



User Manual

UNIVERSE

Ref. 8600



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1. INTRODUCTION

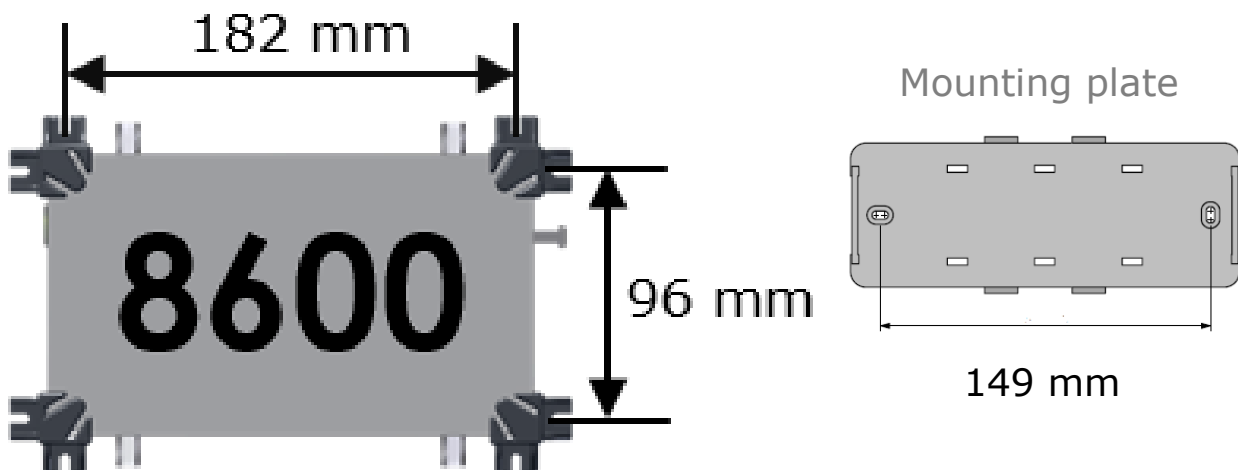
Product description

- Receives 1 transponder from any DVB source (satellite, terrestrial or cable)
- Decrypts the PayTV channels, when a professional CAM is inserted
- Puts the demodulated transponder on your private coaxial and IP network
- Can work standalone to insert channels in your existing network
- More products can be combined to a make a complete headend:
 - Cascadable inputs and outputs
 - Remote powering capabilities
- Compatible with SD and HD, with MPEG2 and MPEG4
- Perfect picture quality thanks to a MER, comparable to premium headend equipment
- Plug&Play thanks to a built-in WebGUI

Package contents

- 1x Universe (ref.8600)
- 1x Power adaptor (including mounting plate with tie-wrap)
- 1x Ethernet cable

Mounting



Typical installation

- Perfect when your TV installation does not have satellite tuners, but you wish to receive satellite TV.
- Perfect when your TV installation does not support DVB-T2 tuners, but you wish to receive the newest DVB-T2 signals. See figure 1.
- In existing installation where you want to add a few extra channels from different sources.
- New installations, where you can use 1 or multiple Universes to setup a complete network of TV and radio channels. See figures 2 and 3.
- In some countries, the operator does not support CAMs with business-to-business (B2B) subscriptions. But if that operator allows professional installations, you can use multiple Universes with business-to-consumer (B2C) subscriptions without driving the costs too high.

