

Processor 8ASI / DVB-S2 (S) RF

CAS ID 4AEC

User's Manual

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Overview

The 8ASI DVB-S2 (S) Processor is a multifunction device intended for multichannel DVB-S2 (S) broadcasting. It provides TS re-multiplexing, scrambling, modulating and Up-converting.

- The processor re-multiplexes up to 8 input Transport Streams(TS) and forms a spectrum in the DVB-S2(S) format transmitted at Radio frequency.
- Standard SD/ HD DVB-S2(s) receivers can be used as subscriber receivers.
- IP output can be used to transport one of the packages via IP network or monitor one of the packages chosen from output or input stream at your PC.

The single Processor allows you to organize DVB-S broadcasting of ~8 programs, as well as a system for monitoring of channels on your PC. The Processor can replace the remultiplexer, scramblers, DVB-S2 Modulator and UP-converters.



Construction

The processor has a monblocking design –19`` REC mounted 1U Contains the main board with the input and output connectors, power supply.

Front panel



The front panel Indicators:

1	Power
2	Power Indicator LED
3	LED Indicator
4	Indicator `s control button

INPUTS 1-8. Indication of the ASI stream at the relevant input.

I.

OVERFLOW - Built-in multiplexers has an indicator showing the maximum allowable stream is exceeding.

This is due to the fact that the input streams typically have a variable bit rate, and at the Processor settings time the forming steam may be correct, but during a broadcast time either of the input streams may increase and cause spillage of the subscriber images. To avoid this on the important channels, it is possible to assign one channel as the one that may be subject to restrictions.

1.	In 1 – In 8 ASI inputs i
2.	Out, Out 2 - 2 ASI outputs
3.	RF Out. Radio Frequency output
4.	ETHERNET / IP Output RJ45 connector
5	FAN
6	Ground pole
7	AC 220V
8	Fuse

Main features

- 8 ASI Inputs re multiplexing
- Modes: DVB-S or DVB-S2
- Output modulation QPSK or 8PSK
- Software update/upgrade.
- DVCrypt CAS support.
- EPG, OTA, LCN support, Network Search.
- Up to 92 PID
- Adjustable level of the output RF signal.
- Quick replacement of the device in the system without stream rescan
- MPEG-2, MPEG-4/AVC, HD / SD and 3D support.
- Automatic and manual PID insertion;
- Connection to PC: Ethernet 100 E-base, RJ45.
- IP Output with Staffing Off function.
- IP output: Supported protocols RTP, RTP+,UDP.
- IP output can be used to transport one of the packages via IP network.
- Visual monitoring the input and output streams with the free program DVCrypt Ts Monitor via IP
- IP allows you to record the output ASI stream to the PC for further analysis.
- Quick replacement of the device in the system without stream rescan.

Specification			
INPUT INTERFACE			
ASI Inputs 8 DVB ASI streams, 8 BNC Connectors			
ASI	OUTPUTS		
2 DVB-ASI Outputs	2 DVB ASI, 2 port, 2 BNC Connectors		
R	F Output		
Connector	F-type		
Frequency range:	70-1700 MHz (adjustable)		
Output RF signal level	80-100 dB/uV, adjustment -10dB/uV;		
MOI	DULATION		
STANDARD	DVB-S /S2		
Modulation type	QPSK/ 8PSK		
Symbol Rate	6750 - 3500 ksym/s		
Rolloff factor	0,2 ; 0,25 ; 0,35		
IP TS Output and Ethernet control			
Ethernet type:	100/1000 mbit/s (RJ-45)		
Format:	UDP/IP, RTP/IP		
IP Address Format:	Multicast, Unicast		
TS Packet format:	188 Byte		
	General		
Power:	~220V+\-20%		
Power Consumption:	Max 20W		
Size:	19``, 1U 480*45*180 (mm)		
Weight:	3,5 Kg		

Connections

AC In 220B 50Hz+ Fuse



GND



Grounding Terminal

When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm.

ASI Inputs



"IN1 – IN8" Input signals must comply with the EN 50083-9:1998 standard.

