

Easy Streamer User Manual

(Easy Streamer v 6.1.0.0)

Contents

1.	Overview			<u>1</u>
2.	Software			<u>1</u>
	2.1. Easy Streame	er		<u>1</u>
	2.1.1. Yer	el Ser	ver	<u>1</u>
	2.1.2. Stre	eam In	hfo	<u>2</u>
	2.1.3. Play	y Butto	on	<u>2</u>
	2.1.4. Loc	king P	rogram	<u>3</u>
	2.1.5. Sett	tings		<u>3</u>
	2.1.5.1	Inp	out Device Settings	<u>4</u>
	2.1.5.1	1.1	Setting Buttons	<u>4</u>
			Video Settings	<u>4</u>
			Restart	<u>4</u>
			Audio Settings	<u>4</u>
			Channel Routing	<u>5</u>
	2.1.5.3	1.2	Input Device	<u>5</u>
	2.1.5.	1.3	Video Format	<u>5</u>
	2.1.5.	1.4	Audio Format	<u>6</u>
	2.1.5.	1.5	Stream Type	<u>6</u>
	2.1.5.	1.6	Scale	<u>6</u>
	2.1.5.2	Mu	x. Settings	Z
	2.1.5.	2.1	OverAll Bitrate	<u>7</u>
	2.1.5.	2.2	Video Bitrate	<u>7</u>
	2.1.5.	2.3	Audio Bitrate	<u>Z</u>
	2.1.5.	2.4	Program No, PMT Id, VideoTS Pid, AudioTS Pid, PCR Pid:	<u>7</u>
	2.1.5.3	Red	cort Settings	<u>8</u>
	2.1.5.	3.1	Filename	<u>8</u>
	2.1.5.	3.2	Folder	<u>8</u>
	2.1.5.	3.3	Split Mode	<u>8</u>
	2.1.5.	3.4	Split Size	<u>8</u>
	2.1.5.4	Ne	twork Settings	<u>8</u>
	2.1.5.	4.3	Protocol	<u>9</u>
	2.1.5.	4.4	Source IP	<u>9</u>
	2.1.5.	4.5	Target IP	<u>10</u>
	2.1.5.	4.6	Port	<u>10</u>
	2.1.6 Ad	vance	d Settings	<u>10</u>
	2.1.6.1	Layer	2 Audio Encoder Preset	<u>10</u>
	2.1.6.2	H264	Video Encoder Preset	<u>11</u>
	2.1.6.3	MPEC	G Multiplexer Preset	<u>11</u>
	2.1.6.4	Netw	vork Renderer Preset	<u>12</u>
	2.1.7 File	e 		<u>13</u>
	2.2.7.1	Lock	-	<u>13</u>
	2.2.7.2	Save	Server List	<u>13</u>
	2.2.7.3	Open	i Server List	13
	2.2.8 He	ip		13
	2.2.8.2	Abou	t 	13
	2.2.8.3	Licen	se kequest	13
	2.2.8.4	Unlin	e License	<u>13</u>
	2.2.8.5	Syste	m Into	<u>13</u>

		2.2.9	Shutdown with Windows Task Maneger	<u>14</u>
3.	Тес	hnical	Support	<u>15</u>
	3.1	Suppor	rt by phone	<u>15</u>
	3.2	On-site	e Support	<u>15</u>
	3.3	Remot	te Access	<u>15</u>
4.	Со	ntact		<u>16</u>

1. Overview

Easy streamer system in the entrance through the network of live video or audio source over Unicast or Multicast provides the IP address and the port to the stream.

2. Software

2.1. Easy Streamer

When running Easy Streamer program Graphic 1 'comes out as in a screen. This interface includes section we have listed below.

