

# AC-EX70-SC2-R

18GBPS SCALING HDBASET RECEIVER, EDID MANAGER, AUDIO DE-EMBEDDER

## QUICK START GUIDE

THE AC-EX70-SC2-R IS THE IDEAL HDBASET RECEIVER FOR INTEGRATORS WHO NEED TO DISTRIBUTE 18GBPS VIDEO TO CURRENT AND LEGACY DISPLAYS WHILE MAINTAINING THE BEST QUALITY PICTURE. FEATURING BIDIRECTIONAL IR AND RS232, POE, EXTRACTED AUDIO VIA BALANCED ANALOG OR TOSLINK, 480P-4K60 4:4:4 SCALING WITH INTERLACE TO PROGRESSIVE CONVERSION, ROBUST EDID MANAGEMENT, AND A BUILT-IN TEST PATTERN GENERATOR. THE CONSTANT RESOLUTION OUTPUT HOLDS NO MATTER THE INPUT SIGNAL WHILE THE BLANK BLACK SPLASH SCREEN ELIMINATES THOSE PESKY NO SIGNAL IMAGES WHEN SWITCHING.



- UP/DOWN SCALER
- EDID MANAGER
- AUDIO DE-EMBEDDING
- TROUBLESHOOTING
- LEGACY INTEGRATION
- HDMI HANDSHAKE FIXER

### HOW TO INSTALL:

1. CONNECT THE SC2 RECEIVER'S HDBASET INPUT TO THE HDBASET OUTPUT ON YOUR HDBASET MATRIX SWITCH.
2. NEXT CONNECT THE HDMI OUTPUT TO THE INPUT OF YOUR SINK DEVICE.
3. FOR POWER, ENSURE THAT YOUR MATRIX HAS POE ENABLED. IF NOT THE SC2-RECEIVER CAN BE POWERED WITH THE SUPPLIED 48V POWER SUPPLY.

### CONTROLLING THE DEVICE:

#### FRONT PANEL:

OUTPUT TIMING, EDID SETTINGS, AND TEST PATTERNS CAN ALL BE ACCESSED AND CONTROLLED BY THE 3 BUTTONS ON THE FRONT OF THE SC2 RECEIVER



## MICRO USB/RS232- FOR FIRMWARE AND CONTROL:

IN ORDER TO CONNECT YOUR COMPUTER TO THE SCALER BY RS-232 YOU NEED TO MAKE YOUR OWN CABLE WITH ONE END A PHOENIX CONNECTOR AND THE OTHER END A RS-232 PORT. YOUR COMPUTER DOESN'T HAVE A RS-232 INPUT, GET A USB



RS232

MICRO USB

CONVERTER (AS SHOWN BELOW), AND PLUG THE

USB END INTO ANY COMPUTER

## OUTPUT TIMING:

THE AVPRO EDGE'S AC-SC2-AUHD IS THE IDEAL SOLUTION FOR ANYONE THAT IS NEEDING TO DISTRIBUTE A SIGNAL TO A VARIETY OF DISPLAYS AND KEEP AN OPTIMAL PICTURE. BE ABLE TO CONTROL UP/DOWN SCALING AND ALSO HANDLE EDID ISSUES (INCLUDING 4K HDR EDID'S),



INSTRUCTIONS:

OUTPUT TIMING				
OUTPUT VIDEO FORMAT	1	2	3	4
1. OFF BYPASS	0	0	0	0
2. 480P 60Hz	1	0	0	0
3. 720P 60Hz	0	1	0	0
4. 1080P 60Hz	1	1	0	0
5. 1920x1200 (VESA)	0	0	1	0
6. 4K 30Hz	1	1	1	0
7. 4K 60Hz YUV 4:2:0	0	1	1	0
8. 4K 60Hz	1	1	1	0
9. AUTO (Sink device EDID)	0	0	0	1
10. ADAPTIVE (see manual)	1	0	0	1

IMAGE ENHANCEMENT, AND THE ABILITY TO DE-EMBED 2 CHANNEL ANALOG AND 6 CHANNEL DIGITAL AUDIO FROM STREAM.

TO CONTROL THE OUTPUT TIMING PRESS THE OUTPUT SETUP BUTTON UNTIL THE IS LIT AT THE CORRESPONDING SETTING NUMBERS. IF YOU HAVE 480, 720, OR 1080 DISPLAYS THE AC-SC2-AUHD WILL MAKE SURE IT'S GETTING THE RIGHT PICTURE WITH ADAPTIVE MODE. SIGNALS BELOW 1080P 60Hz GET UPSCALED TO 1080P 60Hz, WHILE SIGNALS ABOVE 1080P 60Hz ARE BYPASSED BY THE SCALER. (PIC OF EDID LIGHTS AND EDID SETTINGS)

LED

## EDID SETTINGS

WITH EDID SETTINGS YOU CAN MANAGE THE SOURCES DEVICES AND FORCE A CERTAIN OUTPUT. THIS IS ESPECIALLY IMPORTANT ON NEWER SOURCES THAT RELY ON EDID COMMUNICATIONS IN IMPLEMENT HIGH BANDWIDTH AND HDR