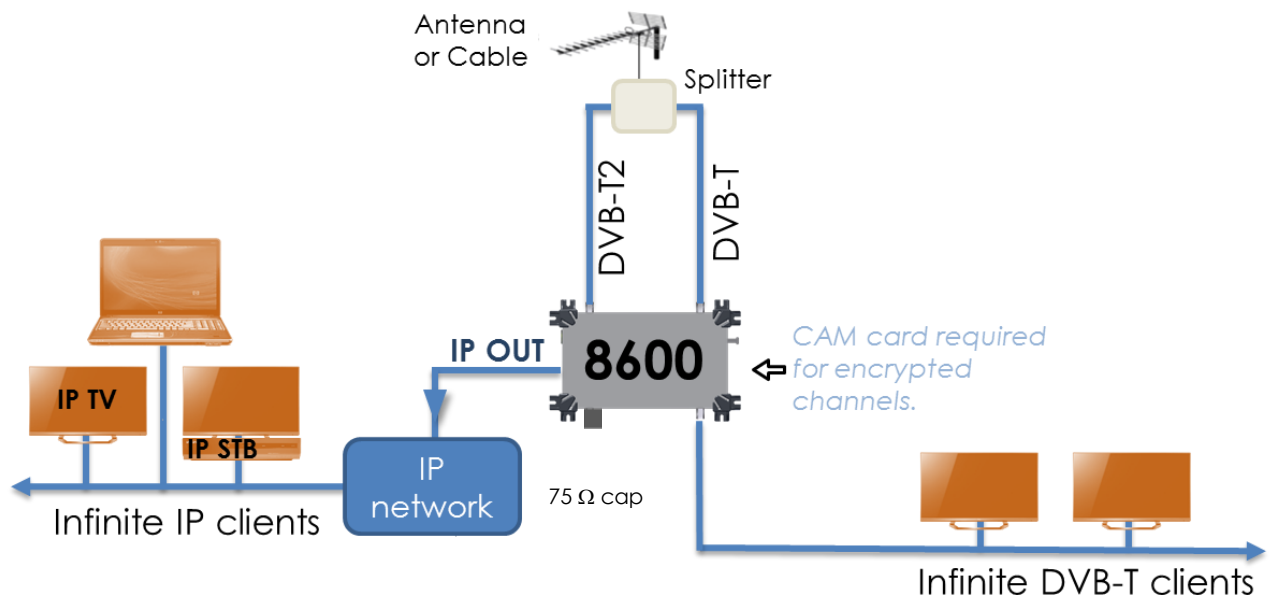


FIGURE 1: DVB-T2 CONVERTED TO DVB-T SIGNALS AND ADDED TO THE DVB-T BROADCAST

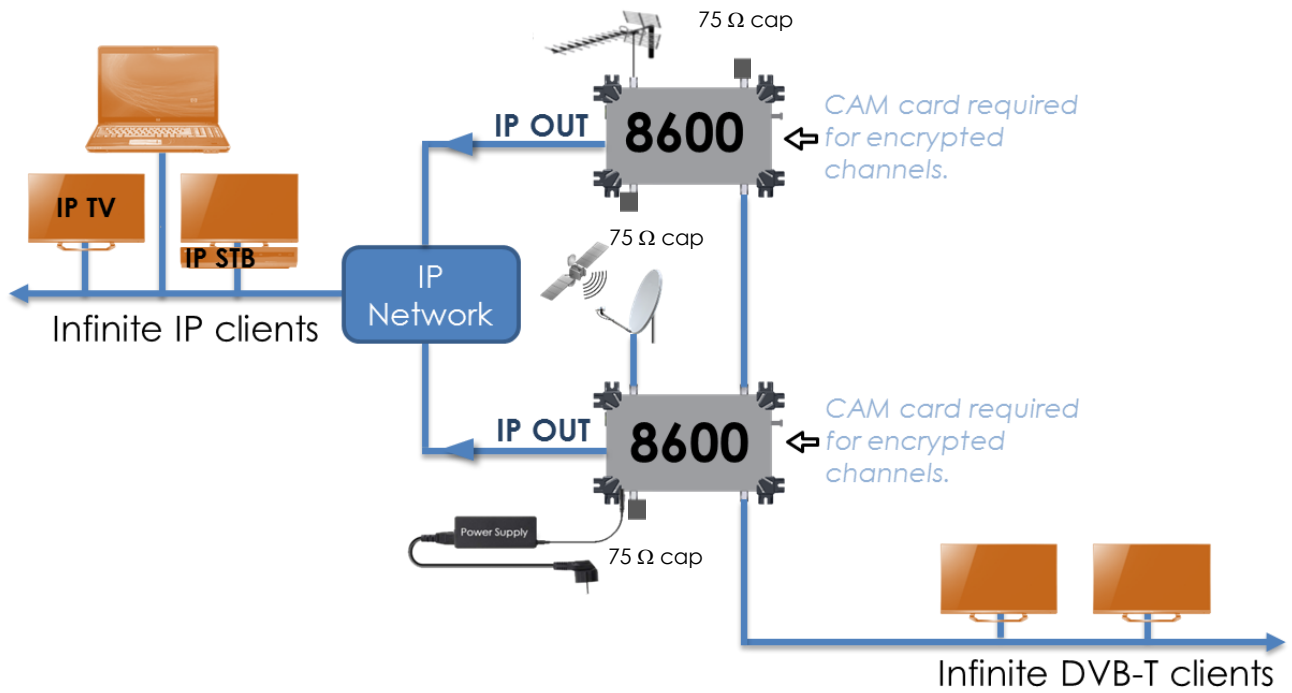


FIGURE 2: DVB-T AND DVB-S2 CONVERTED TO DVB-T AND IP CHANNELS

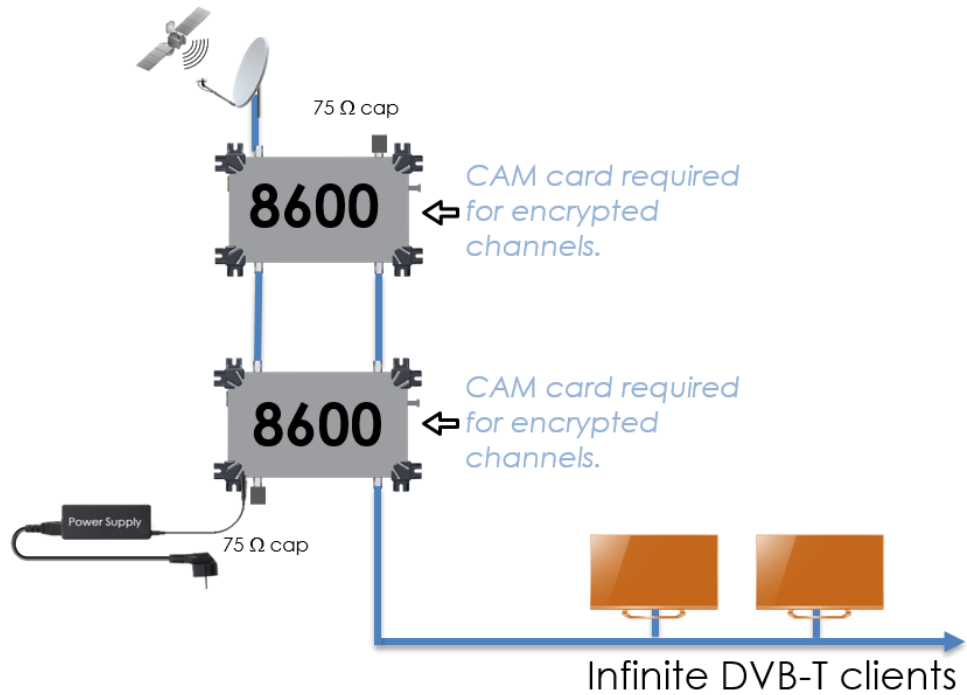


FIGURE 3: DVB-S2 CONVERTED TO DVB-T

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.

- ⚠ To avoid any risk of overheating:
 - Install the unit in a well aired 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.
 - 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 climates (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.



Maintenance

- ⚠ 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

2. INSTALLATION OF THE HARDWARE

Module overview



1. INPUT: DVB-S/S2, DVB-T/T2, DVB-C
2. BYPASS: to insert a network of existing TV channels (should be blocked with a 75Ω DC-blocked resistor when not used)
3. CAM INTERFACE
4. TV OUT: DVB-T or ISDB-T
5. LOOP-THROUGH: to connect to the next Universe INPUT (should be blocked with a 75Ω DC-blocked resistor when not used)
6. 15 VDC INPUT + POWER LED
7. RESET BUTTON
8. ETHERNET CONNECTOR: WebGUI + IP OUT
9. TUNER LOCK LED: indicates if the tuner is locked. If the LED is blinking, that means the WebGUI is connected.

For typical applications, see figure 1, 2 and 3 on page 5 and next.

Connecting the power supply

The Universe works with the supplied adaptor of 15V DC. The power supply can be connected via the inlet (6) but the Universe can also be powered via the TV OUT (4).

15V DC is also being supplied to the BYPASS (2), which enables 1 power supply to feed more than 1 unit. Up to 3 Universes can be powered from the same adaptor.

3. CONFIGURATION OF THE MODULE

3.1. Minimal system requirements

The WebGUI is supported by the following web browsers (and newer versions of these browsers):

- Chrome 4
- Safari 3.1
- Firefox 3.6
- Explorer 9
- Opera 10.6

When using a different browser, we cannot guarantee a correct functioning of the interface.

3.2. Starting up the module

Connect all cables needed for your installation. (See p.8 Installation of the Hardware.) For the first set-up it is advised to connect the Ethernet cable (RJ45) directly to your PC (without using a switch).

- After powering the Universe, wait until the power led turns green (this can take about 2 minutes). Once the power led is green, the unit can be accessed through the WebGUI. The unit uses 192.168.50.50 as the default IP address. Therefore, you will need to set-

up a static IP in your PC that matches the subnet of the device. For example 192.168.50.25.

