

Overview

This shows you how to build a dead simple aux input for the 83 RX7 factory stereo system with EQ and Joystick. It is completely reversible and involves only unplugging the EQ's 8 Pin DIN connection and placing your new cable in between. This "Aux In" cable has straight-through connections from a Female DIN on one end to the Male DIM on the other end. We tie a 3 conductor 3.5 mm stereo jack onto the three leads that are the input to the EQ from the Tape Deck/Tuner.

As long as you can solder wires, you can make this. And you don't even have to remove the head unit if you can reach behind it to get the white DIN plug.

This is what my stereo looks like, in case you are curious if yours is right for the job. That black cable is the aux in, I routed it through the ashtray opening. I know, elegant it is not.



Behavior

I turn on the factory unit to Radio mode and I hear the audio from the tuner. I plug my smartphone (Galaxy S3) into the aux input and the radio source silences. When I use the smartphone's music player, the signal comes through clearly with no buzzing or alternator whine. Once music stops playing, the radio signal comes back on. There is some magic happening with impedances or other dark arts, all I can

say is that it works perfectly. Just make sure you adjust your smartphone volume to match the radio's normal loudness.

Diagrams and Instructions

83 RX7 Factory Stereo System Pictorial Layout

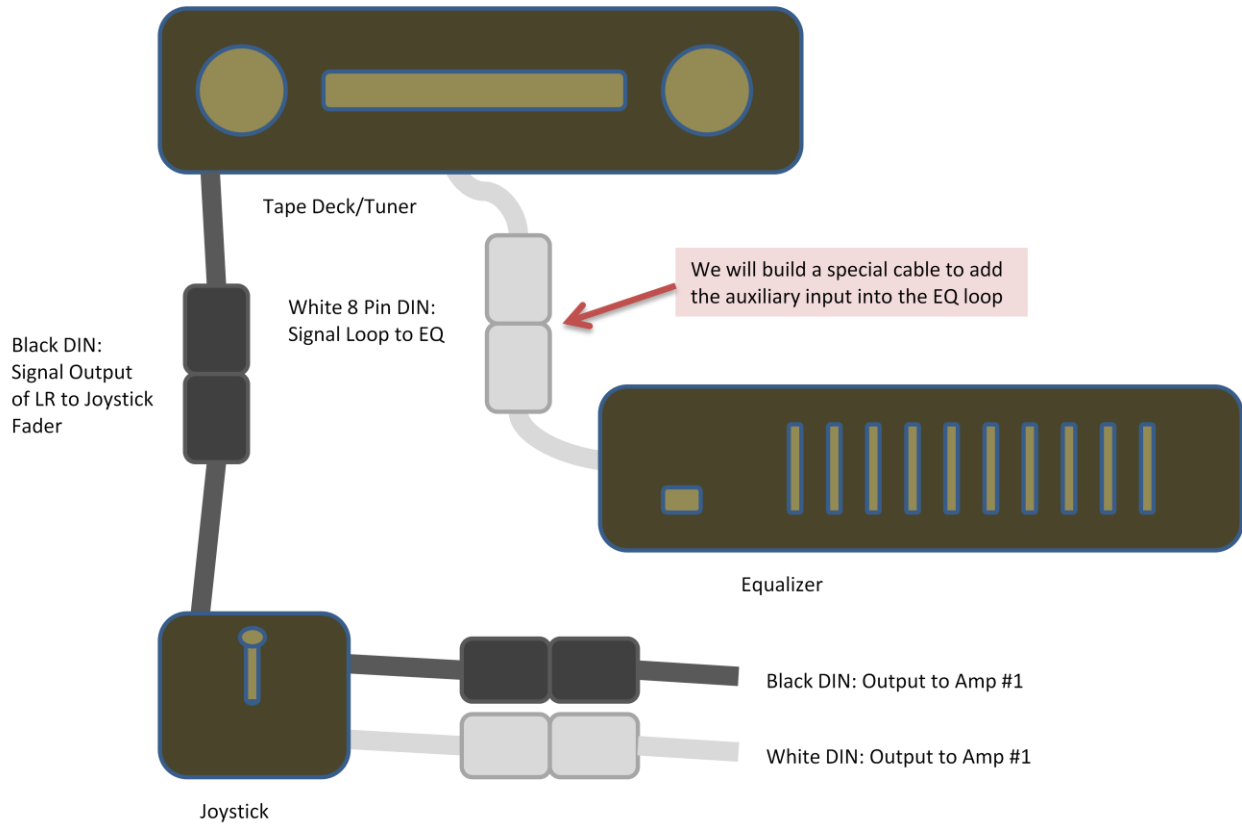


Figure 1, Layout as installed by the factory. The DIN cables carry power and signal. All we care about is the audio signal. NOTE: If you have an extra, unconnected, white DIN connector, just ignore it. It is the faded output from the head unit (and its not used because we have the joystick fader).

