

# ADE-264(B)

# **Encoder & IPTV Streamer with HDMI+CVBS Input**



# h.264 compatible encoder & IP streamer combined

- ✓ HDMI- and CVBS (FBAS) compatible input for encoding
- Stereo Audio embedded (HDMI) or external Stereo Input (3.5mm Stereo-Jack)
- ✓ CVBS: PAL/NTSC SD and HDMI: HD Resolution 1080p, 1080i, 720p and lower
- ✓ IP output: RTSP, RTMPs, UDP/RTP, HTTP, HLS, FLV
- ✓ Distribution of Video Camera HD-SDI and other sources content over LAN, WAN or internet
- ✓ 4 simultaneusly and independent Live stream broadcast encoder engines to multiple destinations
- ✓ Video-over IP applications
- ✓ IPTV/OTT applications
- ✓ Video conferencing, Camera streaming, INFO-Channels
- ✓ IPTV on LAN applications, Corporate IPTV for Broadcasters
- ✓ HD and SD video encoding (incl. 1080p)
- ✓ Corresponding products: M15 & 6800+ SetTopBox, HDD-275 decoder for digital signage
- ✓ Available as ADE-1264 in 1RU 19" Version up to 16 in 3RU

BLANKOM ADE-264B HDMI and CVBS compatible encoders serving the distribution of SD and HD TV/video content through IP networks in digital quality. The live video can be received by Internet media server by TV sets, with IPTV Set-Top Boxes, with PC's and Tablets/Smartphones using i.e. VLC Player



#### **BLANKOM ADE-264**

IPTV encoder designed for TV signal distribution in excellent quality over LAN and INTERNET.

The H.264 (AVC) compatible compression technology features low bit rates for IPTV/OTT systems. The highefficient encoding chips saves bandwidth cost through all its resolution range.

Distribution of SD and HD TV channels through the IPTV/OTT network using state-of-art IP technology from almost any kind of video input.

Excellent Video and Audio quality.

High reliability.

No regular service and maintenance need during operation.

Available also as HDE-264 with only HDMI input support.

info@blankom.de



- 1 -

www.blankom.de





#### Anmerkung:

Alle von uns veröffentlichten Betriebsanleitungen richten sich an den Antennen- und IT-Fachmann, der über grundlegende Kenntnisse der Empfangs-, Netzwerk- und Anlagentechnik verfügt. Die Einhaltung aller relevanten Vorschriften und Richtlinien für den Aufbau und Betrieb von solchen Anlagen obliegt dem Installateur und/oder dem Betreiber. Insbesondere sind die in den jeweiligen Ländern geltenden Vorschriften und Richtlinien für die Inbetriebnahme speziell für den Stromanschluß und alle mit den Produkten in Zusammenhang stehenden und geltenden Normen und Gesetze einzuhalten.

# Quick-Start-Manual

# Remark:

All operating instructions published by us are intended for the antenna and IT specialist who has basic knowledge of reception, network and system technology. Compliance with all relevant regulations and guidelines for the installation and operation of such systems is the responsibility of the installer and/or the operator. In particular, the regulations and guidelines applicable in the respective countries for commissioning, especially for the power connection, and all standards and laws related to the products must be complied with.

#### Annotation:

Tous les modes d'emploi que nous publions sont destinés aux professionnels de l'antenne et de l'informatique qui ont des connaissances de base en matière de réception, de mise en réseau et de technologie des équipements. Le respect de toutes les réglementations et directives pertinentes pour l'installation et l'exploitation de ces systèmes relève de la responsabilité de l'installateur et/ou de l'exploitant. En particulier, il convient de respecter les réglementations et directives applicables dans les pays respectifs pour la mise en service, notamment pour le raccordement électrique, ainsi que toutes les normes et lois relatives aux produits.

# Annotazione:

Tutte le istruzioni per l'uso da noi pubblicate sono destinate al professionista dell'antenna e dell'informatica che ha una conoscenza di base della tecnologia di ricezione, di rete e delle apparecchiature. Il rispetto di tutti i regolamenti e le linee guida pertinenti per l'installazione e il funzionamento di tali sistemi è responsabilità dell'installatore e/o dell'operatore. In particolare, devono essere rispettati i regolamenti e le linee guida applicabili nei rispettivi paesi per la messa in funzione, soprattutto per il collegamento alla rete elettrica e tutte le norme e le leggi relative ai prodotti.