Lasy Stream Controller is connected to 127.0.0.1:6002	
File Settings Help	
Easystream Local Servers Easystream Remote Servers	Video Info Audio Info Network Info Mux Info Mux Statisti
Server Ip Server Port 127.0.0.1 6002 S	Preset Type: DVB
1	Bitrate : 4000 2 Aspectratio : Auto Field Order : TopField_First Picture Type : Interlaced
6002 Open Server	Chroma : 4_2_0
00:00:00:00 3 Input : Decklink Video Capture V. Format : PAL - 8 bit 4:2:2 YUV Encode : MPEG2Streaming	Total Bitrate: 4401 Kbit/s

Graphic 1

2.1.1. Local Server (Figure 1 – Part 1)

Easy Streamer server portion of the program (Figure 1 - Part 1) is installed in the system can manage the local Easy Streamer program or with the remote control feature can manage any IP and Port in Easy Streamer programs. Easy Streamer Remote Servers tab to control the passing of the system that have the desired Easy Streamer program by entering the IP address and port added to the list.



Graphic 2

2.1.2. Stream Information (Figure 1 – Part 2)

Easy Streamer program in (Figure 1 - Part 2) Information section Video, Audio, LAN, mux and Mux statistics, including 5 pieces of information display. (Figure 3).

Video Info	Audio Info	Network Info	Mux Info	Mux Statisti
Preset Type :	: DVB			
Video Forma	t: Auto			
Bitrate :	4000			
Aspectratio :	Auto			
Field Order :	TopField_F	First		
Picture Type	: Interlaced			
Chroma :	4_2_0			

Graphic 3

The information available from the settings screen on the Easy Streamer program this information can be displayed quickly.

Video Info	Audio Info	Network Info	Mux Info	Mux Statisti
Preset Type : DVB Video Format : Auto Bitrate : 4000 Aspectratio : Auto Field Order : TopField_First Picture Type : Interlaced Chroma : 4_2_0	Mode: Siloreso Audio Layer : Layer2 Bitrate : 192	Protocol : UDP Source IP : 192.168.1.35 Target Ip : 127.0.0.1 Port : 1100	Program Number:1PMTId:1000videoTSPid:1001audioTSPid:1002PCRPid:1001PCR Repetition:37PSI Repetition:100	Video Frame Queue: 3 Audio Frame Queue: 23 Mux Time: 00:08:12:709 Graph Time: 00:08:12:874 Video Underflow: 0 Audio Underflow: 0 Video PTS: 00:08:13:218 Audio DS: 00:08:13:218



2.1.3. Play Button (Figure 1 – Part 3)

Easy Streamer program is being broadcast on the Play button that appears in our work and our starting, stopping next to the entrance, the selected card, v.format, the format in which the video is posted and shows the information stream.



2.1.4. Locking Program (Figure 1 – Part 4)

The lock button on the Streamer programs for our program can be locked to prevent tampering by others. Default User Name: Admin Password : emslock as it is entered.



Graphic 7



2.1.5. Settings (Figure 1 – Part 5)

SimpleSettingWi	ndow			
Input Device Set	lings ———			
	4			
Input Device:	Decklink Video Capture			
Video Format :	PAL - 8 bit 4:2:2 YUV	and the second second		
Audio Format :	2 channels, 48.0kHz, 16-bit			
Stream Type :	MPEG2_Streaming			
Audio Codec :	MPEG_Audio			
Mux Settings —		Network Settings		
OverAll Bitrate :		Protocol :	UDP	
Video Bitrate :	4000	Source IP :	192.168.1.35	
Audio Bitrate :	192	Target lp :	127.0.0.1	
Program No :	1	Port :	1100	
PMT Id :	1000			
VideoTS Pid :	1001			
AudioTS Pid :	1002			
PCR Pid :	1001			
Record Settings				
Enable Reco	rd			
Filename :	Record @date @time.ts			
Folder :	C:\Users\Admin\Documents\Easy Browse			
Split Mode :	Split_By_Size		_	
Split Size(MB) :	3600			Add Remove
			Advance	ed Apply

Graphic 9

2.1.5.1. Input Device Settings

2.1.5.1.1. Setting Button



Video Settings: When you click number 1 button then in graphic 11 window opening. Easy Stream able to send multiple stream when you sellect servers . Payout Video output which, if pressed Server that this output is selected and approved.

