UNITRON n.v.				



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FACTORY RESET

All settings can be reset to default by means of a factory reset.



FIRMWARE UPGRADE

To upgrade the firmware of the device, click the Firmware upgrade menu item.

0 johansson		Language: en 👻 Alarm: 🔍	
DMH web interface 1.2.	Release	5203 - ProStreamer IP DVB-S2 (CI)	
Summary Configuration Global Export configuration Factory reset Firmware upgrade DVR-52 inputs IP output MPEG settings	Firmware upprade File: Bladeren. Upload, Start firmware		
Copyright © 2011 UNITRON n.x			

Click on the *BROWSE* button, and open the upgrade file. Click *UPLOAD* to send the file to the device, and click *START FIRMWARE* to install the new firmware on the device.

CONFIGURATION OF THE INPUT

DVB-S2 INPUT: 5202/5203

Go to the LNB Settings menu to configure the 4 LNB inputs.

ummary	LNB settings						
onfiguration VB-S2 inputs	Input	Label	Voltage	Tone	DISEqC	Band	Ext. voltage
VB settings	1	Vlow	13V 💌	OFF -	Α 🕶	Ku 👻	V
iner 1	2	H low	18V -	OFF -	Α 👻	Ku 👻	V
	3	V high	13V 👻	ON 👻	Α 👻	Ku 👻	V
iner 2	4	H high	18V 👻	ON 👻	Α -	Ku 👻	V
iner 3							
uner 4	Apply						

- Input: Sequence number of the input (also indicated on the front of the actual module)
- Label: custom label for each input (e.g. V low, or ASTRA 19.2 V Low,...)
- Voltage: The LNB voltage to select the polarization

 13V: Vertical polarization
 18V: Horizontal polarization
- Tone: LNB tone to select low/high band
 ON: high band
 OFF: low band
- DiSEqC[®]: control of a DiSEqC[®] switch (A/B/C/D)
- Band: Satellite band
 - Ku-band: common in Europe
 - $\circ\,\mbox{C-band}$: mostly used in the USA
- Ext. Voltage: Add 1V to the LNB voltage to compensate the cable losses for long coaxial cables.

Press APPLY to confirm the parameters.

Go to the *TUNER* menu to configure the tuner frequency. The modules have 4 independent tuners, which can be assigned to every input, thanks to a built-in multiswitch.

0 johansson		Language: en 🗸 Alarm; 🔎			
DMH web interface 1.2.4.F	elease	5203 - ProStreamer IP DVB-S2 (CI)			
Summary Configuration DVB-S2 inputs LNB settings	Tuner 1 - Settings Input: V Iow • Frequency (MHz): 10847 Baud Rate (KBaud): 23000				
Tuner 1 Tuner 2 Tuner 3 Tuner 4	Apply				
IP output MPEG settings	Tuner 1 - Status				
	BER: 10 ⁻¹ SNR: 0 dB				
	Available services Type Name	SID			
Copyright @ 2011 UNITRON n.v.					

- Input: One of the 4 labels configured in the previous step. This selects the satellite input.
- Frequency: Transponder frequency
- Baud rate [kBaud]

Press *APPLY* to confirm the parameters. The module will now set the tuner to this frequency. Wait until the correct parameters are loaded.

ohanssor		Language: en 🛩 Alarm: 🧶
MH web interface 1.	2.4.Release	5203 - ProStreamer IP DVB-S2 (CI
Summary	Tuner 1 - Settings	
Configuration		
	Input H high 👻	
NB settings	Frequency (MHz): 12109 Baud Rate (kBaud): 27500	
uner 2	Apply	
uner 3		
uner 4		
	Tuner 1 - Status	
	Lock:	
	Level: Loading	
	BER: 10-1	
	SNR: 0 dB	
	Available services	
		SID
	Type Name	SID

When the tuner is able to lock on the frequency, the list of services from this transponder will be shown.

johansson				Language: en 👻 Alarm: (
IH web interface 1.2.4	4.Release			5203 - ProStreamer IP DVB-S2
immary	Tuner 1 - Sett	ngs		
Infiguration	1			
B-S2 inputs	Input		H high 👻	
3 settings		ncy (MHz):	12109	
her 1	Baud R	ate (kBaud):	27500	
ier 2				
ner 3	Apply			
ner 4				
	Tuner 1 - Stat	15		
output				
EG settings	Lock:	•		
	Level:		-39 dBm	
	BER:		10-8	
	SNR:	_	14 dB	
	Available serv			
	Available serv	ices		
	Туре	Name		SID
	🛛 🖸 🕯	EUROS	PORT HD	5041
		HISTOR	RY HD	5042
	N	FILMBO	IX HD	5043
		NOVY H	ID	5044
	N	Spektru	im HD	5045
		HBO HI	0	5047
		Travel C	Channel HD CE	5048
		Eurosp	ort HD DUT	5049

The status of the tuner is shown.