ASI Outputs



2 ASI Outputs: Each of this 2 outputs has the same ASI stream

RF Output.

F Connector. Frequency range 70-1700 MHz (adjustable)

IP Out



RJ45 connector for the IP Out and Ethernet Control

Operation common information

Processor must be connected to the PC for the settings, control and Update and Upgrade. (The rear panel RJ45 connector)

The Processors have built-in system time synchronization. The control computer is synchronized from the source time signal and in turn synchronizes the Processor. The processor provides a timing signal that is synchronized receiver. In case of loss of signal synchronization whole system will work, but showing the wrong time. DVCrypt program will write this in the server log.

Environment Requirement

Environment Temperature 5~40 (sustainable), 0~45 (short time),

Installing air-conditioning is recommended

Power Requiring device power, air-conditioning power and lighting power are independent to each other. Device power requires AC power 220V 50Hz. Please carefully check before running.

Machine Hall Floor Electric Isolation, Dust Free, Ground anti-static material.

Grounding Requirement

Good grounding is the basis of reliability and stability of devices. Good grounding are the most important guarantee of lightning arresting and interference rejection.

Coaxial cable's outer conductor and isolation layer should keep proper electric conducting with the metal housing of device.

Grounding conductor must adopt copper conductor in order to reduce high frequency impedance, and the grounding wire must be as thick and short as possible. It is prohibited to use any other device as part of grounding electric circuit

The area of the conduction between grounding wire and device's frame should be no less than

25mm².

The System Installation.

To obtain a workable system, it is necessary:

- 1. Operating System: Windows XP, or Windows server 2003/2008.
- 2. DVCrypt program
- 3. HUB/switch for local area computer networks for simultaneous connection of all the Processors to a single computer.

RJ45 connector cable to the HUB connection:

	RJ45	RJ45	
1	white / orange	white / orange	1
2	orange	orange	2
3	white / green	white / green	3
4	blue	blue	4
5	white / blue	white / blue	5
6	green	green	6
7	white / brown	white / brown	7
8	brown	brown	8

4. One -by one connection of all processors to the server DVCrypt and register them in the system. The system will automatically assign a number to the new Processor and will monitors the numbers of all of the processor in the system.

How to add the new Processor to the System.

Attention! All connection to the PC is required to switched off power and grounded equipment

- 1. Connect the Processor via the HUB or Switch to PC
- 2. Set the Server PC network parameters.
- 3. Install and run DVCrypt program
- 4. Click the "Processors" icon appear the "Processors" window
- 5. Click the + icon and follow the wizard's instructions to install the Processor.
- 6. If all is OK and Processor is found, it will appear in the window" Processors ".
- 7. Double click the left mouse button on the number of the processor will open the Settings window, where you must point the name of the channel fed to the Processor inputs and the frequency at which the Processor operates.
- 8. Repeat steps 1-6 for all of the Processors.

Server PC network parameters settings.

Server PC requirements:

please check that following requirements are met:

- 1 CPU: 1 GHz or faster;
- 2 RAM: 1 GB or more;
- 3 HDD: at least 1 GB of free space;
- 4 LAN adapter and/or USB for modules interface;
- 5 Operating System: Windows XP, or Windows server 2003/2008.

Required PC setting:

The computer should be equipped with network adapter with installed TCP/IP. Network adapter properties:

🕹 Local Area Connection Properties 🔋 🗙
General Authentication Advanced
Connect using:
Intel 21140-Based PCI Fast Ethernet
This connection uses the following items:
🗆 畏 QoS Packet Scheduler 📃
✓ T Network Monitor Driver
Internet Protocol (TCP/IP)
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
Notify me when this connection has limited or no connectivity
OK Cancel

The computer IP address can be assigned statically or dynamically (DHCP). As example IP address is 192.168.1.3 (shown at the Figure below).

Internet Protocol (TCP/IP) Properti	es ?X
General	
You can get IP settings assigned auto this capability. Otherwise, you need to the appropriate IP settings.	
O Obtain an IP address automatica	lly
○ Use the following IP address: —	
IP address:	192.168.1.3
Sybnet mask:	255.255.255.0
Default gateway:	· · · ·
C Obtain DNS server address auto	matically
• Use the following DNS server ad	ldresses:
Preferred DNS server:	
Alternate DNS server:	· · ·
	Adyanced
	OK Cancel

Wiring diagram is as follows:



If you need to have the Server with the other Computer in the network, we recommended to use the other diagram, in order to provide reliable communication with the Processor and additional security:



DVCrypt SW operation

Software installation

Simply run the included DVCrypt_*Install.exe* installation file and follow the prompts.

Starting the Control Program

The Control Program is started from the Start menu. / All Programs / DVCrypt / Control Program

When you start the program will require to choose the type of connection:

Подключение	X
💿 Локально	
С К серверу	localhost
Порт	8100
	OK Cancel

Locally, if the program Server installed on the same computer, or to a server, if it is installed on another PC. Then it is necessary to enter the IP address and port of the PC on which you have installed the server.

After selecting the connection window will open system of administration "Login":

Вход		×
Пользователь		
A admin A operator A engineer A info	Администратор Оператор Инженер Информация	
Пароль	Вход]

The program uses a system of administration which is structured as follows:

There is a main user of the DVCrypt program – Administrator. All rights to use these functions (on / off) belong to the administrator.

Administrator is enters to the program as an "administrator" with personal password and appoints the other users. The administrator also can on / off some of the functions of the program DVCrypt, necessary for the user.

The number of users and their rights determined by the administrator.

All default passwords is empty.

DVCrypt program contains two main functional modules. DVCrypt **Client** and **DVCrypt Server**.

By clicking the Login button brings you to the DVCrypt Client main window:

DVBToolkit Client - Modules – 🗆 🗙							
Main View ?							
🚠 🛅 琴 🎘 🕂 🧇 🖨 📑 跎 💣 ヘ IP / 2 🔤 🚺							
Module	Settings	Status	# [S	Label	PIDs [DEC]		

The DVCrypt Server can by started from the taskbar .:

To open the DVCrypt Server log you can click left mouse button the Server Icon - the Server Log Window appear.

To open the DVCrypt Server Settings click right moue button the Server Icon and select Settings.

In the Server settings need to enable communication with the Processor - Ethernet:

Settings	<u>></u>
About	Server settings Server port 8100
Server ver. 3.0 [Nov 11 2013] (c) 2003 - 2013, DVL	Module interface Image: RS-485 COM3 Image: RS-485 Image: RS-485 Image: RS-48
Licensed to DVLab (0001, 4AEC) Subscribers 100000	Bind to network adapter 192.168.32.32
DVB settings Cyrillic encoding Win-1251	SMS notifications Enable Setup
LCN descriptors E-Book	Debug Enable debug logging
Integration	Keep debug information (days) Billing 💌 Send problem report
Interface language Language Edit New	OK Cancel

If the Server has a single network adapter for communication with the Processor, it is recommended to enable the option "The network interface only" and point it IP address:

Settings	X
About DVCrypt Server ver. 3.0 [Nov 11 2013] (c) 2003 - 2013, DVL	Server settings Server port 8100 Module interface
License	RS-485 COM3 COM3
Licensed to DVLab (0001, 4AEC) Subscribers 100000	Bind to network adapter
DVB settings Cyrillic encoding Win-1251	SMS notifications
LCN descriptors E-Book	Debug
Integration Billing software integration mode	Keep debug information (days) Billing 💌
Interface language	
Language English	OK Cancel



Click "Next" and follow the wizard prompts

NOTE!

New Device connected to the system will be searched, their MAC and IP addresses will be listed. Search can be repeated by pressing **Refresh** button. If there are a few Devices, it is difficult to determine the Device among others. In this case you can select the Device in the list and press **Blink** button. The selected Device will flash red LED (built in Ethernet connector) three times. Next step is entering IP address of selected Device.

Select the Processor (Module) and click next.

/AC	IP	
20:BF:DB:00:2D:CF	192.168.32.54	Refresh
		Blink

6) Next step is the IP address of the selected Processor setting.

Select any free IP address in the range of this local network (for example, we use addresses from 92.168.1.100 to 192.168.1.200) and enter it. Network mask and Default gateway should be set only if the Device will work in other subnetworks for the new Device and add it to the system.

	Processor 8ASI / DVB-S2(S) RF User's Manual	
	Add new module	
	Change network settings of the module and click <next> to proceed.</next>	
	You can leave current settings unchanged.	
	IP address 192 . 168 . 32 . 54	
	Network mask 255 . 255 . 0	
	Default gateway 0.0.0.0	
	< Назад Далее > Отмена	
The serve	ver will set the IP address for the new processor and add it to the system:	
	Add new module	
	Adding new module to the system	
	If this operation takes too much time than the system can't communicate with new module.	
	You can click <cancel> to stop operation.</cancel>	
	< Назад Далее > Отмена	

The IP address and MAC will be shown in Devices window in Control Software. It will be impossible to change the Device IP address hereafter. To change the Device IP address it is necessary to delete the Device from the system and add it again.

new module		
New module was successfully ad	ded to the system.	
Click <finish>to continue.</finish>		

After adding the Device it should be set. Double click on the Device number and it will appear **Converter setting** window,

Notes

If the distance between the Server and Devices is rather long and there are routers, and automatic search doesn't work - in this case it is necessary to do the following:

Connect the new Device to the local network or to the Server directly and set the IP address as described above. Not waiting that the system will find and add the Converter, interrupt the adding procedure.

Connect the new Converter to remote network. Run adding procedure and select the option "The module is not listed here. Enter IP address of the module directly"

Enter IP address of the Processor (Module).

IAC	IP	Refresh
		nenesn
		Blink

	Processor 8AS	/ DVB-S2(S) RF U	Jser's Manual		
Add new mo	odule		×		
Enter IP a	address of the module and click	<next> to proceed.</next>			
IP addre	ess 1	92 . 168 . 32 . 54			
		< Назад Далее >	Отмена		
-					
The server will try to c	communicate wi	th the Device and	add it to the s	ystem:	
Add new	module			×	
Add new	module				
	g new module to the system				
lf this than th	operation takes too much tir he system can't communicat	ne te with new module.			
You c	an click <cancel> to stop of</cancel>	peration.			

< Назад

Далее >

Отмена

Attention!

All Devices are delivered set to the IP address **192.168.0.254** or **192.168.0.253**, **n**etwork mask **255.255.255.0**.

The Devices should have different IP addresses when you add them to the system. The delivery set includes **EthernetSetup.exe** utility which makes it possible to change Device IP address and network mask. The utility doesn't require installation. Before changing the IP address connect the Device to Ethernet hub/switch, connect to it also a PC having installed network board (network board IP address should be in the Device IP address range. For example, the Device IP address is 192.168.0.254, then network board IP address can be in 192.168.0.1. 192.168.0.254 range, network mask 255.255.255.0). Then run **Ether**-

Ethernet Setup		×
MAC	IP	English 💌
20:BF:DB:00:00:1E	192.168.0.222	
20:BF:DB:00:08:FB	192.168.0.191	Refresh
		Blink
		Ping
		Setup
		Passport
		Close

netSetup.exe, the program will find the Device.

Select the device and press Setup button

The **Network parameters** window will appear, where you can change the Device IP address and network mask. The procedure of assigning IP address should be performed for all Devices before adding them to the system. Pressing **Ping** button you can check connection between the PC and the Device. If you press **Blink** button, the selected Device will flash red LED (built in Ethernet connector) three times.

Attention!

It is not recommended to change the Device IP address after the Device has been already added to the system as it will cause connection failure. To re-establish connection it is necessary to repeat procedure of adding the Device to the system again.

After finishing the new Processor will added to the main window.



Modulation is selected by radio buttons "CAM". The modulation by default is CAM 64

Frequency tuning is set by slider "MHz" or you can type the Frequency in the accordingly window directly.

Note The the frequency of the 1st spectrum is a priority. From its value depends on the value of the other frequencies, so you need to set the frequency of the first spectrum the first and then set the frequency of the rest.