Restart: The third button is clicked to restart input device settings.

Properties	Properties
Setup	
Server	PLAYOUT1 Video(720x576)
	PLAYOUT1 Video(720x576)
	PLAYOUT2 Video(1920x1080)
	Disconnect
	OK Cancel Apply

Graphic 12

Audio Settings: When you click number 2 button then in graphic 12 window opening. Easy streaming to send more than one stream then u have to chooice their servers selected. If the audio output of which is published in this Payout Server that output must selected and approved.

Properties	Properties
Setup	
Server	PLAYOUT1 Audio(48000x16)
	PLAYOUT1 Audio(48000x16)
	PLAYOUT2 Audio(48000x16)
	Disconnect
	OK Cancel Apply

Graphic 13

Channel Routing: Routing is performed for the audio channel. After clicking on the fourth button on the screen that the number of channels selected. Easy Stream routing which channel is to be made that the channel selection is choose and approved.

С	hannel Count : 8] 4	dd														
		ch 1	ch 2	ch 3	ch 4	ch 5	ch 6	ch 7	ch 8	ch 9	ch 10	ch 11	ch 12	ch 13	ch 14	ch 15	ch 16	
	Stream	~	~															
	Stream			<	V													
	Stream					V	V											



2.1.5.1.2. Input Device: Easy Encoder input will be used in conjunction with the program are selected on the system board.





2.1.5.1.3. Video Format: The video signal from the video card format, according to the incoming signal is coming in which format should be selected. The signal at the correct format when the video input source selected in the preview window Figure 9 'We have seen from out image as follows



Graphic 16

2.1.5.1.4. Audio Format: The sound of the publication will be sent to as many channels selected will be sent. More than 2 channel audio only H.264 Streaming supports.



Graphic 17

2.1.5.1.5. Stream Type: The publication will be sent should be selected which will be sent by encoding. MPEG2_Streaming and H264_Streaming is commonly used in professional publishing. MPEG2_Streaming_Only_RTP and H254_Streaming_Only_RTP also RTMP Streaming is used in the web publishing. . MPEG_Audio_Streaming and AAC_Audio_Streaming radio broadcasting in the field is only used to send audio

Stream Type :	MPEG2_Streaming			
	MPEG2_Streaming			
	MPEG2_Streaming_Only_RTP			
	H264_Streaming			
	H264_Streaming_Only_RTP			
	MPEG_Audio_Streaming			
	AAC_Audio_Streaming			
	RTMP_Streaming			

Graphic 18

2.1.5.1.6. Scale: The resolution of the image to be sent value having a certain resolution and If you do not want to pass this value then in Graphic 18 made of your choice.





2.1.5.2. Mux. Settings

2.1.5.2.1. OverAll Bitrate: : When the checkbox is checked here, for an OverAll Bitrate value Bitrate is entered. According to the overall bitrate value entered here automatically Video Bitrate and Audio Video Bitrate value are set by the system.

OverAll Bitrate :	4000	\checkmark
	Graphic 20	

2.1.5.2.1. Video Bitrate: The quality of the broadcast will be sent is determined by the quality of the purchaser's request or according to the transmission rate. If the "overall Bitrate" The Checkbox selected "Nulla Pack" Checkbox is activated. "Nulla Pack" Null Packets is selected (empty packages) it sends.



2.1.5.2.2. Audio Bitrate: The quality of sound will send the request to the receiver or by the transmission rate should be determined according to quality.



2.1.5.2.3. Program No, PMT Id, VideoTS Pid, AudioTS Pid, PCR Pid: The number of programs to be encoded and the PID values are entered. All PID range: from 0 ~(to) 8192 can be entered. Value by the user or the receiving device from replaceable. However, the PID 's different values, it is necessary to ensure that input.

Program No :	1
PMT ld :	1000
VideoTS Pid :	1001
AudioTS Pid :	1002
PCR Pid :	1001

Graphic 23

2.1.5.3. Recort Settings

When the Enable Recorder option is selected (Figure 24), our source video from our video capture card at the same time 'in the menu to save the the MPEG-TS recording options open.

