episode ESA-70V-2CH-IP AMPLIFIER

SERIAL PROTOCOL

OVERVIEW

The following information will guide the installer through simple set up and programming for serial control of Episode™ ESA-70V2CH-150W/300W/500W Amplifiers.

Please read the entire document before any RS-232 setup.

If you have any questions about serial control after reading this document, please contact Technical Support.

CONTACTING TECHNICAL SUPPORT

Phone: 866.838.5052 or 704.909.5229

Email: support@episodeaudio.com

BEFORE BEGINNING

Make sure the following items are close at hand for setup:

- ESA-70V2CH-150W/300W/500W Amplifier
- Control system with serial output
- Control system documentation
- ESA-70V2CH-150W/300W/500W Installation Manual
- · Serial cables and adapters for connection between controller and amplifier
- · List of the functions to program into the control system

FIRMWARE VERSION

The information in this document applies to ESA-70V2CH-150W/300W/500W amplifier with firmware version 01.00.78.370, or higher. If the firmware version is below 01.00.78.370, please update to the latest version.

UPDATING FIRMWARE

Via GUI

- 1. Ensure the firmware file is saved onto a PC and follow the steps below:
- 2. Click on the Micro.DSP tab
- 3. Click "Enable HTTP Bootloader"
- 4. Choose the new firmware file on your PC and click "Upload"

NOTE: Some browsers do not show file upload status, in these cases, wait about 5 minutes for the upload to complete.

5. The amplifier will reboot once the new firmware is installed. Any saved settings will be retained after the firmware has been updated

Via OvrC®

- 1. Log in to your OvrC account via PC or mobile application. (See instructions in the Configuration Utility for instructions on installation and set up of OvrC).
- 2. Select the ESA-70V2CH-150W/300W/500W amplifier on device list.
- 3. Select "Update Firmware".



RS-232 PORT CONFIGURATION

The ESA-70V2CH-IP Amplifier receives control data on the "Rx" pin and transmits control data on the "Tx" pin of the screw-down terminal serial port at the back of the amplifier. The connection cable between the amplifier and the control system will need to be configured so the Rx pin on the amplifier is connected to the TX pin on the control system, and the Tx pin on the amplifier is connected to the Rx pin on the control system. See the illustration below for details.

Configuration for the control system ports can vary. Refer to the documentation for the control system you are using to ensure proper connection and configuration.

Pir	Function	Screw Terminal Connector
_		IR RS232 DRY CONTACT
R>	Data Receive	SGGTxRxIn1In2
Т	Data Transmit	
		GND
GNE	Ground	Tx (Data Transmit) Rx (Data Receive)

SERIAL COMMUNICATIONS FORMAT

Set the serial communications to the following format on the control system control port.

Baud Rate	9600 bps
Data Bit	8 bits
Parity	None
Stop Bit	1 bit

POWER

System Power=	Power State	Carriage Return	Line Feed				
Example #1: Power On the Amplifier.							
System_Power=	On	<cr></cr>	<lf></lf>				
Example #2: Power Off the amplifier.							
System_Power=	Off	<cr></cr>	<lf></lf>				
Example #3: Automatically power on the amplifier to the input that becomes active and power off when no inputs are active.							
System_Power=	Auto	<cr></cr>	<lf></lf>				

Response
Example #1: Power On the Amplifier.
System_Power=On <cr><lf></lf></cr>
Example #2: Power Off the amplifier.
System_Power=Off <cr><lf></lf></cr>
Example # 3: Automatically power on the amplifier to the input that becomes active and power off when no inputs are active.
System_Power=Auto <cr><lf></lf></cr>