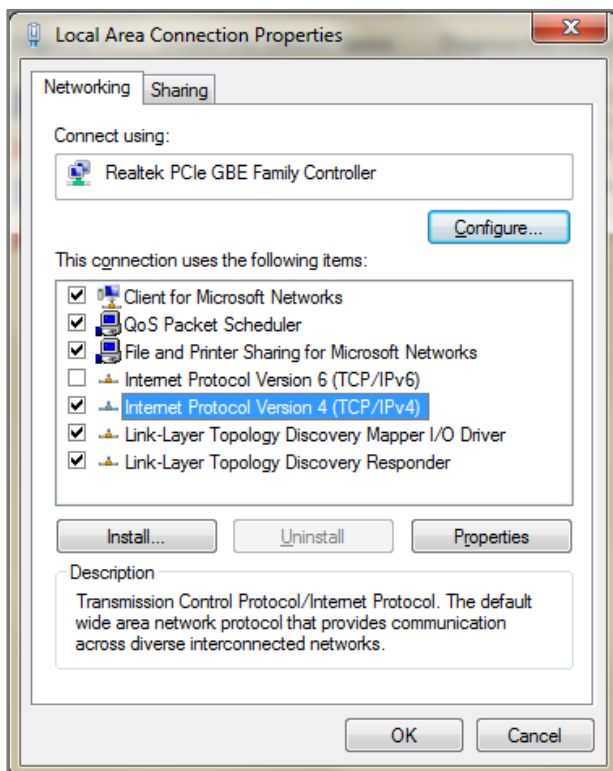
Windows 7

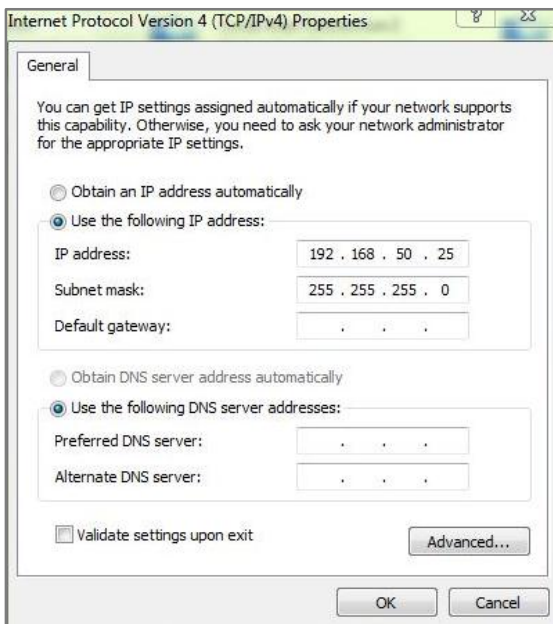
Go to start → Control Panel → Network and Internet → Network and Sharing Center → Change Adapter Settings. Right-click on "Local Area Connection" and then on "Properties".

Windows 8

Open the windows 8 start screen by pressing the start button. Type "Control Panel" and press enter. Then go to "Network and Internet" → "Network and Sharing Center" → "Change Adapter Settings". Right-click on "Local Area Connection" and then on "Properties".

Double click on "Internet Protocol Version 4 (TCP/IPv4)" to enter the IP settings of your adaptor.



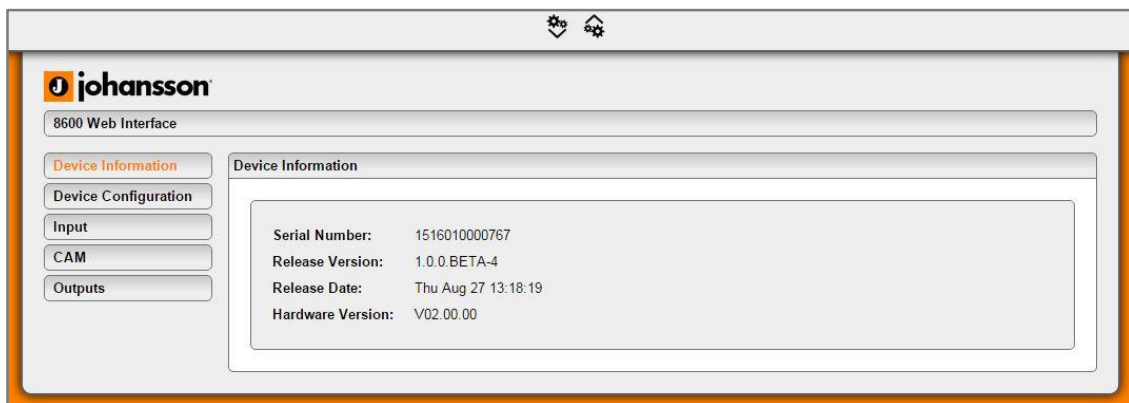


Check the radio button "Use the following IP address" and enter an IP and subnet mask.

You can leave the Default gateway and DNS settings empty.

Open your browser and surf to the website <http://192.168.50.50>.

If everything went fine you will see the following webpage, if not check your network settings and try again.



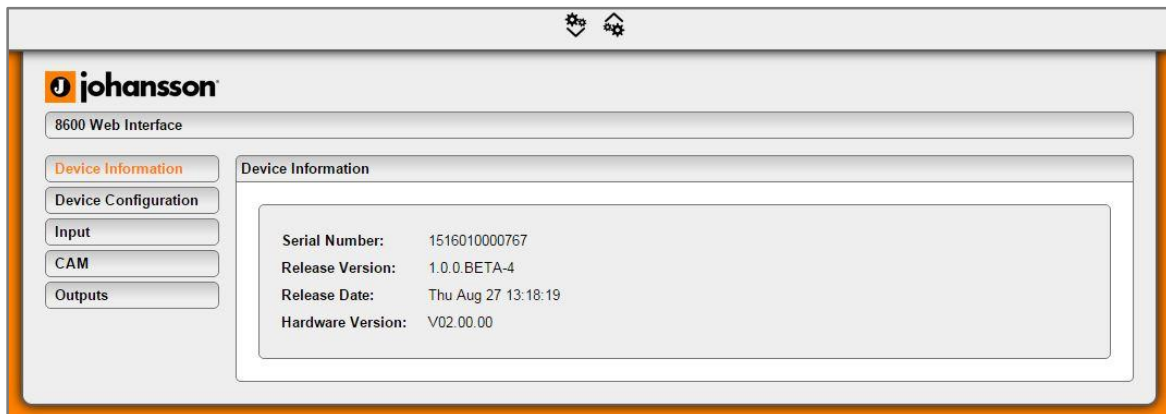
After you have changed the IP address of your device (See page 12) you can unplug the direct cable and add the device to your installation. Don't forget to change the IP settings of your PC back to its previous settings.

Resetting the device

Reboot the device by shortly pressing the reset button 1 second. When the button is released the power led will turn red until the device is rebooted.

Reset the device to factory default settings by pressing the reset button for more than 10 seconds. When the button is released the power led will turn red until the reset is done. The device will be restored to factory default settings and the IP of the device will be changed to 192.168.50.50.