83 RX7 Factory Stereo with "Aux In Cable"

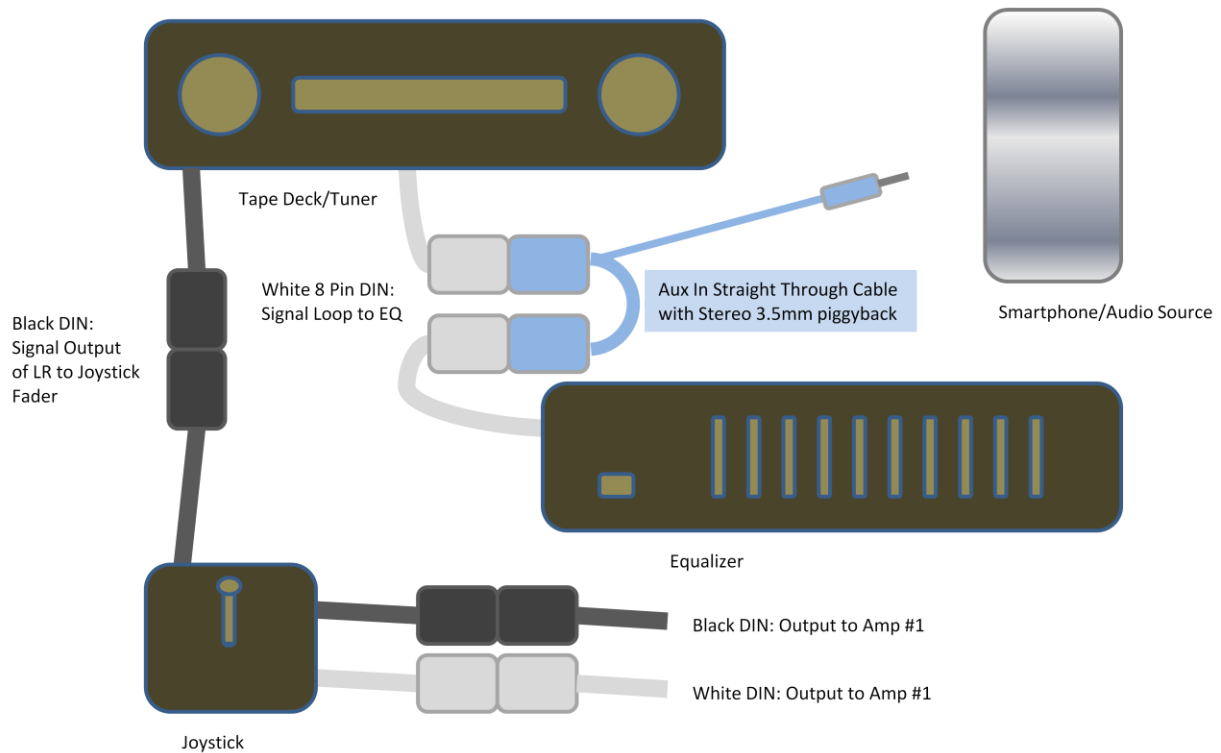


Figure 2, The factory layout with the new DIN cable shown.

Making the Cable

Buy one male and one female 8 Pin DIN connector

Male is

<https://www.digikey.com/product-detail/en/SD-80/CP-1080-ND/97003>

Female is

<https://www.digikey.com/product-search/en?vendor=0&keywords=cp-1180-nd>

Make an 8 conductor straight through connection for pins 1 to 7, and the shield. You can leave pin 8 disconnected, it seems to do nothing. But definitely connect the shields as they provide a solid ground connection for the EQ.

Connect the stereo 3.5mm jack as follows:

- Signal Ground onto pin 4
- Right + signal onto pin 5
- Left + signal onto pin 6

Pins 4, 5, and 6 are the inputs to the EQ coming from the Tape Deck /Tuner. When you connect your auxiliary audio to those pins, you will be feeding the EQ and subsequently back to the Tape Deck/Tuner.

This means that you can use the (awesome!) Clarion EQ for the aux in source as well.

PIN Diagram

Here are the pin numbers that I used. Your connector might number them differently. Use this orientation.