# Anotación:

Todas las instrucciones de uso publicadas por nosotros se dirigen al profesional de la antena y de la informática que tiene conocimientos básicos de recepción, de redes y de tecnología de equipos. El cumplimiento de todos los reglamentos y directrices pertinentes para la instalación y el funcionamiento de dichos sistemas es responsabilidad del instalador y/o del operador. En particular, deben cumplirse los reglamentos y directrices en los respectivos países para la puesta en marcha, especialmente para la conexión de la energía y todas las normas y leyes relacionadas con los productos.

#### Anotação:

Todas as instruções de operação publicadas por nós são destinadas ao profissional de antena e TI que possui conhecimentos básicos de recepção, rede e tecnologia de equipamentos. O cumprimento de todos os regulamentos e diretrizes relevantes para a instalação e operação de tais sistemas é de responsabilidade do instalador e/ou do operador. Em particular, os regulamentos e diretrizes aplicáveis nos respectivos países para comissionamento, especialmente para a conexão de energia e todas as normas e leis relacionadas aos produtos devem ser obedecidas.



U.





#### **Appearance:**



DC-Jack 12V, AUDIO 3.5mm Input, Status LEDs, HDMI IN, RESET Button-hole, CVBS/FBAS BNC, RJ-45 GbEthernet

Variant with SDI Inputs: SDE-265 (no 264 available any more)



SDI-Versions have a loop through to cascade the Input to other SDI-devices...



Sticker with default settings (MAC may be different)

**ADE-16264** in 3RU 19" Chassis with redundant inbuilt power supplies:





#### Notes and Hints:

The Gigabit-Ethernet-port does not support PoE so please take care of not accidently using a PoE switch- you can damage the port and the unit will be not accessible anymore.

We recommend to use an IGMP-V2/3 protocol capable GBE- Switch to avoid flooding your network <u>with unmanaged multicast</u> streams. Also some consumer Internet routers do not like Multicasts (UDP/RTP) and might reboot periodically.

An Internet-connection is not necessary as long as you need to use NTP and does not have an own NTP server in your network.

Please asure that your HDMI –Output you like to encode is set to max. HD with 1080p60 or lower. Higher values will not work. Note: i50 will be encoded to p25 !!! Interlaced is a dinosaur related to the good old analogue times ;-).

The embedded Linux system takes some seconds to fully boot. After the System-LED is on, you can connect your browser to it. We recommend Chrome, Opera, and Mozilla. For a preview PopUp in the browser, a flash-player addon need to be installed for the browser.

Sometimes it is helpful to reload the browser – page to get the changed settings and values because of different browser behaviours...

The RESET button will erase all your settings and the unit will be forced to start with factory defaults. Use a thin wire to pass the small hole and press the inside button by it for at least 5-10 seconds until the System LED will go off. The encoder would perform a restart than after releasing the button.

The Web-Interface lookalike may vary between different Versions but basically its selfexplaining.

The SDI versions supporting only the first embedded Stereo-Audio-Pair to be encoded.

#### Setting up your PC/Laptop before connecting:

If you use a Windows based PC, you should assign its ethernet adapter into the same range like the encoder: Use a static IP like follows:

1st: Open your network settings in System Menu:

Problembehandlung			Netzwerkeinstellungen ändern		
Netzwerk- und Interneteinstellungen öffnen		₿	Adapteroptionen ändern Zeigt Netzwerkkarten 🖓 und ändert Verbindungseinstellungen.		
• • • 02.12.2019	$\rightarrow$	-	- · · ·		