3.2.1. Device Information



Device Information gives some basic information about the device. Here you can find the serial number, firmware version, the release date of the firmware and the hardware version. This is useful for checking if your device is up-to-date.

3.2.2. Device Configuration

Login

Here you can set up a user and password to secure the WebGUI. After pressing the "Apply" button you will be asked to reboot the device. Press "OK" to confirm the reboot.

The next time you want to access the configuration pages you will be asked to login. The device information page remains accessible without authenticating.

If you have forgotten your password you will need to reset the Universe to its default settings by pressing the reset button (see p. 11).

Network

Go to "Device Configuration" → "Network" to change your IP settings. After changing the IP settings you will need to reconnect to the new IP.

You can choose to obtain an IP address automatically. This requires a DHCP server, which is available on most home and professional IP networks. You can find the IP address of your device in the DHCP client list of your DHCP server.

Alternatively, you can keep the Universe in static IP 192.168.50.50 or any other address of your choice.

→ **Remark:** The "Apply" button starts blinking if you change the settings of the Universe so you won't forget to press it.

The screenshot shows a web interface titled "Network Configuration". It features a checkbox labeled "Obtain automatically". Below this, there are four input fields: "IP Address" with the value "192.168.50.50", "Subnet Mask" with "255.255.255.0", "Gateway" with "0.0.0.0", and "DNS" with "8.8.8.8". At the bottom left of the configuration area is an "Apply" button.

Firmware Update

The screenshot shows the "Firmware Update" section of the "8600 Web Interface". On the left, there is a navigation menu with "Firmware Update" highlighted. The main area contains a "Choose File" button, the text "No file chosen", a progress bar at 0%, and the instruction "Please select a valid update file (*.upg)". An "Upload" button is located below the progress bar.

If you want to update the firmware click on "Choose File" and select the update file. The firmware file ends with the *.upg extension. Then click the "Upload" button and wait until the file is uploaded and the device is rebooted.

This screenshot shows the "Firmware Update" section after a successful update. The "Choose File" button now displays the filename "1.0.0.TST-7.upg". The progress bar is at 100%, and the text "Update successfull, server will reboot ..." is visible. The "Upload" button remains at the bottom.

Reboot

Click on "Reboot" to restart your device. This is useful when you don't have physical access to the Universe.

3.2.3. Input Settings

LNA/LNB Configuration

Mode: LNB Type:

The LNB / Multiswitch is being controlled by another device

Polarisation / Voltage: Sat.:

Apply

Power: ●

Choose the mode you want to use and if required the type of LNB. The following settings depends on the Mode and LNB used. If you select the Universal or C-Band LNB the LO Frequency and Band / Tone settings will not be shown because those settings are filled in automatically.

LNB / Multiswitch

Choose this mode if you are using a regular LNB or a multiswitch.

LO Frequency (kHz) **:

The LNB / Multiswitch is being controlled by another device

Polarisation / Voltage: Band / Tone: Sat.:

Apply

** LO frequency should be set to 0 when intermediate frequencies (IF) are used for tuning...

- LO Frequency (kHz): The LO Frequency used in the LNB. Set this to 0 when intermediate frequencies (IF) are used for tuning. This setting will be filled in automatically when choosing the Universal or C-Band LNB type. *(only available if LNB type is manual)*
- The LNB / Multiswitch is being controlled by another device: Enable this setting if you are using another device to control the input e.g. another universe.
- Polarisation / Voltage: The polarisation or voltage you want to use.
- Band / Tone: The band / tone you want to use. *(only available if LNB type is manual)*
- Sat.: The satellite (A, B, C, D) used.
- Apply: Save your current settings!

Single Cable (EN 50494) and (EN 50607)

LO Frequency (kHz) **: <input type="text" value="0"/>				
User Band (UB)	UB Frequency (kHz)	Polarisation / Voltage	Band / Tone	Sat.
<input type="text" value="0"/>	<input type="text" value="1280000"/>	<input type="text" value="Horizontal / Right / 18V"/>	<input type="text" value="High / 22kHz"/>	<input type="text" value="A"/>
<input type="button" value="Apply"/>				
** LO frequency should be set to 0 when intermediate frequencies (IF) are used for tuning...				

- LO Frequency (kHz): The LO Frequency used in the LNB. Set this to 0 when intermediate frequencies (IF) are used for tuning. This setting will be filled in automatically when choosing the Universal or C-Band LNB type. *(only available if LNB type is manual)*
- User Band (UB)*: The user band you want to receive.
- UB Frequency (kHz)*: The user band frequency.
- Polarisation / Voltage: The polarisation or voltage you want to use.
- Band / Tone: The band / tone you want to use. *(only available if LNB type is manual)*
- Sat.: The satellite (A, B, C, D) used.
- Apply: Save your current settings!

* : You can find the desired User Band and User Band frequency in the manual of your SCR LNB or multiswitch

DC for Terrestrial Amp.

<input type="checkbox"/> The terrestrial amp. is being powered from another device (disable power)
Voltage
<input type="text" value="12V"/>
<input type="button" value="Apply"/>

- The terrestrial amp. is being powered from another device (disable power): Enable this option if you use another device to power the terrestrial amplifier.
- Voltage: Choose the desired voltage 12V or 24V.
- Apply: Save your current settings!