INPUT SWITCH

Command Switch_Audio=	Input	Colon Delimiter	Input Type	Colon Delimiter	Input (Up to 3 Bytes)	Comma Delimiter	Output	Colon Delimiter	Output Type	Colon Delimiter	Output (Up to 3 Bytes)	Carriage Return	Line Feed
Example #1: Switch Line Level Audio Input 1 to Output Speaker 1.													
Switch_ Audio=	Input	:	Line	:	1	,	Output	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #	2: Mix I	nput	1 & 2 to) Spea	aker 2.								
Switch_ Audio=	Input	:	Line	:	12	,	Output	:	Speaker	:	2	<cr></cr>	<lf></lf>
Example #	3: Mix I	nput	1 & 3 to) Spea	aker 1.								
Switch_ Audio=	Input	:	Line	:	13	,	Output	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #	4: Sum	or m	ix input	s 1 ar	nd 2 to o	utput Sp	eaker 1.						
Switch_ Audio=	Input	:	Sum	:	12	,	Output	:	Speaker	:	1	<cr></cr>	<lf></lf>

*Inputs: Inputs 1 & 2 - Unbalanced RCAs, Inputs 3 & 4 - Balanced inputs

Possible Commands	Valid Input Options:
Line:1	1
Line:2	2
Line:3	3
Line:4	4
Sum:12 will sum inputs 1 and 2	12
Sum:13	13
Sum:14	14
Sum:23	23
Sum:24	24
Sum:34	34
Sum:123 will sum inputs 1, 2 and 3	123
Sum:234	124
Sum:ALL will sum inputs 1, 2, 3 and 4	234
Response	
Example #1: Switch Line Level Audio Input 1 to Output Speak	er 1.
Switch_Audio=Input:Line:001,Output:Speaker:001 <cr><lf></lf></cr>	
Example #2: Sum or mix inputs 1 and 2 to output Speaker 1.	

Switch_Audio=Input:Sum:012,Output:Speaker:001<CR><LF>



OUTPUT VOLUME

Example #1: Adjust the volume to 50% for Speaker 1.								
Output_Volume= Output : Speaker : 1 , 50 <cr></cr>	<lf></lf>							
Example #2: Increase the volume for Speaker 1.								
Dutput_Volume= Output : Speaker : 1 , + <cr> <lf></lf></cr>								
Example #3: Decrease the volume for Speaker 1.								
Output_Volume= Output : Speaker : 1 , - <cr></cr>	<lf></lf>							
Example #4: Adjust the volume to 0% for Speaker 1.								
Output_Volume= Output : Speaker : 1 , 0 <cr></cr>	<lf></lf>							
Example #5: Mute sound for Speaker 1.								
Output_Mute= Output : Speaker : 1 , ON <cr></cr>	<lf></lf>							
Example #6: Unmute sound for Speaker 1.								
Output_Mute= Output : Speaker : 1 , Off <cr></cr>	<lf></lf>							
Response								
Example #1: Adjust the volume to 50% for Speaker 1.								
"Output_Volume=Output:Speaker:001,050 <cr><lf>"</lf></cr>								
Example #2: Increase the volume for Speaker 1.								
"Output_Volume=Output:Speaker:001,051 <cr><lf>"</lf></cr>								
Example #3: Decrease the volume for Speaker 1.								

"Output_Volume=Output:Speaker:001,050<CR><LF>"

Example #4: Mute sound for Speaker 1.

"Output_Mute=Output:Speaker:001,ON<CR><LF>"

Example #5: Unmute sound for Speaker 1.

"Output_Mute=Output:Speaker:001,0FF<CR><LF>"

OUTPUT EQ

Command Output_Bass=	Output	Colon Delimiter	Output Type	Colon Delimiter	Output (Up to 3 Bytes)	Comma Delimiter	Tone Command	Carriage Return	Line Feed
Example #1: Increase bass output in Speaker 1.									
Output_Bass=	Output	:	Speaker	:	1	,	+	<cr></cr>	<lf></lf>
Example #2: Adjust bass output to +2dB*.									
Output_Bass=	Output	:	Speaker	:	1	,	+2	<cr></cr>	<lf></lf>
Example #3: Adjust bass output in Speaker 1 to 0.									
Output_Bass=	Output	:	Speaker	:	1	,	0	<cr></cr>	<lf></lf>

*Any number -6 to +6.