Output power level is set by slider :"Output Power".or you can type it *in the accord-ingly window directly.* in the range 0-9db

Caution. The Processor Settings can be loaded to device after you click the "Set your settings" only. This can be done both after the all settings is finished or each of setting -separately.



2) Drag the program you need from the left side to the right, into the selected package.

- 3) Check the output stream you will have click the button
- 4) Change the settings if the stream is greater of the recommended.

After that – click the green button "Write settings to the device"

CAS settings

To enable the conditional access system for the selected channels in the main window: double click the Processor number –

● — 許 图 伊 兌 ① 小 學 ▶ 중 ⑦ 叻 ●	Статус ОК	N [Service ID] (LCN)	Название	Условный доступ	РIDы [HEX]
		N [Service ID] (LCN)	Название	Условный доступ	РІDы [HEX]
	ОК				
, FEC 2/3, SR: 27500 Ksymbol/s					
2, SPSK 3/4, ro = 0. 25, SR: 27000 Ksymbol/s, bitrate: 60. 16 MBit/s	OK ·	1 [0848] 2 [1240] 3 [1241] 4 [1242] 5 [1243] 6 [1344]	Euronews RBC-TV Fashion TV CNL MIR	Опрытый Опрытый Опрытый Опрытый Опрытый Опрытый	V: DA80, A: DA81, A: DA V: DA80, A: DA8C, PCR: V: DA8D, A: DA8C, A: DA V: DA90, A: DA91, PCR: V: DA92, A: DA93, PCR: V: DA94, A: DA95, PCR:
	2, 8PSK 3/4, ro = 0.25, SR: 27000 Ksymbol/s, bitrate: 60.16 MBit/s		- 2[1240] 3[1241] 4[1242]	- 2 [1240] RBC-TV 3 [1241] Fashion TV 4 [1242] CNL 2, BPSK 3/4, ro = 0.25, SR: 27000 Ksymbol/s, bitrate: 60.16 MBR/s [5] MIR	- 2 (1240) R8C-TV Отфензий 3 (1241) Fabion TV Отфензий 4 (1242) ОНL Отфензий 2, 8PSK 3/4, ro = 0.25, SR: 27000 Ksymbol/s, bitrate: 60. 16 MBt/s (1245) 2, 8PSK 3/4, ro = 0.25, SR: 27000 Ksymbol/s, bitrate: 60. 16 MBt/s (1245)

The Condition Access settings window will appear:

🛃 🔒 📊 💹 🖾 🛤 🚽	e \land 🤤 🗕 📴 😰 🛠 🗐 \land 🖉 🖻	2 th f				
ртер	Настройки	Статус	N [Service ID] (LCN)	Название	Условный доступ	PIDы [HEX]
D8:00:13:03		L'acarda				
		OK	1 [0810]	Euronews	Закрытый (001 - Социальный)	V: 0700, A: 0701, A: 070
emux.CAS [100000] i8.32.188		-	2 [0811] 3 [0812]	RBC-TV Fashion TV	Закрытый (001 - Социальный) Закрытый (001 - Социальный)	V: 0708, A: 070C, PCR: 0 V: 070D, A: 070E, A: 070
тройки конвертера		×	4 [0813] 5 [0814]	CNL MIR	Закрытый (001 - Социальный) Закрытый (001 - Социальный)	V: 0710, A: 0711, PCR: 0 V: 0712, A: 0713, PCR: 0
аналы	- Ko	нвертер	6 [0815]	Publika TV	Закрытый (001 - Социальный)	V: 0714, A: 0715, PCR: 0
			7 [0816]	A-ONE Moldoa	Закрытый (001 - Социальный)	V: 0716, A: 0717, PCR: 0
🖃 🔒 Открытый		Конвертер 10 8ASI.CAS [100000]	8 [0817] -	RU-TV	Закрытый (001 - Социальный)	V: 0719, A: 071A, PCR: 0
1. [0848] Euronews	Изменить		1 [0A30] 2 [0A31]	RBC-TV Fashion TV	Открытый Открытый	V: 0780, A: 0781, PCR: 0 V: 0782, A: 0783, A: 078
2. [1240] RBC-TV		полнительно	3 [0A32]	CNL	Открытый	V: 0785, A: 0786, PCR: (
3. [1241] Fashion TV	Условный доступ	Настройки сети	4 [0A33]	MIR	Открытый	V: 0787, A: 0788, PCR: 0
4. [1242] CNL	- Условный доступ	Настройки телегида	5 [0A34] -	Publika TV	Открытый	V: 0789, A: 078A, PCR: 0
5. [1243] MIR 6. [1244] Publika TV		пастроики телегида	1 [0820] 2 [1100]	CNL MIR	Открытый Открытый	V: 0800, A: 0801, PCR: 0 V: 0802, A: 0803, PCR: 0
0. [1244] FUDIKA I V	Открытый	Настройки ОТА	3 [1101]	Publika TV	Открытый	V: 0804, A: 0805, PCR: 1
	О Закрытый 001 - Социальный		4 [1102]	RU-TV	Открытый	V: 0806, A: 0807, PCR: 0
		олнительные настроики	5 [1103] -	THT Bravo	Открытый	V: 0809, A: 080A, PCR:
	🔲 Второй пакет с 🛛 🕕 ди	000				
	С Открытый					
	C	[[
	Закрытый ОО1 - Социальный	Y				
	OK	Cancel				
		·				
		OK Cancel				
AS [100000] 8.32.127 08:00:13:82	DVB-52, 8PSK 3/4, ro = 0.25, SR: 27000 Ksymbol/s, bitr	ОК -	1 (0848) 2 (1240) 3 (1241) 4 (1242) 5 (1243) 6 (1244) -	Euronews RBC-TV Fashion TV CNL MIR Publika TV	Открытый Открытый Открытый Открытый Открытый Открытый	V: 0A80, A: 0A81, A: 0A V: 0A88, A: 0A8C, PCR: V: 0A80, A: 0A8C, A: 0A V: 0A90, A: 0A8E, A: 0A V: 0A90, A: 0A91, PCR: V: 0A92, A: 0A93, PCR: V: 0A94, A: 0A95, PCR:

IP Outputs Settings

Click icon «IP» on the tool-bar

IP output configuration window appears where you must to set:

- 1. Protocol (RTP, UDP, RTP +)
- 2. Port
- 3. IP address the stream will be broadcast to,
- 4. IP Stream source. The Source can be input or output stream, scrambled or not scrambled, with stuffings or without stuffings.