The LNA/LNB is now configured. Next we will configure the tuner.

Tuner Configuration

Type:

Frequency (kHz) Symbol Rate (kBaud)

Lock:

IF Frequency: 2121.75 MHz

Bitrate: SNR:

Level: PER:











CAM Inserted:

Change your input type to the DVB source you are using. Select the frequency and symbol rate or bandwidth to match the transponder you want to receive and click on "Apply". To know the transponder go to <http://www.lyngsat.com> or <http://kingofsat.net>. If all settings are correct the lock icon will turn green.

Naam	Land	Category	Standard	Modulation	Symbol Rate	FEC	Provider	Bitrate	Network ID
Collapse all frequencies									
19.2°E	Astra 1M	10714.25 H 49	Astra 1M	DVB-S2	QPSK	22000			
Occasional Feeds, data or inactive frequency									
19.2°E	Astra 1KR	10729.00 V 50	Astra 1KR	DVB-S2	8PSK	22000		42.6 Mbps	
ZAP	AXN Spain HD	Spain	Series	Canal+ (Astra)	Nagravision 3	30800	160	HD	80 esp 81 vo
ZAP	Canal+ Comedia HD	Spain	Movies	Canal+ (Astra)	Nagravision 3	30801	161	HD	80 esp 81 vo 82 83 84 85 86 87 88 89 90 91 92 93 94
ZAP	Canal+ Liga HD	Spain	Sport	Canal+ (Astra)	Nagravision 3	30802	162	HD	80 esp 81 vo 82 83 84



- Lock: Green symbol means the device is locked on the chosen transponder.
- Bitrate: The bitrate of the incoming signal.
- Level: The level of the incoming signal.
- SNR: Signal to Noise Ratio of the incoming signal.
- PER: Packet Error Rate of the incoming signal. This should be 0% otherwise the incoming signal quality is bad.
- CAM Inserted: Turns green if a CAM module is detected.







If the tuner is well configured and the lock icon is green the list of channels should be available.

SID	Type	Name	Descramble
4401		TVE INTERNACIONAL EUROPA	<input checked="" type="checkbox"/>
4402		CANAL 24 HORAS	<input type="checkbox"/>
4422		CNN Int.	<input type="checkbox"/>
4430		DW	<input type="checkbox"/>
4411		RNE RADIO 1	<input checked="" type="checkbox"/>
4412		RNE RADIO 3	<input type="checkbox"/>
4413		RNE RADIO 4	<input type="checkbox"/>
4414		RNE RADIO 5 TODO NOTICIAS	<input type="checkbox"/>
4415		RNE RADIO CLASICA	<input type="checkbox"/>
4416		RNE RADIO EXTERIOR DE ESPAÑA	<input type="checkbox"/>

Apply

Select the service(s) you want to run through the CAM Interface by checking the Descramble checkboxes. A red lock means the service is encrypted and a green one means the service runs through the CAM module and can now be decrypted. Confirm with the "Apply" button.

SID	Type	Name	Descramble
7020		RTL4 HD	<input checked="" type="checkbox"/>
7023		RTL5 HD	<input type="checkbox"/>

- SID: Service ID for listed service.
- Type:
 -  : HD-TV
 -  : SD-TV
 -  : Radio
 -  : Data
- Lock:
 -  : Descrambled service.
 -  : Scrambled service.
 - No lock: FTA service.
- Name: Name of the service.
- Descramble: Determines if the selected service goes through the CAM or not.

3.2.4 CAM

CAM Menu

Aston CAM	Smart card number
# 1 : [Subscription information] # 2 : [Settings] # 3 : [Information]	
<input type="button" value="Return"/>	
<input type="button" value="(Re)open CAM Menu"/>	

The CAM menu will open automatically in a few seconds, if it doesn't you can click the "(Re)open CAM Menu" button. To use the CAM menu click on the menu item you want to open and click on "Return" to go back 1 step in the menu.

The CAM menu will be different if you use another CAM module and/or CAM card. For more information about the CAM menus refer to its specific manual.

Aston CAM

1 : [Waiting for smart card, please wait]

If you get the message "Waiting for smart card, please wait" you will need to wait a few seconds and then click the "(Re)open CAM Menu" button or the "Waiting for smart card" message to refresh the menu.

3.2.5 Output Settings

IP

Click on "Add Service" to add a service to an IP stream. You can keep adding services until the CPU hits 100%. But if the CPU usage exceeds 90% you can have performance issues, due to peaks in the services. If you want the Universe to decrypt the services, make sure the lock icon is green otherwise go back to input settings and descramble the service.

Don't forget to press the "Apply" button when all output settings are done.