- 2.1.5.3.1. Filename : In this section we tag our video will be recorded . Sample: Record @date @time.ts (@) Signs here after reviewing our benefits from adding the name of our information listing.
- **2.1.5.3.2.** Folder : Register to record the location of the video file will be selected.
- **2.1.5.3.3. Split Mode :** The recorded file in the desired time or size option in the partition.
- **2.1.5.3.4. Split Size :** In some of the recorded file in the required time in milliseconds, or any size in kb is set some time in the auto division.

r Record Settings			
Filename :	Record @date @time.ts		
Folder :	C:\Users\Admin\Documents\E Browse		
Split Mode :	Split_By_Size		
Split Size(MB) :	3600		

Graphic 24

2.1.5.4. Network Settings

This section is where you should enter the Protocol, Source IP, Target IP and Port information. If desired to create more than one link is clicked the Add button and enter the information. Remove button is made with the deletion process.





2.1.5.4.3. Protocol: Of networked devices, should be sellect it one of these protocols to determine of how to communicate, how to send the data, how will get data.

Protocol :	UDP 🔽		
Source IP :	UDP		
Target lp :	RTP		
Dort	тср		
Port.	RTP_Over_TCP		
Graphic 26			





Graphic 27

network card from the publication will be sent in order to select the Source IP section.

2.1.5.4.5. Target IP: IP address of the device in the receiving portion of the post is inserted. A direct connection from point to point IP address is entered or The broadcast made using the Internet to the receiving party external IP have entered. Inside the desired port forwarding to the IP steam is delivered in this way. If you do not know your modem port forwarding or selling your company you need to contact the technical department.



2.1.5.4.6. Port: PORT number of devices in the receiver portion of the broadcast is entered.



2.1.6. Advanced Settings

Easy Encoder "advanced settings menu", you can access the Advanced menu in the settings screen.

Advenced Settings Window		
► MPEG2VideoEncoderPreset		5
► Layer2AudioEncoderPreset		
► MPEGMultiplexerPreset		
► NetworkRendererPreset		
		1
	Set Defeult	
	Set Default Apply	Add Remove
	l L	
		Advanced Apply



2.1.6.1. Layer2 Audio Encoder Preset (Graphic 31) : The encoder software becomes active if Stream Type MPEG2 selected. When Layer 2 is the default audio settings come ready to also you can edit the default.

Layer2AudioEncoderPreset			
mode	Stereo		
layer	Layer2		
bitrate	_192		
► H264VideoEncoderPreset			
► MPEGMultiplexerPreset			
► NetworkRendererPreset			

Graphic 31

2.1.6.2. H264 Video Encoder Preset (Graphic 32) : The encoder software becomes active if Stream Type H264 selected. H264 settings is to come ready to use also you can edit the default.

► Layer2AudioEncoderPreset			
▼ H264VideoEncoderPi	reset		
PresetType :	Main		
Level :	Level_3		
Bitrate :	3000		
FrameType :	Interlaced_Fields		
BitratePass :	Single_Pass		
Aspectratio :	Auto		
Max Gop :	33		
Max B Frames :	3		
CPB Size (kbits) :	2000		
Use HRD :	✓		
► MPEGMultiplexerPreset			
► NetworkRendererPreset			



2.1.6.3. MPEG Multiplexer Preset (Graphic 33) : MPEG multiplexer menu is used common to all streams. The Stream Type options DVB, Transport Stream or Program Stream can be selected. The number of programs and PID values can be changed from this menü
 (Bknz 2.1.5.2.4.-Page 7)

► Layer2AudioEncoderPreset				
► H264VideoEncoderPr	► H264VideoEncoderPreset			
MPEGMultiplexerPress	set			
streamType	DVB			
tsld	0			
prgramNumber	1			
PMTId	768			
videoTSPid	2000			
audioTSPid	1005			
PCRPid	2000			
pcrRepetition	37			
psiRepetition	100			
numberOfTSPacket	7			
enablePadding				
► NetworkRendererPreset				