Response
Example #1: Increase bass output in Speaker 1.
"Output_Bass=Output:Speaker:001,+01 <cr><lf>"</lf></cr>
Example #2: Adjust bass output to +2dB.
"Output_Bass=Output:Speaker:001,+02 <cr><lf>"</lf></cr>
Example #3: Adjust bass output in Speaker 1 to 0.
"Output_Bass=Output:Speaker:001,00 <cr><lf>"</lf></cr>

Command Output_Treble=	Output	Colon Delimiter	Output Type	Colon Delimiter	Output (Up to 3 Bytes)	Comma Delimiter	Tone Command	Carriage Return	Line Feed
Example #1: Decrease treble output in Spea	Example #1: Decrease treble output in Speaker 1.								
Output_Treble=	Output	:	Speaker	:	1	,	-	<cr></cr>	<lf></lf>
Example #2: Adjust treble output in Speaker 1 to -2dB.*									
Output_Treble=	Output	:	Speaker	:	1	,	-2	<cr></cr>	<lf></lf>
* Any number -6 to +6.									

Response
Example #1: Decrease treble output in Speaker 1.
"Output_Treble=Output:Speaker:001,-01 <cr><lf>",</lf></cr>
Example #2: Adjust treble output in Speaker 1 to -2dB.

"Output_Treble=Output:Speaker:001,-02<CR><LF>"

STATUS

Command Status=	Map	Colon Delimiter	Output Type	Colon Delimiter	Output (Up to 3 Bytes)	Carriage Return	Line Feed
Example #1: What input is currently selected on	speaker outp	out 1?					
Status=	MAP	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #2: What is system Power status?							
Status=	Power	N/A	N/A	N/A	N/A	<cr></cr>	<lf></lf>
Example #3: What is the volume setting for speaker output 1?							
Status=	Volume	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #4: What is the bass level setting for sp	eaker output	: 1?					
Status=	Bass	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #5: What is the treble level setting for s	peaker outpu	ut 1?					
Status=	Treble	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #6: What is the system Mute status?							
Status=	Mute	:	Speaker	:	1	<cr></cr>	<lf></lf>
Example #7: What is the system Firmware?							
Status=	Firmware	,	System	N/A		<cr></cr>	<lf></lf>

Response
Example #1: What input is currently selected on speaker output 1?
"Status=MAP:Input:Line:001,Output:Speaker:001 <cr><lf>"</lf></cr>
Example #2: What is system Power status?
"Status=Power:On <cr><lf>"</lf></cr>
Example #3: What is the volume level for speaker output 1?
"Status=Volume:Output:Speaker:001,050 <cr><lf>"</lf></cr>
Example #4: What is the bass level setting for speaker output 1?
"Status=Bass:Output:Speaker:001,+02 <cr><lf>"</lf></cr>
Example #5: What is the treble level setting for speaker output 1?
"Status=Treble:Output:Speaker:001,-04 <cr><lf>"</lf></cr>
Example #6: What is the system Mute status?
"Status=Mute:Output:Speaker:001,0N <cr><lf>"</lf></cr>
Example #7: What is the system Firmware version?
"Status=Firmware,System <cr><lf>Version01.00.78.370<cr><lf>"</lf></cr></lf></cr>

RESET

SonSSIPFactoryReset	Carriage Return	Line Feed	
Example #1: Reset system to factory settings.			
SonSSIP_FactoryReset	<cr></cr>	<lf></lf>	
Response			

0K*

* There is no "<CR><LF>" after the "OK".

NEED HELP? CONTACT TECH SUPPORT

For other information, instructional videos, support documentation, or ideas, visit our website and view your item's product page.

Phone: 866.838.5052

Email: support@episodeaudio.com

WARRANTY

2 YEAR LIMITED WARRANTY

This Episode product has a 2-Year limited warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to a designated service center with prior notification and an assigned return authorization number (RA).



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