- Status:
 - Green: tuner locked
 - Red: tuner unlocked
- Level: input signal level [dBm]
- BER: Bit Error Rate
- SNR: Signal to Noise Ratio [dB]

The table 'Available services' shows all the services found in the transponder.

- Type: Type of data
 - TV service
 - 🌶 radio service
 - locked service (encoded)
 - dunlocked service (decoded)
- Name: Service name
- SID: Service Identifier (unique ID for a service)

CONFIGURATION OF THE OUTPUT

Null PCP VLN PCP V 1 229.0.1.1 4552 OFF • 4 • 2 229.0.1.2 4552 OFF • 4 • 3 229.0.1.3 45152 OFF • 4 • 4 229.0.1.3 45152 OFF • 4 • 5 229.0.1.3 45152 OFF • 4 •	Channel Multicast address UDP port VLAN PCP VUC 1 229.0.1.1 4512 OFF 4 1 2 229.0.1.2 4512 OFF 4 1 3 229.0.1.3 4512 OFF 4 1 4 229.0.1.4 4512 OFF 4 1 5 229.0.1.5 4512 OFF 4 1	TE2. 165.10.100 T TE2. 165.10.100 T Apply Channel Multicast address UDP port VLN PCP VID 1 2280.1.1 49152 OFF • 4 • 1 2 2280.1.2 49152 OFF • 4 • 1 3 2280.1.3 49152 OFF • 4 • 1 6 2280.1.6 49152 OFF • 4 • 1 6 2280.1.6 49152 OFF • 4 • 1 7 2280.1.8 49152 OFF • 4 • 1 8 2280.1.8 49152 OFF • 4 • 1 7 2280.1.8 49152 OFF • 4 • 1 9 2280.1.8 49152 OFF • 4 • 1 11 2280.1.1 49152 OFF • 4 • 1						
192.168.10.100 1 1 290 / 1 49152 OFF - 4 1 230.1.1 49152 OFF - 4 - 2 230.1.2 49152 OFF - 4 - - 3 230.1.3 49152 OFF - 4 - <	Is: Is: Is: Is: Is: Is: Is: Channel Multicast address UDP port VLN PCP VIC 1 228 0.1.2 49152 OFF • 4 • I 3 228 0.1.3 49152 OFF • 4 • I 4 228 0.1.4 49152 OFF • 4 • I 5 228 0.1.6 49152 OFF • 4 • I 6 228 0.1.8 49152 OFF • 4 • I 7 228 0.1.8 49152 OFF • 4 • I 7 228 0.1.8 49152 OFF • 4 • I 9 228 0.1.8 49152 OFF • 4 • I	TE2. 165.10.100 T TE2. 165.10.100 T Apply Channel Multicast address UDP port VLN PCP VID 1 2280.1.1 49152 OFF • 4 • 1 2 2280.1.2 49152 OFF • 4 • 1 3 2280.1.3 49152 OFF • 4 • 1 6 2280.1.6 49152 OFF • 4 • 1 6 2280.1.6 49152 OFF • 4 • 1 7 2280.1.8 49152 OFF • 4 • 1 8 2280.1.8 49152 OFF • 4 • 1 7 2280.1.8 49152 OFF • 4 • 1 9 2280.1.8 49152 OFF • 4 • 1 11 2280.1.1 49152 OFF • 4 • 1						
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2 239.0.12 49152 OFF 4 4 3 239.0.13 49152 OFF 4 4 4 239.0.14 49152 OFF 4 4 5 239.0.15 49152 OFF 4 4 5 239.0.15 49152 OFF 4 4	2 299.0.1.2 49152 OFF 4 1 3 239.0.1.3 49152 OFF 4 1 4 239.0.1.4 49152 OFF 4 1 5 229.0.1.6 49152 OFF 4 1 6 229.0.1.6 49152 OFF 4 1 7 239.0.1.6 49152 OFF 4 1 8 239.0.1.6 49152 OFF 4 1 9 239.0.1.6 49152 OFF 4 1	2 299.0.1.2 44152 OFF 4 1 3 293.0.3.3 44152 OFF 4 1 4 293.0.1.4 4152 OFF 4 1 5 293.0.1.6 4152 OFF 4 1 6 293.0.1.6 4152 OFF 4 1 7 293.0.1.6 4152 OFF 4 1 8 290.1.8 4152 OFF 4 1 9 290.1.8 4152 OFF 4 1 9 290.1.8 4152 OFF 4 1 10 229.0.1.8 4152 OFF 4 1 11 290.1.11 4152 OFF 4 1						
