

AUDICA

Audica Professional MULTIZone – Subwoofer Operation White Paper

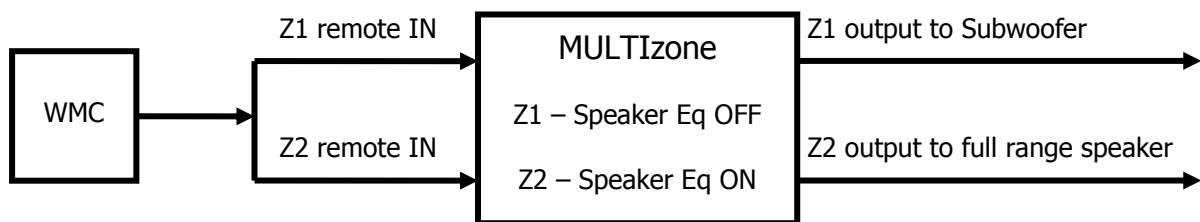
Issue: 1

Date: 19th July 2013

Introduction

If the MULTIZone is to be used with a speaker system which requires Audica Speaker Eq and also includes a subwoofer, then two zones must be employed. One zone is set to a flat response (Eq off) to drive the subwoofer and one with Eq on to drive the full range speaker. This paper describes two arrangements which can achieve this end.

1.0 USE 2 ZONES CONTROLLED BY A SINGLE WALL MOUNT CONTROLLER (WMC)

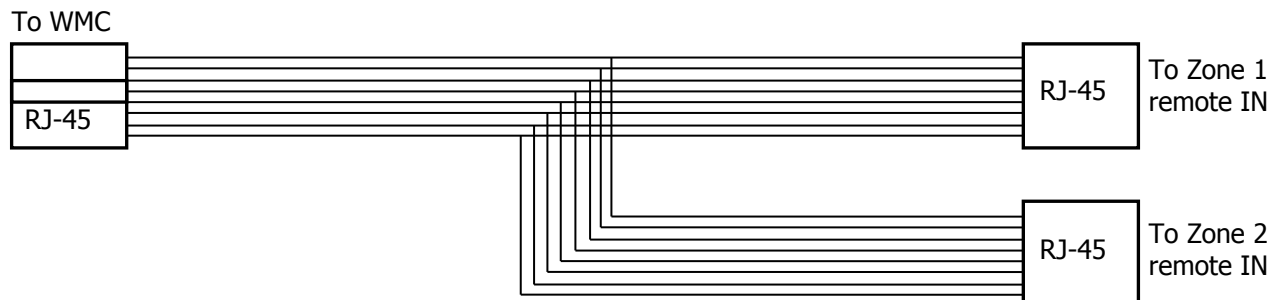


Connect the WMC using a special RJ-45 remote control cable (wired as a simple "Y" – see below) to two remote control inputs on the MULTIZone (in this case Zones 1 and 2). Then set speaker EQ OFF on Zone 1 (DIP switch #7 OFF) to drive the subwoofer and EQ ON (DIP switch #8 ON) on Zone 2 to drive the full-range speaker.

The WMC selects the source fed to both zones and the input gain for that source is set in the normal way. The WMC volume control becomes the "master" volume control for both Zone 1 and Zone 2 outputs.

Advantages: Simple

Disadvantages: Requires WMC and special RJ-45 "Y" cable (below)



RJ-45 "Y" cable for 2-zone control

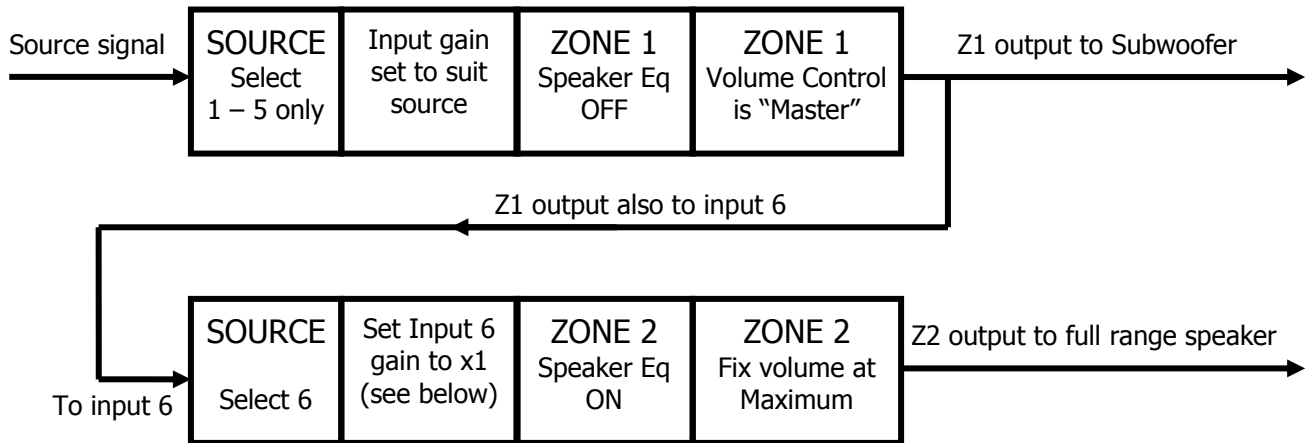
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2.0 CASCADE 2 ZONES



- Feed source signal to any of inputs 1 to 5, selected to go to Zone 1 (and set input gain as normal).
- Set Zone 1 speaker EQ OFF and send Zone 1 output to Subwoofer.
- Feed Zone 1 output also to input 6.
- Select input 6 to go to Zone 2. Input 6 gain should be set at an intermediate level (see * below)
- Set Zone 2 speaker EQ ON and send Zone 2 output to the full-range speaker.
- Set Zone 2 volume to maximum – and fix it there.
- Zone 1 volume is the "master" control for both outputs.

Advantages: Does not require WMC or special RJ-45 cable

- Disadvantages:**
- The full-range audio signal passes through 2 ADC-DAC systems (resulting in a slight increase in noise and distortion)
 - Source 6 input gain must be specially set
 - Operation is not intuitive
 - Requires Zone 2 volume and input select controls to be fixed (e.g. taped)

* In order to optimise dynamic range, Input 6 gain control should set to produce x1 gain between Input 6 and Zone 2 output (with Z2 Zone volume at Maximum). If a test signal and AC meter are not available, this can be done approximately using the following procedure.

- Set the input 6 gain to maximum
- Turn gain down until slot in gain control is horizontal