		🏺 Status von	Ethernet		×	
		Allgemein				
		Verbindung				
		IPv4-Konr	nektivität:		Internet	
		IPv6-Konr Mediapsta	nektivität: htusi		Internet	
		Dauer:	itus;		01:52:23	
		Übertragu	ingsrate:		1,0 GBit/s	
		Details				
					Ν	
		Aktivität —			63	
			Gesendet —	<b>L</b>	Empfangen	
Organisieren 🔻		Bytes:	100.003.547		30.198.750	
IRENIS Realisk DCle GBE Family Cont		Eigens	ichaften 💎 Dea	aktivieren	Diagnose	
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	💭 Realtek PC	le GBE Family	Controller		]	
	-			V C		
	)iese Verbinduna	verwendet fol	gende Elemente:	Nonrigurieren		
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	🗹 👮 Npcap P	acket Driver (N	NPCAP) (Wi-Fi)			
	🗹 🏪 QoS-Pak 🔽 💷 Intel(P) T	etplaner	oooo Filtor Drivor			
	<ul> <li>The internet p</li> </ul>	Technology Ac	n 4 (TCP/IPv4)			
	🗆 🔔 Microsoft	-Multiplexorpro	tokoll für Netzwerl	kadapter		
	Microsoft	t-LLDP-Treiber		×		
	`	_		/	1	
	Installieren	Deins	stallieren E	igenschaften		
	Beschreibung TCP/IP. das St	andardprotoko	ll für WAN-Netzwe	erke, das den		
	Datenaustausc	h über verschi öglicht	edene, miteinande	r verbundene		
confirm Administrator access->	Holzmonike enn	oglici it.			Change	IPv4
Eigenschaften von Internetprotokoll, Versi	on 4 (TCP/IPv4)	×			0	
Allgemein						
IP-Einstellungen können automatisch zugev	viesen werden, we	enn das				
Netzwerk diese Funktion unterstützt. Wend Netzwerkadministrator, um die geeigneten	len Sie sich anderr IP-Einstellungen zu	nfalls an den u beziehen.				
IP-Adresse automatisch beziehen						
Folgende IP-Adresse verwenden:						
IP-Adresse: 19	2.168.1.1	03				
Subnetzmaske: 25	5.255.255.	0				
Standardgateway: 19	2.168.1.	1				
DNS-Serveradresse automatisch bezie	hen					
Folgende DNS-Serveradressen verwei	nden:					
Bevorzugter DNS-Server: 19	2.168.1.	1				
Alternativer DNS-Server:	.9.9.	9				
Einstellungen beim Beenden überprüf	en	weitert				
cottingc	ОК	Abbrechen	1			
settings.			-			



And confirm please. Linux users should know how to change the ethernet or WIFI settings.

Than open your browser and enter the http- Address of the box 192.168.1.168 (w/o https):

0 🔏 192.168.1.168

Depending on browser you'll get a log-in-screen window:

Der Server "192.168.1.168" fordert Ihren Benutzernamen und Ihr Kennwort an.		Bitte melden Sie sich an		
Der Server meldet: "pbox".		http://192.168.1.168		
		Die Verbindung zu dieser Website ist nicht sicher		
admin		Benutzername:		
•••••		Passwort:		
Anmeldedaten speichern				
ОК	Abbrechen	Anmelden Abbrechen		

Enter the default username = admin, default password = admin .... and here we go:

BLANKOM H.264 MPEG-4/AVC	HD Encoder S Version: 4.83	System Platform					
Input status							
Running Time:0000	-00-00 01:03	:49					
Device Time:2022-1	Device Time:2022-12-06 12:41:33(Sync Time To Device)						
CPU Usage:21% (If	CPU Usage:21% (If CPU usage always more than 85%, please close some stream.)						
HDMI Input Size:19	20x1080p@!	50					
HDMI Video Frame	s:7222						
HDMI Lost Video Fr	ames:3						
CVBS Input Size:PA	L						
CVBS Video Frames	:3829						
CVBS Lost Video Fra	ames:2						
Audio Samplerate:4	8000						
					45		
Main stream							
Encode Type:H.264							
Encoding Size:1920	x1080@30						
Bitrate(kbit):1800							
TS URL:http://192.1	68.1.168/0.t	s http://192.168.1.	168:8080/0.ts				
HLS URL:Disable							
FLV URL:http://192	168.1.168/0.	flv http://192.168.	1.168:8080/0.flv				
RTSP URL:rtsp://19	2.168.1.168/	0 rtsp://192.168.1.	168:8554/0				
RTMP URL: Disable							
RTMP(S) PUSH URL	RTMP(S) PUSH URL: Disable						
Multicast URL:Disal	ole						
Preview(HTML5)							
Status	Network	Main stream	Substream	CVBS1	CVBS2	Audio And Video	System



#### Substream

Encode Type:H.264

Encoding Size:1920x1080@25

Bitrate(kbit):4000

TS URL:Disable

HLS URL:Disable

FLV URL:http://192.168.1.168/1.flv http://192.168.1.168:8080/1.flv

RTSP URL:Disable

RTMP URL: Disable

RTMP(S) PUSH URL: Disable

Multicast URL:Disable

Preview(HTML5)

# CVBS1

Encode Type:H.264
Encoding Size:720x576@25
Bitrate(kbit):3000
TS URL:http://192.168.1.168/2.ts http://192.168.1.168:8080/2.ts
HLS URL:Disable
FLV URL:http://192.168.1.168/2.flv http://192.168.1.168:8080/2.flv
RTSP URL:rtsp://192.168.1.168/2 rtsp://192.168.1.168:8554/2
RTMP URL: Disable
RTMP(S) PUSH URL: Disable
Multicast URL:Disable
Preview(I)TML5)

and second CVBS2 as well ...