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11 239.0.1.11 49152 OFF 4 -		12 239.0.1.12 49152 OFF _ 4 _ 1	9	239.0.1.9 239.0.1.10	49152	OFF 🚽	4 🗸	
			9 10 11	239.0.1.9 239.0.1.10 239.0.1.11	49152 49152	OFF -	4 🖵 4 🖵	1
12 239.0.1.12 49152 OFF 4	12 239.0.1.12 49152 OFF 🗸 4 🗸 1	13 239.0.1.13 49152 OFF 4 1	9 10 11 12	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12	49152 49152 49152	OFF - OFF -	4 🕌 4 🛶 4 🛶	1
12 239.0.1.12 49152 OFF + 4 + 13 239.0.1.13 49152 OFF + 4 +	12 239.0.1.12 49152 OFF ↓ 4 ↓ 1 13 239.0.1.13 49152 OFF ↓ 4 ↓ 1		9 10 11 12 13	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12 239.0.1.13	49152 49152 49152 49152	OFF • OFF • OFF •	4 v 4 v 4 v 4 v	1
12 239.0.1.12 49152 OFF 4 - 13 239.0.1.13 49152 OFF 4 - 14 239.0.1.14 49152 OFF 4 -	12 238.0.1.12 49152 OFF ↓ 4 ↓ 1 13 238.0.1.13 49152 OFF ↓ 4 ↓ 1 14 238.0.1.14 49152 OFF ↓ 4 ↓ 1	14 239.0.1.14 49152 OFF 🖕 4 🦊 1	9 10 11 12 13 14	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12 239.0.1.13 239.0.1.14	49152 49152 49152 49152 49152	OFF • OFF • OFF • OFF •	4 y 4 y 4 y 4 y 4 y	1
7 239.0.1.7 49152 OFF ↓ 4 ↓ 8 239.0.1.8 4952 OFF ↓ 4 ↓ 9 239.0.1.9 49152 OFF ↓ 4 ↓ 10 239.0.1.0 49152 OFF ↓ 4 ↓	11 239.0.1.11 49152 OFF 4		8	239.0.1.8 239.0.1.7	49152 49152	OFF - OFF -	4 🕌 4 🛶 4 🛶	
12 239.0.1.12 49152 OFF 4	12 239.0.1.12 49152 OFF 🗸 4 🗸 1		9 10 11 12	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12	49152 49152 49152	OFF - OFF -	4 🕌 4 🛶 4 🛶	1
12 239.0.1.12 49152 OFF + 4 + 13 239.0.1.13 49152 OFF + 4 +	12 239.0.1.12 49152 OFF ↓ 4 ↓ 1 13 239.0.1.13 49152 OFF ↓ 4 ↓ 1		9 10 11 12 13	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12 239.0.1.13	49152 49152 49152 49152	OFF • OFF • OFF •	4 v 4 v 4 v 4 v	1
12 239.0.1.12 49152 OFF + 4 + 13 239.0.1.13 49152 OFF + 4 +	12 239.0.1.12 49152 OFF ↓ 4 ↓ 1 13 239.0.1.13 49152 OFF ↓ 4 ↓ 1		9 10 11 12 13	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12 239.0.1.13	49152 49152 49152 49152	OFF • OFF • OFF •	4 v 4 v 4 v 4 v	1
12 239.0.1.12 49152 OFF 4 4 13 239.0.1.13 49152 OFF 4 4 14 239.0.1.14 49152 OFF 4 4	12 239.0.1.12 49152 OFF 4 1 13 239.0.1.13 49152 OFF 4 1 14 239.0.1.14 49152 OFF 4 1 15 239.0.1.15 49152 OFF 4 1	14 239.0.1.14 49152 OFF + 4 + 1 15 239.0.1.15 49152 OFF + 4 + 1	9 10 11 12 13 14	239.0.1.9 239.0.1.10 239.0.1.11 239.0.1.12 239.0.1.13 239.0.1.14	49152 49152 49152 49152 49152	OFF - OFF - OFF - OFF - OFF -	$ \begin{array}{c} 4 \\ $	1

Navigate to the *IP SETTINGS* menu to configure the IP addresses at the output.