Output Configuration

CPU: 62%

Bitrate: 11.903 Mbps


SID	Type	Name	Dest. Address	Dest. Port	Enabled	Details
12851		La Une HD	239.50.0.5	49152	<input type="checkbox"/>	
12810		Infokanaal TV	239.50.0.2	49152	<input checked="" type="checkbox"/>	
12853		La Trois	239.50.0.10	49152	<input checked="" type="checkbox"/>	
12857		Club-RTL	239.50.0.11	49152	<input checked="" type="checkbox"/>	
12778		VRT Radio1	239.50.0.3	49152	<input checked="" type="checkbox"/>	
12862		Classic21	239.50.0.8	49152	<input checked="" type="checkbox"/>	

Apply --Add Service-- Download playlist:













- SID: Service ID.
- Type:
 - : HD-TV
 - : SD-TV
 - : Radio
 - : Data
- Lock:
 - : Descrambled service.
 - : Scrambled service.
 - No lock: FTA service.
- Name: Name of the service.
- Dest. Address: Destination address, the IP address the service will run on, needs to be in the 239.0.0.0-239.255.255.255 range.
- Dest. Port: Destination port, the port the service will run on.
 - ! ➔ Make sure that no 2 service(s) have the same Destination address and Destination port, in that case only 1 service will be available.




- Enabled: Turns the service on or off. Can be used instead of the delete button if you are planning to use that service later.
- Delete button: Deletes the service from the list.
- Details: Show advanced settings about the service, see details below.
- Apply: Saves the current settings!



Click "Download playlist:  " to download a playlist for your streams. This playlist can be opened on your computer with VLC or can be imported in your IPTV setup box or middleware.

Click on "Details" to enter the advanced settings for that service. Here you can enable or disable the underlying streams. Don't forget to press the "Apply" button.

SID	Type	Name	Dest. Address	Dest. Port	Enabled	Details
12851	 	La Une HD	239.50.0.5	49152	<input checked="" type="checkbox"/>	 
	PID	Type	Bitrate	Enabled		
	551		 5.587 Mbps	<input checked="" type="checkbox"/>		
	34		 0.126 Mbps	<input checked="" type="checkbox"/>		
	101		 0.202 Mbps	<input checked="" type="checkbox"/>		
	51		 0.227 Mbps	<input checked="" type="checkbox"/>		

- PID: Package identifier for the listed stream.
- Type:  : Video
 : Audio
 : Data
- Bitrate: Bitrate of the stream.
- Enabled: Turns the selected stream on or off.

RF

In the RF Output section, the Universe has to be configured differently than the IP Output. While in the IP section, you add services to your list, in the RF section you have to disable services till you have no longer an overflow. The reason is that for instance a 55Mbps satellite transponder will not fit in a DVB-T MUX of 32 Mbps.

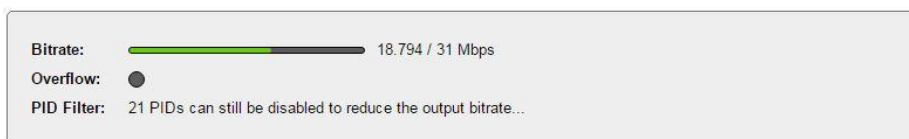
Don't forget to press the "Apply" button after the configuration is done.

The screenshot shows the 'Output Configuration' window with the following settings:

Frequency (kHz)	Bandwidth	Constellation	Code Rate	Guard Interval	Mode	Attenuation (dB)	State
618000	8 MHz	64QAM	7/8	1/32	2k	0	ON







An 'Apply' button is located below the configuration fields.

- Type: Type of output signal.
- Frequency (kHz): Here you can select the frequency you want to transmit on.
- Bandwidth: Choose the desired bandwidth.
- Constellation: Choose the type of constellation you want to use. (64QAM, 16QAM, QPSK)
- Code Rate: The following code rates can be used 7/8, 5/6, 3/4, 2/3 or 1/2. A higher code rate means more services can be selected without having an overflow.
- Guard Interval: The following code rates can be used 1/32, 1/16, 1/8 or 1/4.
- Mode: 2k, 4k or 8k.
- Attenuation (dB): Enter a value between 0 and 45 dB, 0dB being the maximum output power.
- State: Turns the output on or off.






- Bitrate: Total bitrate that is being output at the TV OUT connector. Turns red if you have an overflow.
- Overflow: Turns red if too many services are selected. Please uncheck some services or streams and click apply until the symbol turns grey, and the Bitrate turns green.
- PID Filter: Shows the amount of PIDs you can still filter out. The Universe can disable up to 27 PIDs.

SID	Type	Name	Enabled	Details
12851	 	La Une HD	<input checked="" type="checkbox"/>	▼
12856	 	RTL-TVi HD	<input type="checkbox"/>	▼
12810	 	Infokanaal TVV	<input checked="" type="checkbox"/>	▼
12852	 	La Deux	<input checked="" type="checkbox"/>	▼
12853	 	La Trois	<input checked="" type="checkbox"/>	▼
12857	 	Club-RTL	<input checked="" type="checkbox"/>	▼
12858	 	Plug-RTL	<input checked="" type="checkbox"/>	▼
12881	 	Planet	<input checked="" type="checkbox"/>	▼

