[AN008]



Line-Out Audio Interface

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3820 NORTH VENTURA DR.

ARLINGTON HEIGHTS, IL 60004

U.S.A

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Static Electric Warning

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Complete Support Site with User Guides & Help: <u>http://www.anetdsupport.com/</u> Additional App Notes: **Customer Feedback Survey:** AND Legal Disclaimer:

http://www.anetdsupport.com/AppNotes http://www.anetdsupport.com/survey http://www.anetd.com/legal







OVERVIEW

All AND devices can output line-level audio signals, except the IPSCM unit, which does not offer access to the line-out signal. The output level is $2V_{pp}$.

PROCEDURES

You can use the following two-wire cable (or similar) to establish a physical connection between an AND device and the line-level destination. In the case of a ZONEC2 unit, you can use an RCA cable in place of the custom cable specified below.

Line Out Audio Cable Build of Materials				
Manufacturer/Part #	Qty	Description		
Molex 50-57-9002	1	Two-position .100" connector housing		
Molex 16-02-1125	2	Gold finished female terminal connectors		
Alpha Wire 1172C	1	22 AWG, 2 conductor, PVC insulated stranded wire, or similar		
CUI SR-3501 or CUI SP-3501	1	3.5mm female jack or male plug connector		

1. Cable Assembly

- a. Cut the appropriate length of cable (Alpha Wire 1172C) for the installation.
- b. Strip one end of the cable and crimp a female terminal connector (Molex 16-02-1125) to each wire, using a Molex crimper # 64016-0201.
- c. Slide the two female connectors into the connector housing (Molex 50-57-9002). The connector will snap into place when it is inserted properly.
- d. Strip the other end of the cable and attach the red wire to terminal 2 (left channel audio) of the female jack and black wire to terminal 1 (ground) of the jack (CUI SR-3501). See Figures 1 and 2.
- e. If using the male plug (CUI SP-3501), attach the red wire to the tip terminal (left channel) and the black wire to ground terminal.

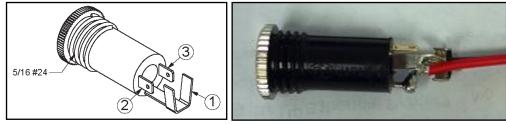


Figure 1 and 2 – 3.5mm female jack connections



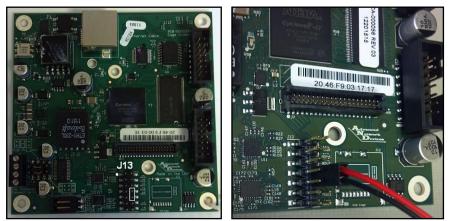
Advanced Network Devices • 3820 Ventura Dr. Arlington Hts. IL 60004 • Fax: 847-359-5418 Support: <u>tech@anetd.com</u> • 847-463-2237 • <u>www.anetdsupport.com</u>





2. AND Device Connections

Plug the two position .100" connector housing end of the cable onto pins 8 and 10 of the J13 header on the bottom edge of the square controller board in the device, as shown in Figures 3 and 4. The black wire (ground) goes to pin 10, and the red wire to pin 8.



Figures 3 and 4 - Connection to controller board

3. External Audio Destination

Connect the line in of the audio destination into the 3.5 mm female jack or male plug cable assembly. For ZONEC2, use an RCA cable, or 2-wire pair of speaker wire.

4. Testing and Adjustment

- a. Power on the AND device and the external audio destination.
- b. Set the volume output of the audio destination to 75% of the max volume.
- c. Configure the AND device volume. If using the device's web page, select **Device Settings** → **Audio**. Set *Speaker Volume* to 8.0. For a configuration file:

```
<SIPConfig
volume="8.0"
/>
```

- d. Reboot the speaker.
- e. Send audio to the AND device, and verify the audio broadcasts at reasonable levels at the destination output. Adjust the volume settings accordingly.

Web Page Device Settings			
Line-Out Parameters	Description		
Speaker Volume	Sets the volume of the speaker, as well as the line-out audio signal. Range: 0.0 - 10.0		

Configuration File Settings (Using SIPConfig Tag)				
Configuration File Parameter	Correlation to web page settings	Value Range		
volume	Speaker Volume	0.0 - 10.0		





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