- Channel: The number of the channel
- Multicast address: Multicast IP address of the 16 streams. These
 multicast addresses will be needed to receive the streams on a PC/TV.
- UDP port: UDP port number
- VLAN: turn VLAN ON/OFF
- PCP: Priority Code Point: a 3-bit field which refers to the IEEE 802.1p priority. It indicates the frame priority level. Values are from 0 (best effort) to 7 (highest); 1 represents the lowest priority. These values can be used to prioritize different classes of traffic (voice, video, data, etc)
- VID: VLAN Identifier: a 12-bit field specifying the VLAN to which the frame belongs.

Navigate to the *SERVICE ASSIGNMENT* menu to configure the streams. Every Prostreamer module (except for the 5230) can stream up to 16 services.

Service as	signment				5203 - ProSt	
ation	Multicast	Port		Name	SID On	CAM
1 🗋	-					20
2 📄	-	-	-		-	21
з ы	-	-	-		-	20
4 📫			•			21
5 🜄		-				21
e 💽	-	-	-	-	-	2
7 🜄	-	-	-		-	21
8 📫		1.1	÷			21
9 🗋	-	-	-		-	21
10 📄	-	-	-		-	28
11 💽	•		•	•		21
12 🔛	•	1	÷			28
13 🜄		-	•		-	
14 🔛	-	-	-	-	-	
15 💽			1			
18 📄		•	-			2
IP bitrat	r			/ 100 Mbps		

- Multicast address: IP address of the stream
- Port: UDP port of the application
- Name: Name of the service
- SID: Service ID: Unique number, which identifies the service
- ON: Check this box to enable the streaming of this service, uncheck to stop the streaming.
- CAM: Check this box to pass this stream through the CAM slot for decryption.
- Icons:

add a new program to the list of services

- update the current service, this icon will become active if some setting has changed
- delete the service from the list, pressing this icon will remove the program permanently (you can add it again)

Press the 🔁 button to add a new service. A list of available services (from all 4 tuners) will appear on the screen.

🧿 johansson			Langu	uage: en 🗸 Alarm: 🔵
DMH web interface 1.2.4	4.Release		5203 - Pro	oStreamer IP DVB-S2 (CI)
Summary	Service assignment			
Configuration DVB-S2 inputs	Multicast address Port	Name	SID On	САМ
IP output	1 🛃 🔯 🔒 T1 EUROSPORTHI)	5041	2 X
IP settings Service assignment	2 🔛 😥 🔒 T1 HISTORY HD		5042	2 🗙
MPEG settings	3 🛃 🔯 🔒 T1 FILMBOX HD		5043	2 🗙
ini co acunga	4 🛃 🔯 T1 NOVY HD		5044	2 🗙
	5 🛃 🔯 🔒 T1 Spektrum HD		5045	2 🛛
	6 🔛			2 🗙
	7 💟			2 🗙
	8 🕞			2 X

Click on the service to be added and wait until the service is loaded into the list.

DMH web interface 1.2	.4.Release					520	3 - Pro	Streame	r IP D\	/B-S2 (CI
Summary	Service assi	gnment								
		Multicast addr	ess Port		Name	SID	On	CAM		
IP output	1 🖸	1	T149EUR			5041	V	V		
IP settings Service assignment	2 🔛	1	T1 HIST	ORY HD		5042				
MPEG settings	3 🜄		T1 FILM	IBOX HD		5043				
	4 💟		T1 NOV	Y HD		5044				
	5 🔛		T1 Spr	Loading	3	5045				
	6 🔛			121						
	7 💽									
	8 📄									

The list will be refreshed and the added service will appear.

MH web interface 1.2.4	1.Release	2							520	3 - Pro	Streame	er IP DV	/B-S2
Summary	Servi	ce assig	Inment										
Configuration DVB-S2 inputs		L.	lulticast address	Port				Name	SID	On	CAM		
IP output	1		239.0.1.1	49152	T1	tv.	6	EUROSPORT HD	5041	V	V	2	×
IP settings Service assignment	2		239.0.1.2	49152	T1	W		HISTORY HD	5042			2	×
MPEG settings	3		239.0.1.3	49152	T1	tv	â	FILMBOX HD	5043	v	V	2	×
	4		239.0.1.4	49152	T1	tv		NOVY HD	5044	V		2	×
	5		239.0.1.5	49152	T1	W	â	Travel Channel HD CE	5048	v	V	2	×
	6		239.0.1.6	49152	T1	tv)		Eurosport HD DUT	5049	V		2	×
	7		239.0.1.7	49152	T 4	tv	â	HISTORY HD	5042	V	V	2	X
	8				4				1.1			2	