The STATUS page shows your Setup encodings for all the MAIN and the Substream(s).

Parallel and different streamings can be used for all encoder parts as long as the capacity of the system is not claiming it: You will get a message if the encoding capacity will be reached and one or more substreams would be disabled... The B-Models might support only one streaming Method enabled in Main and sec. Stream (= max. 2 outputs) but try in parallel: CVBS and HDMI should work. But the **analogue Stereo Audio Input** (3.5mm) would be related to the **CVBS** Input only.



In some Sub-Streams Info-sections (model depending) you can check the Picture/Sound directly in the browser by this button:

FLV URL:http://192.168.1.168/0.flv http://192.168.1.168:8080/0.flv
RTSP URL:rtsp://192.168.1.168/0 rtsp://192.168.1.168:8554/0
RTMP URL: Disable
RTMP(S) PUSH URL: Disable
Multicast URL:Disable
Preview(HTML5)

but you need to

enable the FLV or HLS stream before using that – and Flash-Player support is needed by your browser:

HLS URL:	/0.m3u8	Disable 🗸
FLV URL:	/0.flv	Enable V
RTSP URL:	/0	Disable
RTMP URL:	/0	Disable V
TMP(S)/RTSP PUSH URL:	rtmp://192.168.1.169/live/0	Disable 🗸

Enabling it in the related Sub-Stream settings

-> Applying it by Set Up!

TS URL:	/1 ① 192.168.1.168	
FLV URL:	7. Set successfully, please restart your d	levice!
RTSP URL:	/1	ок
RTMP URL:	/1	
RTSP PUSH URL:	rtmp://192.168.1.169/live/1	Disable 🗸
Multicast IP:	238.0.0.1	Disable 🗸
Multicast port:	1235	[1-65535]
	Apply	

This <u>does not mean to restart the encoder</u> but to restart your Stream-receiver-Decoder like VLC or IPTV Settopbox to re-sync it to the new codec values. This message will popup every time you change the encoder parameters. Receivers are stupid and might not react to the changed values by themself.

Depending on Model: Preview in Browser is possible from within the status page as a link:



RTMP URL: Disable			
RTMP(S) PUSH URL: Disable			
Multicast URL:Disable			
Preview(HTM	L5)		
Status	Network	Main stream	

HINT: Adobe Flash **does not** work with HEVC h.265 codec!!!! You need to have h.264 encoding to be set in the main or sub-stream menu (model depending).



#### CVBS-Preview with connected DVD-Player:



Since last year, Adope and also Microsoft disabled the FLASH support in all OS.

Therefore we changed the internal Preview Player to HTML5 Mode only:





#### HDMI-Input stream- Preview:

Back to STATUS page:

Like the hint above, sometimes its helpful to reload the Status page i.e. if you see @0:

ŵ to gather the actual values like Input HDMI values: Input status Running Time:0000-00-00 01:10:43 Device Time:2022-12-06 12:48:27(Sync Time To Device) CPU Usage:22% (If CPU usage always more than 85%, please close some stream.) HDMI Input Size:1920x1080p@50 HDMI Video Frames:13776 2 HDMI Lost Video Frames:3 CVBS Input Size:PAL CVBS Video Frames:7304 **CVBS Lost Video Frames:2** Audio Samplerate:48000

The device time can be adjusted by the Network-setup-part NTP-Server which you need to tell the NTP server URI and UTC-time difference. UK = '0', Germany normal is UTC+1...



#### If you press (Sync Time To Device) it will be updated.

To also check your encoding streams you can copy the URI from the STATUS page:

Encode Type:H.264	
Encoding Size:1920x1080@30	
Bitrate(kbit):1800	
TS URL:http://192.168.1.168/0.ts ht	tp://192.168.1.168:8080/0.ts
HLS URL:Disable	B
FLV URL:http://192.168.1.168/0.flv	http://192.168.1.168:8080/0.flv

Mark it by the mouse and COPY it - Than insert into VLC:



**Note:** If you more than one Network-Card in operation (like WIFI and GbE) in your receiving machine, VLC often doesn't recognize where to catch it from. Manually settings of METRIC Values for both can solve this issue.