2.1.6.4. Network Render Preset (Graphic 34) : Network Renderer is selected as the menu Stream Protocol UDP, RTP or TCP. Source, Target and port values can be changed in the same way (Bknz 2.1.5.4.2, 2.1.5.4.3, 2.1.5.4.4)

۲	Layer2AudioEnc	oderPreset							
►	H264VideoEnco	derPreset							
►	MPEGMultiplexe	erPreset							
v	NetworkRendere	erPreset							
	Protocol :	UDP	_	_	_	-		•	
	Source IP :							•	
	Target lp :	127.0.0.1							
	Port :	1100							
	TTL	64							
	Control bitrate	✓							
Ľ									
							Add	Remo	ove

Grafik 34

2.1.7. File

2.2.7.1 Lock

Our lock button on the Easy Streamer can be locked to prevent tampering by others purpose. Default Username: Admin Password: ems lock as it is entered. **(Refer to 2.1.4)**



2.1.7.2. Save Server List: As shown in "Figure 36" to get more than one Streamer Server added.. "Save Server List" Clicking the menu will register in the system. When we try to delete from the server interface not deleted from the system and when called" Open Server List" get a list of registered server

File Settings Help	
Login	Easystream Remote Servers
Lock Save	rver Port
Save Server List	
Open Server List	3 🔇 🗡
127.0.0.1 6004	4 💽 💌
127.0.0.1 6005	5 🙆 🗙
6005	Open Server

Graphic 36

2.1.7.3. Open Server List: This menu is used to recall the list of registered Server interface. (Refer ti 2.2.7.3)

2.1.8. Help

- **2.1.8.2. About:** Window displaying version and license information.
- 2.1.8.3. License Request: The first installation of the program can be made by filling in the licensing process should be sent to the company by customers info@devtek.com.tr the e-mail address.
- **2.1.8.4. Online License Request :** The license previously taken via the web makes automatic licensing process.
- 2.1.8.5. System Info : It gives details on the computer's hardware



g-		
Easystream Local S	About	m Rem
Server Ip	Licence Request Online Licence Request	
127.0.0.1	System Info	



2.1.9. Shutdown with Windows Task Manager

When faced with a situation such as the inability to close or freeze in the software, you can close with "Windows Task Manege".

Step 1: CTRL + DEL button to click together.

Step 2: The pop-up screen (chart 39) "Start Task Manager" menu is clicked.



Step 3: Windows Task Manager screen appears. From this screen, "Processes" is clicked the menu. Easy Streamer has related processes. Sağ tıklayıp "End Process" to shut down the application is terminated.

1 Windows Task Manager							
File Options	View	Help					
Applications Processes Services Performance Networking Users							
Image Name User							
DesktopVide dllhost.exe	DesktopVideoHelper.exe *32 SYSTEM						
dwm.exe	dwm.exe Admin						
EasyFT_Sys EasyOnAir	EasyFT_Systemtry.exe Admin EasyOnAir Voa v0.9.0 Build 0013.exe *32 Admin						
EasyStream	EasyStreamController.exe *32 Admin						
egui.exe ekrn.exe	egui.exe Open File Location				Admin		
EOnAir975.	exe	End Process			Admin		
EXCEL.EXE *32 End Process Tree					Admin		
explorer.exe Debug Admin HeciServer.exe Debug SYSTEM IDMan.exe *32 UAC Virtualization Admin					Admin SYSTEM		
IEMonitor.exe ³ Create Dump File Admin							

Graphic 38

3. Technical Support

General support on Easy Media Suite website is accessed using the following links: <u>http://www.easymediasuite.com/</u>

Services;

3.1 Phone Support

Easy Media Suite, Provides online 7x24 telephone support..

3.2 On-site Support

Easy Media Suite, Provides a project launch or support services in place in case of need at the stage when a problem can not be solved over the phone.

3.3. Remote Access Support

Easy Media Suite, Virtual Private Network for clients (VPN) via remote access.

4. Contact

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