



## ARC-HP to MARC Console Wiring

This information will help you connect the ARC-HP headphone amplifier with talkback switching to your Marc audio console. There are a variety of ways to do this however I will show you one way to accomplish the following.

1. Selectable audio source such as program, audition, utility busses and external monitor input.
2. Announcer or producer microphone audio to the external ARC-HP units.
2. Guest microphone talkback audio back to the announcer or producer.

The best way to accomplish this is to have installed the MARC-STM "Studio Monitor Module" in the console as the MARC-STM module will make your interface so much cleaner and provide you with better functionality.

To start with remember when wiring always use shielded Cat 5 cable for best performance as you do not want to add any noise into your headphone system.

### Audio Wiring:

Marc-15 STM module	ARC-HP
Earphone Output RJ-45 - ->	Main Input RJ45
Pin 1 Left (+)	Pin 1 Left (+)
Pin 2 Left (-)	Pin 2 Left (-)
Pin 3 Right (+)	Pin 3 Right (+)
Pin 4 Ground	Pin 4 Ground
Pin 6 Right (-)	Pin 6 Right (-)

\* Note you cannot just plug in an RJ-45 directly from the STM module to the ARC-HP because the other pins on the ARC-HP RJ-45 are used for other logic switching so just connect the audio connections as shown above. Do not connect following wires Pin 5 Blue/White, Pin 7 Brown/White and Pin 8 Brown.

### STM Function:

You may select either PGM "program", AUD "audition", UTL "utility" or Ext "external monitor input" as your audio source. Each ARC-HP has a headphone volume pot so all units are independent of each other for headphone level adjustment.

Setup the main announcer microphone for talk back function to the ARC-HP external headphone amps. Usually this function is installed on microphone 1 check and see if there is the "CR Mic Assign" jumper installed see page 4.26 in the manual for location. Normally from the factory I will install this jumper on microphone channel 1.

\* Please note you may use only one jumper on one module for this function.  
You may remove this jumper and install on another microphone module if so desired.

On the studio monitor module when the Talk to Studio (Red) button is pressed it will send the announcer microphone audio to the ARC-HP on the left earphone. For example this could be the producers microphone module. Just make sure that module gets the "CR Mic Assign" jumper installed.

### **Adding additional ARC-HP units:**

From the first ARC-HP that is connected directly to the Marc console connect a second Cat-5 cable to its Parallel Port then connect the other end of the cable to the second ARC-HP Main Port

Marc Console to --> First ARC-HP its Parallel Port to --> Second ARC-HP Main Port and so on.

As you can see you may connect several ARC-HP units together with just one audio source.

Talkback Function from microphones 2, 3 and 4 etc. to the board operator.

ARC-HP	Microphone Modules 2, 3 and 4.
Control RJ-45 Pin 1 TB switch	Logic RJ-45 Pin 1 Talk
Control RJ-45 Pin 2 TB switch	Logic RJ-45 Pin 4 Logic Ground

\* Note connect each ARC-HP to its designated microphone module on the console. So each microphone module will have its "Talk logic" connected to its designated ARC-HP.

Microphone module channel 2 connected to ARC-HP 2.

Microphone module channel 3 connected to ARC-HP 3.

Microphone module channel 4 connected to ARC-HP 4 and so on.

When the ARC-HP "Talk Back" switch is pressed it will send that microphone audio into the announcer or producers earphone. This function is called Auto Cue and this functionality is on all of Arrakis Systems consoles. Now you have two way communications between the guests microphones and announcer or producer

As you can see the ARC-HP and the Marc audio console work very well together. You may notice other switching functions on the ARC-HP unit this is for other consoles that do not have the extensive logic switching and functionality that the Marc series audio console have.

### **Cough Muting Function:**

For this function please advise us before ordering the ARC-HP that you want the Cough Muting functionality for the Marc audio console. We have a factory modification that will make that work perfectly.

ARC-HP	Microphone Modules 2, 3 and 4.
Control RJ-45 Pin 3 TB switch	Logic RJ-45 Pin 6 Talk

Control RJ-45 Pin 7 TB switch

Logic RJ-45 Pin 4 Logic Ground

When the ARC-HP "Cough" red switch is pressed it will mute the microphone audio as long as the switch is held. The audio will un-mute when the switch is released. This will momentarily prevent any audio from going over the air.

I hope this setup will work for you as there are so many options here. Just let us know if there are other questions or concerns.

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