You can add up to 16 programs, as long as the total bitrate is lower than 100 Mbps. The bitrate is shown in the bar on the bottom of the *SERVICE ASSIGNMENT* page:

IP bitrate:	 0/	100	Mbps

If the bar is green, the total bitrate is good and the chance of having an overflow is quite small. However, if this bar becomes orange, this means the bitrate is close to an overflow. This will happen if the total bitrate is higher than 85 Mbps. If this happens, it is advisable to delete some services, until the bar becomes green again.

If the bar becomes red, there is an overflow. This can be due to the fact that the total bitrate exceeds 100 Mbps, or there can be a CAM overflow. Delete services until the bar becomes green again.

CONFIGURATION OF THE MPEG SETTINGS

This menu item is only visible with modules having a DVB-S2 input.

0 johansson		Language: en 🕶 Alarm: 🔵			
DMH web interface 1.2.4.F	MH web interface 1.2.4.Release 5203 - Pro Streamer IP DVE				
Summary Configuration DVB-S2 inputs IP output	MPEG settings				
	Copyright © 2011 UNITRON n.v.				

- Forward EPG tables: Forward Electronic Program Guide tables to the TV's
- CAS forwarding: Forward the Control Access System tables (CAT, EMM, ECM) to descramble the programs with a set-top box
 - CAT: Conditional Access Table
 - ° EMM: Entitlement Management Message
 - $\circ\,\text{ECM}:$ Entitlement Control Message
- Block others: Block private data
- PID share: Enable sharing of the PES, PCR and ECM

4 TECHNICAL SPECIFICATIONS

DVB-S2		5202	5203
INPUT	interface	4 x QPSK	/ 8PSK
OUTPUT	standard protocols capacity	IEEE 802.3 10/ Multicast up to 16 simultaneous str	IP/UDP
	RF input with loop-through	8 x fem	ale F
CONNECTORS	power supply with loop-through	4 x 'banana	a sockeť
	management port	RJ-4	15
	streaming port	RJ-4	15
	PCMCIA CAM slot	no	yes
	supply voltage	+15 V	DC
GENERAL	consumption	0.6 A	0.8 A
	LED indications	4x lock status,	power, alarm
PERFORMANCE	transport stream processing	de-multiplexing of up PSI/SI p PID filtering/rema regeneration of P EMM/ECM pa IP/UDP encapsulation of	arsing pping capability AT/PMT tables iss-through
OPERATING TEMPERATURE		0 to +40°C	
DIMENSIONS		5RU x 8TE x 195 mm	

DVB-T		5210	5211
INPUT	interface	4 x C()FDM
OUTPUT	standard protocols capacity	IEEE 802.3 10 Multicas up to 16 simultaneous st	t IP/UDP
	RF input with loop-through	2 x fer	nale F
CONNECTORS	power supply with loop-through	4 x 'banar	na sockeť
	management port	RJ	-45
	streaming port	RJ	-45
	PCMCIA CAM slot	no	yes
	supply voltage	+15	VDC
GENERAL	consumption	0.5 A	0.7 A
	LED indications	4x lock status, power, alarm	
PERFORMANCE	transport stream processing	regeneration of EMM/ECM p	parsing apping capability PAT/PMT tables
OPERATING TEMPERATURE		0 to +40°C	
DIMENSIONS		5RU x 8TE x 195 mm	

A / V

INPUT	interface	4 x A / V (CVBS)
OUTPUT	standard protocols capacity	4 streams
	RF input with loop-through	video: 4 x CINCH audio: 4 x jack Ø 3,5 mm stereo
CONNECTORS	power supply with loop-through	4 x 'banana socket'
	management port	RJ-45
	streaming port	RJ-45
	supply voltage	+15 VDC
GENERAL	consumption	0.65 A
	LED indications	power, alarm
PERFORMANCE	transport stream processing	encoding: video: MPEG-2 audio: MPEG-1 IP/UDP encapsulation of 4 MPEG streams
OPERATING TEMPERATURE		0 to +40°C
DIMENSIONS		5RU x 8TE x 195 mm

5 CONDITIONS OF WARRANTY

PERIOD OF WARRANTY

Unitron N.V. warrants the product as being free from defects in material and workmanship for a period of 24 months starting from the date of production indicated on it. See note below.