EDID SETTINGS								
LED STATUS	5	6	7	8				
1. EDID BYPASS	0	0	0	0	0	0	0	0
2. 1080P 2Ch	1	0	0	0	0	0	0	0
3. 1080P 2Ch 3D	0	1	0	0	0	0	0	0
4. 4K 30Hz 2Ch 3D	1	1	0	0	0	0	0	0
5. 4K 30Hz 6Ch 3D	0	0	1	0	0	0	0	0
6. 4K 60Hz 2Ch 3D	1	0	1	0	0	0	0	0
7. 4K 60Hz 6Ch 3D	0	1	1	0	0	0	0	0
8. 4K 60Hz 8Ch 3D	1	1	1	0	0	0	0	0
9. 1080P 2Ch HDR	0	0	0	1	0	0	0	0
10. 1080P 2Ch 3D HDR	1	0	0	1	0	0	0	0
11. 4K 30Hz 2Ch 3D HDR	0	1	0	1	0	0	0	0
12. 4K 30Hz 6Ch 3D HDR	1	1	0	1	0	0	0	0
13. 4K 60Hz 2Ch 3D HDR	0	0	1	1	0	0	0	0
14. 4K 60Hz 6Ch 3D HDR	1	0	1	1	0	0	0	0
15. 4K 60Hz 8Ch 3D HDR	0	1	1	1	0	0	0	0
16. User EDID	1	1	1	1	0	0	0	0

SIGNALS. TO CONTROL EDID PRESS THE EDID SETTINGS BUTTON UNTIL THE LED IS LIT AT THE CORRESPONDING SETTING NUMBERS.



TEST PATTERN			
PATTERN VIDEO FORMAT	9	10	11
1. OFF	0	0	0
2. 720P	1	0	0
3. 1080P	0	1	0
4. 4K 30Hz	1	1	0
5. 4K 60Hz	0	0	1

## TEST PATTERNS

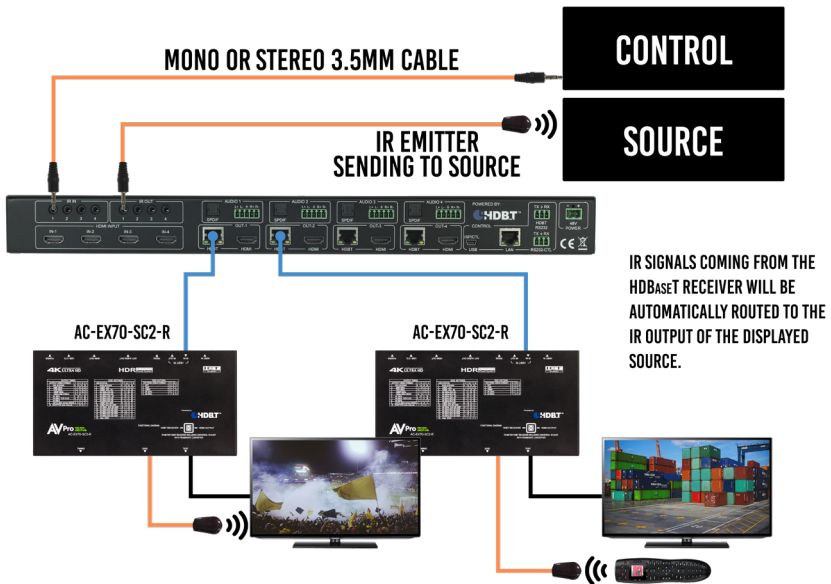
THERE ARE THREE BUILT IN TEST PATTERNS AVAILABLE. TO ENABLE AND DISABLE PRESS "TEST PATTERN" BUTTON TO CYCLE THROUGH THE 4 RESOLUTIONS. THE SC2 RECEIVER WILL OUTPUT A 720P, 1080P, 4K 30HZ, AND A 4K 60HZ TEST PATTERN.

## IR EXTENSION:

IR CAN BE USED IN TWO WAYS:

**FROM RACK (CONTROL SYSTEM DIRECT):** WHEN USING WITH AN AVPRO HDBASET MATRIX, SIMPLY PLUG IR EMITTER INTO THE IR OUT PORT OF THE SC2 RECEIVER.

**FROM REMOTE END:** USE THE IR SENSOR PROVIDED WITH THE AC-EX70-SC2-RS INTO THE IR IN PORT AND SEND IR SIGNALS BACK TO THE AVPRO HDBASET MATRIX.



## TROUBLESHOOTING

- **VERIFY POWER** - WHEN POWER IS APPLIED ALL LIGHTS ON THE TOP OF THE DEVICE WILL FLASH. YOU CAN ALSO PRESS ANY OF THE 3 BUTTONS ON THE SIDE TO CHANGE SETTINGS, THE CORRESPONDING LIGHTS SHOULD CHANGE IF THE UNIT IS POWERED UP.
- **VERIFY CONNECTIONS** - MAKE SURE ALL CONNECTED CABLES ARE PROPERLY CONNECTED. YOU CAN USE THE BUILT IN TEST PATTERN GENERATOR TO VERIFY SIGNAL PATH FROM THE AC-EX70-SC2-R TO THE DISPLAY

**HAVE A QUESTION OR NEED ASSISTANCE?  
DON'T HESITATE TO CONTACT US!**

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