

FV15/FV15HP/PEQ3 Installation Guide

1 Subwoofer placement

We recommend first trying either a corner near the front speakers, or in the middle of the front wall between them. Typically the corners have greater output whilst the mid-wall position often has a smoother frequency response.

2 One port vs two ports

Two-port configuration gives maximum output between 20hz and 40hz while one port configuration gives better extension and transient response. Note the rumble filter setting needs to match the number of ports being used.

2 Recommended initial setup when using an AVR

In the AVR menu, make sure the front speakers are set to "small" and the crossover frequency is set to 80hz. Select the subwoofer mode, such that the bass is only played back from subwoofer, not "subwoofer + front speakers." Next, make sure the distance settings of the speakers and subwoofer are correct in terms of their relative distances.

Recommended plate amplifier settings

(from top to bottom, left to right)

1. **Input:** LFE (higher bandwidth) or LINE-IN
2. **PEQ:** OFF
3. **Gain:** 0db
4. **Bandwidth:** middle position
5. **Frequency:** middle position (40 Hz)
6. **Delay/phase:** 0
7. **Crossover:** max
8. **Volume:** middle position (12 o'clock)
9. **LOWPASS filter:** AVR/12
10. **Rumble filter:** OFF/1 for one port configuration and ON/2 for 2-port configuration
11. **Extension filter:** 14 Hz high damping for articulate sound and 14 Hz low damping for full bodied HT sound.

3 Recommended initial 2-channel setup (without AVR or pre-processor)

The standard PEQ3 amplifier does not have HPF output. This means that the front speakers will run full range. The following setting also assume the subwoofer is placed at a distance to the listener similar to those of the front speakers so no additional delay time adjustment is needed.

Recommended plate amplifier settings

(from top to bottom, left to right)

1. **Input:** LINE-IN
2. **PEQ:** OFF

3. **Gain:** 0db
4. **Bandwidth:** middle position
5. **Frequency:** middle position (40 Hz)
6. **Delay/phase:** 1 o'clock – sealed speakers, 10 o'clock for ported front speakers.
7. **Crossover:** Set Crossover knob to match natural bass extension of the front speakers.
8. **Volume:** middle position (12 o'clock)
9. **LOWPASS filter:** 5" woofers - 80hz/24, larger speakers - 50hz/24.
10. **Rumble filter:** OFF/1 for one port configuration and ON/2 for 2-port configuration
11. **Extension filter:** 14 Hz high damping for articulate sound and 14 Hz low damping for full bodied HT sound.

4. Recommended room EQ setup procedure

4.1 Rumble filter/Extension setting

We recommend the following settings when using a Room EQ program:

One port configuration
Rumble filter: OFF/1
Extension filter: 14 Hz
Damping: low

RoomEQ has the capability to change the frequency response in the room. EQ can interfere with the damping settings as damping relates to the time domain performance. As a result, it is recommended to set up EQ with the maximum possible extension and the best damping for sound quality. **After EQ has been set up, one can then adjust the rumble filter, bass extension and damping settings for the best compromise between output and sound quality.**

4.2 Volume knob settings

We recommend setting the volume so that the RoomEQ system is not using greater boost or trim than necessary. If the boost or trim is greater than 6 dB, then volume adjustment is recommended.

4.3 Subwoofer distance determined by the room EQ system

All room EQ programs need to measure the subwoofer distance. If the distance reported back from room EQ program is very different from the physical distance, it is an indication that the noise level due to reflection or other factors has obscured the ability to accurately measure the distance. It is best to either re-run room EQ with a slightly higher volume setting or to move the subwoofer location so that the room EQ program can achieve a more accurate distance measurement.