B DVCrypt Client - Modules					_ 🗆 ×
Main View ?					
🔳 🚠 🔒 🛅 💭 🐺 🗛 📢	• 🚸 😑 🗕 📴 😰 🛠 🗐 🗸 驒	P 🖻 / 🗗 🚺			
Module	Settings	Status	# [Service ID] (LCN)	Label	Conditional acces
No: 08	Freq: 274.000 MHz	OK Idle	1 [0838] 2 [11C0] -	Moldova 1	Scrambled (001 - Scrambled (001 -
8ASI-RF1.IPIN.UPC.CAS [10000] 192.168.32.121	DVB-C, QAM 64, SR: 6875 Ksymbol/s	Ide	3 [110]	Prime TV7	Scrambled (001 -
20:BF:DB:01:21:89			4 [11C2]	RTR	Scrambled (001 -
No: 09	Freq: 282.000 MHz	IP Output Control	1 [0841]	RTR	Free-to-air
8ASI-RF2.IPIN.UPC.CAS [10000]	DVB-C, QAM 64, SR: 6875 Ksymbol/s		2 [1208]	СТС	Free-to-air
		Module 12	3 [1209] -	SET	Free-to-air
No: 10		Source Output RF1	1 [0848]	TV1000	Free-to-air
5ASI Remux.IPIN.CAS [100000]					Free-to-air
192.168.32.141		Destination			Free-to-air
20:8F:DB:00:1A:C8			4 [1242]		Free-to-air
		IP 192 . 168 . 32 . 33			Free-to-air Free-to-air
		Port 1234 ToS (HEX) 00			Free-to-air
		1 OK 1234 105 (HEA) 00			Free-to-air
No: 11 2+H. 264.HD/ASI.combo	System bitrate: 12400 Kbit/s	Protocol RTP 💌			Free-to-air
192.168.32.77 20:8F:DB:00:1A:85		☐ No stuffings			Free-to-air
No: 12	Freq: 474.000 MHz	Start Stop	1 [0858]	M6 Boutique la chai	Free-to-air
8ASI-RF1.UPC.CAS [100]		over	2 [12C0]	Demain!	Free-to-air
192.168.32.54 20:BF:DB:00:2D:CF	DVB-T, FEC 3/4, QAM 64, IFFT: 2k, Delta: 1	/9 h	3 [12C1] 4 [12C2]	CCTV9 RTR	Free-to-air Free-to-air
20:6F:06:00:20:CF	DVB-1, FEC 3/4, QAM 04, IFF1: 2K, Delta: 1	40, 0	5 [12C3]	Vesti	Free-to-air
			6 [12C4] -	Aljazeera Intl	Free-to-air
			7 [12C5]	TELESUD	Free-to-air
No: 13 8ASI-RF2.UPC.CAS [100]	Freq: 490.000 MHz	OK Idle			
	DVB-T, FEC 3/4, QAM 64, IFFT: 2k, Delta: 1				
		, of o	-		
✓ Ready				admin	
Reduy				Janunin	

	IP				English	
	192.168.0.222					
etwork paramet	100 100 0 101 ers				×	fresh
IP address	1	192 .	168 .	0.	222	
Network mask	1	255 .	255 .	255 .	0	ink
Default gateway		0.	0.	0.	0	ing
			_			etup
		OK		Can	cel	sport
	IP address Network mask	3:00:00:1E 192:168.0.222 100:00:TE 192:168.0.222 IP address Network mask	3:00:00:1E 192:168.0.222 10:00:07 10:310:0.0101 letwork parameters 10:310:0.0101 IP address 192 Network mask 255 Default gateway 0	3:00:00:1E 192:168.0.222 100:00:1F 102:100.0.101 letwork parameters 192 IP address 192 Network mask 255 Default gateway 0	3:00:00:1E 192:168:0.222 100:00:1E 192:168:0.222 100:00:1E 192:168:0.222 100:00:1E 192:168:0.222 100:00:1E 192:168:0.222 100:00:1E 192:168:0.222 100:00:1E 192:168:0.0101 Ietwork parameters 192:.168:0.0101 IP address 192:.168:.0.255 Network mask 255:.255:.255 Default gateway 0:.0:.0	3:00:00:1E 192:168:0.222 10:00:05:0 10:00:00:10 letwork parameters Image: Second

After selecting the required parameters you should click "start" and close the window.

It is possible to check (monitor) work of IP inputs using VLC player.



Select Media / Network and enter the necessary parameters. An example is given on Figure below.



Warranty

Warranty period – 24 months from the selling date

The manufacturer does not take any responsibility for defects occurred at the customer's fault or trading company's during careless transportation, improper storage, technical service or usage, mechanical damages, violating the operation rules.

The software is delivered "as is" unless mentioned otherwise. The manufacturer does not bear responsibility for any consequences of using the software. The software can be used without any limitations. Additional information on the software interfaces can be sent upon request.

The manufacturer reserves a right to bring any changes to the product, software or description without notice. Please ask manufacturer for latest information and updates.

Dear customers!

We make improvements and/or changes in our products and we reserve the right to make changes without notice. Though every effort has been made to ensure that this document is current and accurate, more information may have become available subsequent to the production of this guide.

Our products are under continual improvement, so we would like to draw your attention to the fact that the old-model devices may not be supported by the most recent version of our software. It is caused by using in our equipment advanced technical solutions and new electronic components.

We are pleased to receive at info@dv-lab.com comments and remarks regarding our products and software. At the same address we are ready to provide further information about the products application and updated software.