🛓 0.ts - VLC media player	– 🗆 X
Media       Playback       Audio       Video       Subtritle       Tools       View       Help	<section-header><text><text><text><text><text><text><text></text></text></text></text></text></text></text></section-header>
0.ts	
00:02	00:00
	53% 1.00x 00:02/:

Note: MULTICAST UDP/RTP-Address will be taken by VLC with an @ and we have made it easy for you:

Multicast IP:	238.0.0.1 Disa	ible v
Multicast port:	1234 Dise	able N
1	Apply	2 C
TS U	JRL: //	
HLS U	JRL: /0 192.168.1.168	
FLV U	JRL: // Set successfully, please restart your d	levice!
RTSP U	JRL: /(	ок
RTMP U	JRL: /(	
RTMP(S)/RTSP PUSH U	JRL: rtmp://192.168.1.169/live/0	Disable 🗸
Multicas	t IP: 238.0.0.1	Enable 🗸
Multicast p	oort: 1234	[1-65535]
	A ∧ply	

AGAIN: You do not need to restart the encoder only the receivers you have in your network need to re-sync to the changed values!!!

#### **Multicasts:**



RTMP URL: Disable

RTMP(S) PUSH URL: Disable

Multicast URL:udp://@238.0.0.1:1234

copy with right mouse click

# udp://@238.0.0.1:1234 and insert into VLC:

	HAUEH	19	DEALLELEL	-
۱ 🔺 ا	VLC media player			
Med	ien Wiedergabe Audio	Video Unte	titel Werkzeug	e
Þ	Datei öffnen		Ctrl+O	Netzwerkprotokoll
	Mehrere Dateien öffnen		Ctrl+Shift+O	Ditta achar Cia aire Natawala da ara aire
	Ordner öffnen		Ctrl+F	Bitte geben Sie eine Netzwerkadresse ein:
S	Medium öffnen		Ctrl+D	udp://@238.0.0.1:1234
€ ₩	Netzwerkstream öffnen		Ctrl+N	http://www.example.com/stream.avi
A	(1220 0 0 1 1224 )// C /'			
👗 uap	Windo Neo Audio Video	er	And the	
Medien	Wieder abe Audio Video	Untertiter	kzeuge Ansicht	Hilfe
100				mark well the set
	UHD1~ 💼			Non-sector of the sector of
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				A Second Other Second
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Do not wonder, this HDMIO –signal was downscaled by the Receiver-HDMI out to max FullHD ;-)



Quick-Start-Manual 📥 rtsp://192.168.1.168:8554/2 - VLC media player X Media Playback Audio Video Subtitle Tools View Help 00:01:20 14/16 📀 /Track14.CDA Inhalt Ripping R Track09 Filter Track10 Wiederh. Track11 Modus : Normal Track12 R Track13 (R) Musik Wiedergabe R Track15 R Track16 00:00 00:00 E S X I ₩ ₩ 5 3 141 539 rtsp://192.168.1.168:8554/2 1.00x 00:00/00:00

#### CVBS-Stream:

#### **Network:** Here you can change the encoders IP-address and mode:

If you change it to DHCP – after a reboot it will catch it from your router. Disadvantage: You need to check the to the encoder given IP Address by your router in it's own menu or use an IP-Scanner-tool.

HD Encoder Sy HD Encoder Sy Version: 4.83	vstem Platform
Internet access	
DHCP: IP:	Disable ~ 192.168.1.168
Netmask:	255.255.255.0
Gateway:	192.168.1.1
MAC:	48:D7:FF:02:00:87
	G
DNS	
DNS1:	8.8.8.8
DNS2:	192.168.1.1



We assume, that you are familiar with the basic settings of a network.

PORT		
HTTP Port:	8080	[1-65500]
RTSP Port:	8554	[1-65500]

These are the basic ports for HTTP and RTSP-Streaming use. You can modify that but we recommend to keep them as they are because RTSP – receivers might are fixed to that port while HTTP isn't. The bottom of the every of the menu-pages contain the 'Set up' buttons to take and enable your changes.

