

## Juke Application Note – Connecting Juke to a Line-Level Device

Revision 1.3

### Summary

Juke provides outputs that power speakers in each zone. This application note explains how to connect a zone output from Juke to a line-level input on another device (e.g. a third-party amplifier).

### Installation if Speakers are Connected in Parallel

If Juke is powering speakers in a zone, and you also want the line-level device to play concurrently, the following part is required:

Part Description	Amazon ASIN Number	Amazon Link	Approximate Price
PAC SNI-35 Variable LOC Line Out Converter	B001EAWS3W	<a href="#">Speaker-level to line-level converter</a>	\$9.77

Connect the 4 wires of the PAC in parallel with the speaker wires connected to Juke's green connector (the correct order from left to right is: white, white with a black stripe, grey, grey with a black stripe) for that zone and connect the RCA jacks to the line-inputs on the third-party device. You can adjust the volume of the PAC with the rotary dials on the end, but mostly likely the default setting will work well and there is no need to make an adjustment. That's it!

### Installation if Speakers are Not Connected in Parallel

If you wish to stream via Juke to a third-party device but you want the option of playing that device without also playing to speakers connected directly to Juke for that zone, another step is required. In addition to the Pac part listed above, you need to add a resistor across the positive and negative terminals of Juke's left and right outputs for that zone. (This makes Juke think that speakers are connected to that zone, otherwise it won't play.) This requires the following part:

Part Description	Amazon ASIN Number	Amazon Link	Approximate Price
MULTICOMP MC14709 RESISTOR, WIREWOUND, 50 OHM, 5W, 1%	B005T86UNY	<a href="#">Resistors</a>	\$9.88

To do this, insert the wires for a resistor to the positive (+) and negative (-) terminals for Juke's left output terminal (i.e. in parallel with the wires going to the PAC part). Do the same for the right output terminals using a second resistor. Tighten the 4 screws to secure the wires and resistors.

Here is what the resistors looks like:

