



ARC-HP Manual

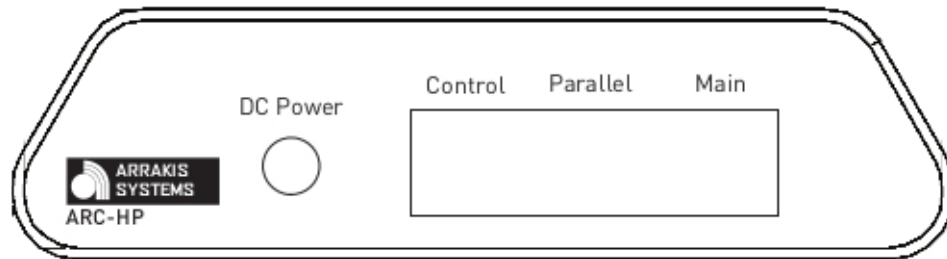
May 20, 2020

Thank you for your purchase of the ARC-HP. The ARC-HP is designed for two purposes:

- 1) **ADDITIONAL HEADPHONE OUTPUTS** - To provide additional headphone outputs for your console. You may use one or more units 'daisy chained' and have multiple headphone outputs.
- 2) **LOGIC & AUDIO INTERFACE** – The ARC-HP has two buttons, **Talkback** and **Cough**. These buttons, along with other logic allow you to interface to your console.

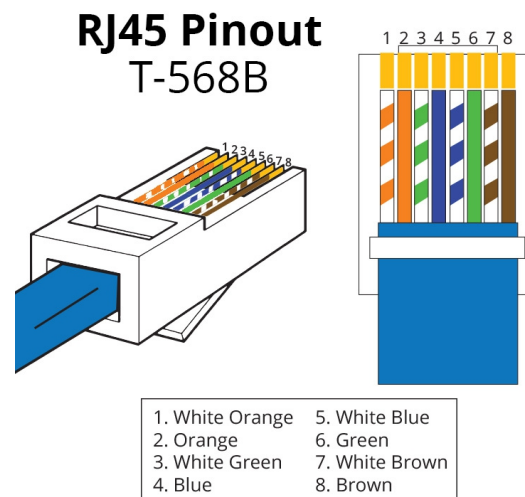
HEADPHONE SETUP INSTRUCTIONS

STEP 1 – Connect the Main Studio console audio output (such as Program, or Monitor output) to the audio **Main** input on the ARC-HP. The **Main** input is a balanced input that uses pins 1, 2, 3, and 6.



MAIN PORT PINOUT

- 1 - PGM L+
- 2 - PGM L-
- 3 - PGM R+
- 4 - GND
- 5 - TB (Control) Pulling to Ground triggers TB relay
- 6 - PGM R-
- 7 - TB Audio In +
- 8 - TB Audio In -



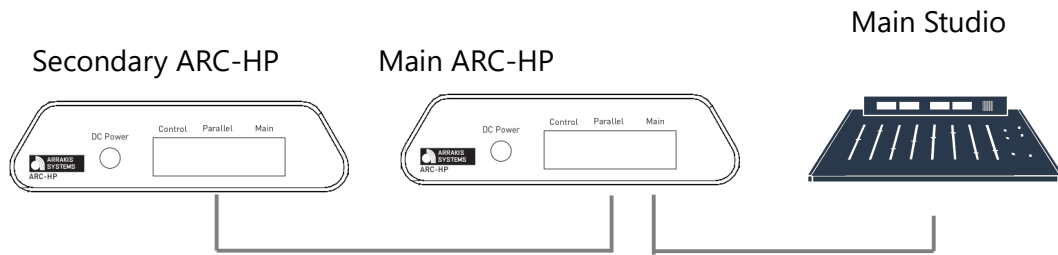
STEP 2 (OPTIONAL) – Connect the Main Studio Talkback audio output to Pins 7 & 8 on the ARC-HP **Main** input. For example, the ARC-10 series boards have a DB15 connection, and Talkback audio fed from Mic's 1 & 2 are fed from the DB15 pin 12 (check ARC-10 manual for current information).

This allows the Main studio to Talk to the user on the ARC-HP.

STEP 3 (OPTIONAL) - Connect the ARC-HP **Main** input, pin 5, to the Main Studio's console logic. When pin 5 on the ARC-HP is pulled to ground, it will:

- (A) duck the PGM audio on the ARC-HP, and
- (B) play the TB Audio from the Main studio.

STEP 4 (OPTIONAL) – If you have additional ARC-HP units, and would like to connect them to the Main Studio, simply connect the **Parallel** output from the main ARC-HP unit to another secondary ARC-HP unit's **Main** input.



PARALLEL PORT

- 1 - PGM L+
- 2 - PGM L-
- 3 - PGM R+
- 4 - GND
- 5 - NA
- 6 - PGM R-
- 7 - TB Audio In 1
- 8 - TB Audio In 2

STEP 5 – Connect your headphones to either the 1/4" or 3.5mm headphone jacks on the front of the ARC-HP.

IMPORTANT NOTE: The ARC-HP is designed to be used with contemporary high-efficiency headphones (24 – 600ohm), not 8ohm headphones.

STEP 6 – Connect the power supply (supplied with the ARC-HP unit). Be sure to only use the supplied AC power supply provided by Arrakis. Use of any other supply will likely destroy the unit, and void your warranty. The power supply works with 110V outlets only.

COUGH FUNCTIONALITY

STEP 7 (OPTIONAL) – Add 'Cough' functionality to the ARC-HP. Connect your mic audio to the **Control** I/O on the ARC-HP. This port is balanced, and uses pins 7 & 8.

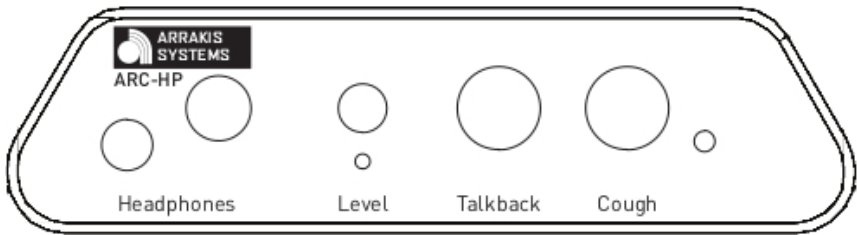
STEP 8 (OPTIONAL) – Connect output pins 3 & 6 of the **Control** I/O to your Main Studio console mic input.

This allows the user to press the **Cough** button on the front of the ARC-HP, which will mute the mic audio. The switch is momentary, so press to cough, and then let go to restore mic audio.

This switch is Normally Closed, but when the **Cough** button is pressed, it will make the switch Open.

CONTROL

- 1 - TB Out
- 2 - TB In
- 3 - COUGH Out +
- 4 - NA
- 5 - NA
- 6 - COUGH Out -
- 7 - COUGH In +
- 8 - COUGH In -

**TALKBACK FUNCTIONALITY**

STEP 9 (OPTIONAL) - The user may use the **Talkback** button to control the Main Studio's mic talkback audio output to send to a connected studio's console input.

Connect Pin 2 on the ARC-HP to the Main Studio's Talkback output. The ARC-10 series uses the DB15 connector pin12 as it's Talkback audio output(check ARC-10 manual for current information).

STEP 10 (OPTIONAL) – Then connect Pin 1 on the ARC-HP **Control** port to the remote consoles studio monitor input.

The Talkback switch is Normally Open, but is closed momentarily when the button is pressed.

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