The MAIN and SUB-Stream adjustments are nearly all similar:

Main stream		
Encoding type:	H.264 🗸	
FPS:	30	[5-60]
GOP:	30	[5-300]
Bitrate(kbit):	1800	[32-32000]
Encoded size:	same as the input \vee	
H.264 Level:	high profile 🗸 🗸	
Bitrate control:	vbr V	
TS URL:	/0.ts	Enable 🗸
HLS URL:	/0.m3u8	Disable 🗸
FLV URL:	/0.flv	Enable 🗸
RTSP URL:	/0	Enable 🗸
RTMP URL:	/0	Disable 🗸
RTMP(S)/RTSP PUSH URL:	rtmp://192.168.1.169/live/0	Disable 🗸
Multicast IP:	238.0.0.1	Enable 🗸
Multicast port:	1234	[1-65535]



**On Screen Display** Menu: You can 'Overlay' a Text or Logo over the encoded Picture in 4 Zones:

OSD

For deeper detailed explanations about the OSD feature refer to the full – Manual please. Also for the ONVIF settings with RTSP.

OSD			
	Alp	ha: 100	[0-128]
Zone 1			
	Zo	ne: Enable 🗸	
	Ту	pe: Text	
		X: Text	[0-1920]
		Y: Scroll Text	[0-1080]
	т	ext:	
	Font s	ize: 36	[8-72]
	Background co	or: white V	
	Co		select color
			Select Color
Zone 2	Zone: Disable		
Zone 3			
Zone 5	Zone: Disable		
Zone 4			
	Zone: Disable		
LOGO	LOGO: Durchsue	hen) Keinewählt.	
	Please u the file r	סוסמם אויש or 24-bit שואוי(טגר ודדר is transparent) pictures les ame is logo1.bmp\logo2.bmp\logo3.bmp\logo4.bmp. or logo	s tnan 500 kByte, 1.png\logo2.png\logo3.png\log
	Upload		
	Ар	pty	

It supports BMP with a special backgroud colour if you like to be that transparent – or simply use already transparent PNG files. Names and limitations of size are shown in the web.



Substream		
Encoding type:	H.264 V	
FPS:	25	[5-60]
GOP:	15	[5-300]
Bitrate(kbit):	4000	[32-32000]
Encoded size:	same as the input $$	
H.264 Level:	high profile 🗸 🗸	
Bitrate control:	vbr v	
TS URL:	/1.ts	Disable 🗸
HLS URL:	/1.m3u8	Disable 🗸
FLV URL:	/1.flv	Enable 🗸
RTSP URL:	/1	Disable 🗸
RTMP URL:	/1	Disable 🗸
RTMP(S)/RTSP PUSH URL:	rtmp://192.168.1.169/live/1	Disable 🗸
Multicast IP:	238.0.0.1	Disable 🗸
Multicast port:	1235	[1-65535]

Audio settings are common for both stream encoder parts:

Audio encoder		
Audio Input:	HDMI V	
HDMI Samplerate:	HDMI	
UDMI Encodori	ANALOG	
HDIVII Encoder:	AAC WS	
HDMI Bitrate:	256000	[48000~320000]
CVBS Samplerate:	44100 🗸	
CVBS Encoder:	AAC Y	
	And -	
CVBS Bitrate:	256000	[48000~320000]

Self-explaining:



HD Encoder System Platform WPEG-4/AVC			
Change password			
Old password:			
New password:			
Confirm password:			
	Apply		

The default settings are usually Ok for most use-cases:

Ad	vanced		
	Video Only:	Disable 🗸	
	Audio Only:	Disable 🗸	
	Hls Splitter Time(s):	10	[3-20]
	Hls Number:	5	[3-20]
	Deinterlaced:	Bottom Only Y	
	Net Drop Threshold:	5000	[50-50000]
	TS muxer:	Compatible with FFMPEG	
	TS once pack:	7	[3-128]
	ts_transport_stream_id:	101	[1-65535]
	ts_pmt_start_pid:	480	[16-7936]
	ts_start_pid:	481	[32-3840]
	ts_tables_version:	6	[0-31]
	ts_service_name:	Live	
	ts_service_provider:	Encoder	
	TS Empty Packet:	No Insert 🗸 🗸	
	TS password enable:	Disable Y	
	Vmix Compatible:	Disable 🗸	
	TS OVER RTSP:	ES ¥	
	Multicast type:	UDP V	
	UDP TTL:	64	[1-254]



Playing with 'Deinterlaced settings' helps sometimes fixing moving picture artefacts. BOTTOM only can solve right-left-camery stucking problems.

Multicast type:	UDP V	
UDP TTL:	64	[1-254]
UDP SOCKET_BUF_SIZE:	20971520	(0-20971520]
Slice split enable:	Disable 🗸	
Slice size:	1024	[128-65535]
MIN_QP:	5	[1-35]
MAX_QP:	42	(MIN_QP-50]
SAR(H.264 Only):	Disable     V       Disable     16:15(720:576->4:3)       64:45(720:576->16:9)     3       8:9(720:480->4:3)	
	32:27(720:480->16:9)	0.0004

**SAR** can adjust your Egg-Head picture into the right format – usefull for CVBS as well. A schedules 'restart' can be programmed (NTP-Time = ON recommended):

NTP	
NTP	enable: Disable V
Ntp	Server: time.windows.com
Time	e Zone: UTC+1 V
	Apply

The settings as well as the Firmware can be back-upped and re-uploaded.

Schedule restart		
Restart enable:	Disable V	
Restart time:	03:00	
	Apply	
Upload firmware and con	figuration	
Select File:	Durchsuchen) Keine Datei ausgewählt.	(File name is 'up.rar' or 'box.ini'. Please don't upload by different
	people at the same time, don't power off	during upload.)
	Upload	



Backup firmware and configuration								
		Backup up.rar	Backu	p box.ini				
System sett	ings							
		Reboot	R	eset				
Status	Network	Main stream	Substream	CVBS1	CVBS2	Audio And Video	System	

The config-settings file is a linux based text file named box.ini. Do not modify store upload that by a windows editor except you will use notepad++ (freeware – please google...)

Finally i.e. after firmware update has been uploaded, the unit can be remotely reset to factory defaults or rebooted...

We recommend to make yourself familiar with 'What is Multicast and Unicast' and the corresponding IP-Ranges.

A last hint:

Using VLC SAP-Gathering will show a simple click'n start entry:

	🛓 VL	.C media play	er										
	Media	Playback	Audio	Video	Subtitle	Tools	View	/ Help					
							☴	Playlist	C	trl+L			
								Docked Playlist					
Ì		- <b>b b</b>											
	Local N	etwork											
	1 T	mDNS Netwo	rk Discov	ery									
	<b>ب چ</b>	Network strea	ms (SAP)										
	<b>₽</b> ₽ (	Jniversal Plug	i'n'Play										
	📥 Pla	ylist										-	C
	Netwo	k streams (9	5AP)							Search			
	📑 PI	aylist [00:00]							Title				
	🚮 M	ledia Library							< □	] 192_168_:	1_68		
	My Con	nputer								🌍 GROUF	P_0_STREAM_0		
ļ		•							-	_	~		
	-, Pla	ylist [00:00]							Title				
	Me	dia Library							> 🗖	192_168_1_	_68		
Yy Computer					× D	192_168_1_	_168						
	M	y Videos								SROUP	0_STREAM_0		

-> Will receive the stream. This works only with Multicast UDP / RTP !

# **MJPG Support:**

Setting the encoder main or secondary processor to



Main stream	า	
	Encoding type:	H.264 V
	FPS:	H.264
	GOP:	MJPEG 30

Enables at the Status-Page the direct Links for Motion JPEG transmission direct into your browser (if that supports it):

Encoding type:	MJPEG V							
FPS:	25	[5-60]						
Bitrate(kbit):	1800	[32-32000]						
Encoded size:	same as the input \vee							
Bitrate control:	vbr 🗸							
Main stream								
Encode Type:MJPEG								
Encoding Size:1920x1080@25								
Bitrate(kbit):1800								
MJPG URL: http://192.168.1.168/0.mjpg								
	JPG URL: http://192.168.1.168/0.jpg							
	TS URL:Disable							

# Just click: (here;-):







#### w/o input signal, so you get our test-picture

The /0.jpg (or in secondary stream the /1.jpg

Will do a screen-snapshot to your browser – so no motion – just like a screenshot. BTW: If no signal has been detected at the Input connector, the Test-picture will appear and the Stream output may 'pump' because the encoder check the input signal periodically – and in this periods', the output stream might fluctuate like:



**Finally:** To get more information about the deeper details of the encoder settings and configuration issues, please download the combined PDF – Manual from our website <u>www.blankom.de</u>.