If during this period of warranty the product proves defective, under normal use, due to defective materials or workmanship, Unitron N.V, at its sole option, will repair or replace the product. Return the product to your local dealer for reparation.

THE WARRANTY IS APPLIED ONLY FOR DEFECTS IN MATERIAL AND WORKMANSHIP AND DOES NOT COVER DAMAGE RESULTING FROM

- Misuse or use of the product out of its specifications.
- Installation or use in a manner inconsistent with the technical or safety standards in force in the country where the product is used.
- Use of non-suitable accessories (power supply, adapters ...).
- Installation in a defect system.
- External cause beyond the control of Unitron N.V. such as drop, accidents, lightning, water, fire, improper ventilation...

THE WARRANTY IS NOT APPLIED IF

- Production date or serial number on the product is illegible, altered, deleted or removed.
- The product has been opened or repaired by a non-authorised person.

NOTE

Date of production is MMYY format, example 0411 = April 2011. For the serial number barcodes, the date corresponds to the 4 first numbers.

6 UHF FREQUENCY TABLE

TV band	Channel	Frequency MHz			
IV	21	470-478			
	22	478-486			
	23	486-494			
	24	494-502			
	25	502-510			
	26	510-518			
	27	518-526			
	28	526-534			
	29	534-542			
	30	542-550			
	31	550-558			
	32	558-566			
	33	566-574			
	34	574-582			
	35	582-590			
	36	590-598			
	37	598-606			
V	38	606-614			
	39	614-622			
	40	622-630			
	41	630-638			
	42	638-646			
	43 44	646-654			
		654-662 662-670			
	45 46	670-678			
	40	678-686			
	48	686-694			
	49	694-702			
	50	702-710			
	51	710-718			
	52	718-726			
	53	726-734			
	54	734-742			
	55	742-750			
	56	750-758			
	57	758-766			
	58	766-774			
	59	774-782			
	60	782-790			
	61	790-798			
	62	798-806			
	63	806-814			
	64	814-822			
	65	822-830			
	66	830-838			
	67	838-846			
	68	846-854			
	69	854-862			

7 POWER CONVERSION TABLE

μV 75 Ω	dBµV	dBm	mV 75 Ω	dBµV	dBm	V 75 Ω	dBµV	dBm
1	0	-109	1	60	-49	1	120	+11
1.5	3.5	-105.5	1.5	63.5	-45.5	1.5	123.5	+14.5
2	6	-103	2	66	-43	2	126	+17
2.5	8.0	-101	2.5	68	-41	2.5	128	+19
3	9.5	-99.5	3	69.5	-39.5	3	129.5	+20.5
3.5	11	-98	3.5	71	-38	3.5	131	+22
4	12	-97	4	72	-37	4	132	+23
4.5	13	-96	4.5	73	-36	4.5	133	+24
5	14	-95	5	74	-35	5	134	+25
6	15.5	-93.5	6	75.5	-33.5	6	135.5	+26.5
7	17	-92	7	77	-32	7	137	+28
8	18	-91	8	78	-31	8	138	+29
9	19	-90	9	79	-30	9	139	+30
10	20	-89	10	80	-29	10	140	+31
15	23.5	-85.5	15	83.5	-25.5			
20	26	-83	20	86	-23			
25	28	-81	25	88	-21			
30	29.5	-79.5	30	89.5	-19.5			
35	31	-78	35	91	-18			
40	32	-77	40	92	-17			
45	33	-76	45	93	-16			
50	34	-75	50	94	-15			
60	35.5	-73.5	60	95.5	-13.5			
70	37	-72	70	97	-12			
80	38	-71	80	98	-11			
90	39	-70	90	99	-10			
100	40	-69	100	100	-9			
150	43.5	-66.5	150	103.5	-5.5			
200	46	-63	200	106	-3			
250	48	-61	250	108	-1			
300	49.5	-59.5	300	109.5	+0.5			
350	51	-58	350	111	+2			
400	52	-57	400	112	+3			
450	53 54	-56	450	113	+4			
500		-55	500	114	+5			
600 700	55.5	-53.5	600 700	115.5	+6.5 +8			
700 800	57 58	-52 -51	800	117 118	+8 +9			
900	58 59	-51	900	118	+9 +10			
300	09	-30	1000	120	+10 +11			
			1000	120	+11			



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