# AP095 Jack Socket Adaptor
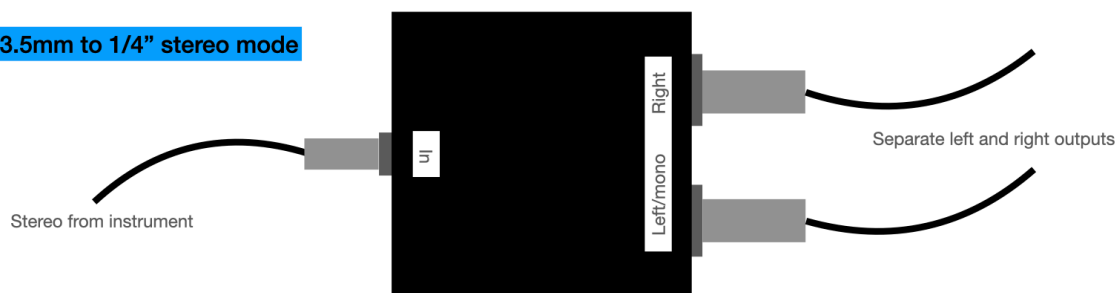
# Hardware Description



**3.5mm to 1/4" mono mode**

Stereo from instrument

In

Right

Left/mono

Mixed stereo out as mono

**3.5mm to 1/4" stereo mode**

Stereo from instrument

In

Right

Left/mono

Separate left and right outputs
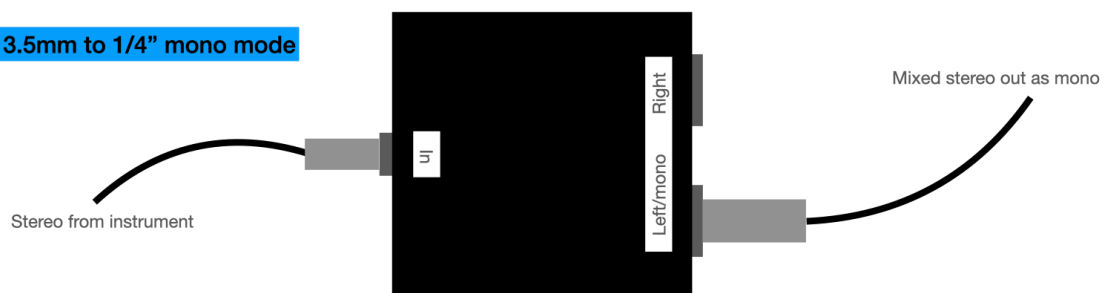
# Description

### Introduction

Connect 1/4" jacks to your instruments that only have 3.5mm outputs - with a clever twist. Some musical instruments only have 3.5mm jacks for output, which is annoying, especially when most venues will throw you a 1/4" jack to plug into their PA. You can get adaptors like 'Y' cables, but they will only output one channel on each connector. This is especially a problem for sounds that fade or are modulated between left and right, which will simply fade up and down on a mono channel.

So, this is a simple, passive (no batteries required) box that takes the 3.5mm from the back of such instruments, and outputs BOTH channels mixed together if just the left/mono socket is used, or straight through stereo (like a 'Y' cable) if both output jacks are used.

Originally made for a Casio CT-S1 keyboard, also works with Artiphon Orba and other instruments that have stereo outputs on 3.5mm jack sockets.

### Operation

**Adaptor mode**

Plug the 3.5mm cable into the instrument, by using both 1/4" outputs, left and right are separated onto different cables.

**Mixer mode**

Plug the 3.5mm cable into the instrument and used ONLY the Left/mono output. Both left and right outputs from the instrument are mixed into the single output.

Do not use the right output on its own, it will not damage anything, but you will only get the right channel output, the signal will not be mixed.

### Specifications

| | | |
|---|---|---|
| Dimensions | - | 65mm x 70mm x 28mm |
| Weight | - | 65 grams |
| Input | - | Stereo 3.5mm jack socket |
| Outputs | - | 2 x Mono 1/4" (6.3mm) jack sockets |
| Included cable | - | 3.5mm double ended cable |

### Functional Impedance

The adaptor mixes by using $1K\Omega$ resistors so as to avoid direct shorts on the instrument output. This resistance is inserted into the signal path, so a small signal loss will occur. As amplifier inputs are high impedance (typically $> 50K\Omega$) this will not normally be noticeable.