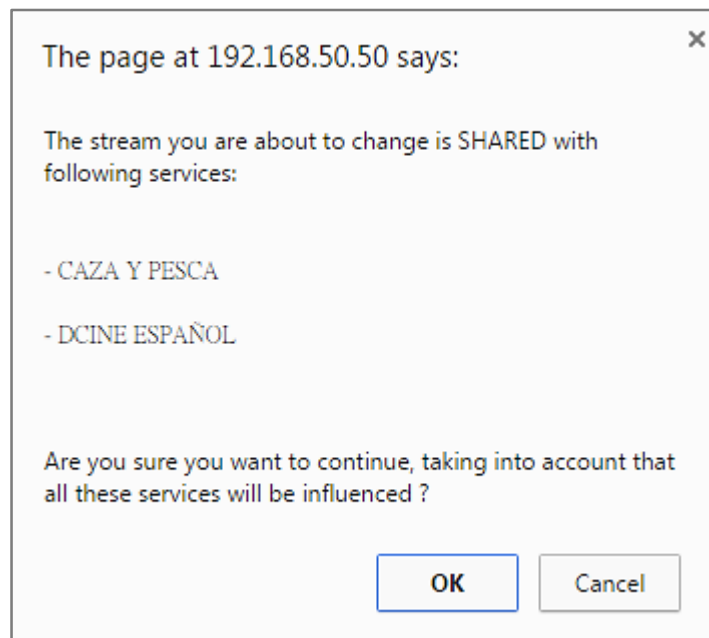
- SID: Service ID.
 - Type:
 -  : HD-TV
 -  : SD-TV
 -  : Radio
 -  : Data
 - Lock:
 -  : Descrambled service.
 -  : Scrambled service.
 - No lock: FTA service.
 - Name: Name of the service.
 - Enabled: Add the service to the RF output. If you disable a video service only the video stream will be disabled, see remark below.
 - Details: Show advanced settings about the service.
 - Apply: Save the current service list.
- ➔ **Remark:** If you disable a SID only the main PID and SID will be disabled. All smaller underlying PIDs (data, audio services) will remain active. The audio will keep running until you rescan your TV. For disabling specific underlying PIDs please go to "Details".
- ➔ **Remark:** The order of the channels will be determined by your receiver. It is advised to set the country to "Others" when scanning the receiver for channels. You can always use the channel numbering function of your receiver if you want to change the order of the channels.

Click on details to enter the advanced settings for that service. Here you can enable or disable the underlying streams. Don't forget to press the "Apply" button.





PID	Type	Bitrate	Enabled
510		0.969 Mbps	<input checked="" type="checkbox"/>
929		0.137 Mbps	<input checked="" type="checkbox"/>

- PID: Package identifier.
- Type:  : Video
 : Audio
 : Data
- Bitrate: Bitrate of the stream.
- Enabled: Turns the selected stream on or off.

➔ **Remark:** A lot of transponders use shared PIDs. That means that 2 or more services make use of the same stream. In that case, when disabling that shared PID, the Universe will warn you about all the services that will be influenced by disabling that shared stream. Click "OK" to continue or click on "Cancel" if you don't want those services to be affected.



Disabling SIDs vs disabling PIDs.

PID	Type	Bitrate	Enabled
172		 0 Mbps	<input type="checkbox"/>
128		 0 Mbps	<input type="checkbox"/>
129		 0 Mbps	<input type="checkbox"/>


If you disable all PIDs but let the covering SID enabled your receiver will still find the service but there will be no image or sound. This can be used if you temporary want to disable a service but don't want to rescan your receiver.

If you enable all PIDs and disable the covering SID, the PIDs will remain active and consume bandwidth but your receiver won't find it when you do a rescan. So if you want to save bandwidth you better disable the underlying PIDs starting with the one that has the biggest bitrate as the amount of PIDs that can be filtered is limited.

3.3. Import and export settings



 : Click on this button to import your settings from the same or another Universe.

 : Click on this button to export your setting to a configuration file. You can import this configuration file in another Universe or to store your configuration on your pc.

4 TECHNICAL SPECIFICATIONS

8600 – Universe		
INPUT		
Number of inputs	-	1 with passive loop-through (-2dB)
Tuner	-	1
Frequency Range	MHz	42 – 2150
Input level	dBm	-65 to -20
Standard	-	DVB-S/S2 DVB-T/T2 DVB-C
DC remote power for LNB or LNA	V - mA	0/13/18/22kHz DiSEqC, EN50494, EN50607 350
RF OUTPUT		
Number of outputs	-	1 RF with passive loop-through (-2 dB)
Multiplex	-	1
Frequency range	MHz	174-862
Output level	dBm	-55 to -10 (adjustable)
Standard	-	DVB-T ISDB-T*
Modulation error rate (MER)	dB	40
ETHERNET OUTPUT		
Number of outputs	-	1Gb Ethernet
Standard	-	IEEE 203ab 10/100/1000 Base-T
Protocol	-	Multicast IP/UDP

* Coming soon

GENERAL		
CI slot	-	1
Input voltage	VDC	12-20
Power consumption	W	7 (without CAM and without remote power)
DC jack	mm	Ø 2.1
Powering remote units	-	Yes, 1 unit can power other units
Operating temperature	°C	0-50
Dimensions	mm	222x142x50
Weight	kg	1.1
Accessories	-	15V power adapter, 1 Ethernet cable

5 CONDITIONS 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-authorized person.

NOTE

Date of production is YYWW format, example 1527 = year 2015 – week 27.
For the serial number barcodes, the date corresponds to the 4 first numbers



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