Powersoft M Series Level 2 Output Equalizer Presets

22 December 2016

22Dec16 Level 2 Output Equalizer Presets for Fulcrum Acoustic loudspeakers were created using *Armonía Version 2.8.1* software. They may be deployed to M Series amplifiers with DSP.

Output Equalizer Presets contain high and low pass filters, parametric filters, delays, and gains for a single band pass.

A single-amplified full range loudspeaker or subwoofer preset is loaded to one amplifier channel using one file. These files are appended "HF_LF" and "VLF" respectively.

A bi-amplified full range loudspeaker preset is loaded to two amplifier channels using two files. These files are appended "LF" for the low frequency transducer and "HF_LF" for the coaxial transducer.

The Output Equalizer Preset feature allows you to load the amplifier channels in whatever configuration you see fit and then save an overall Preset in the amplifier's memory. For example, a bi-amplified loudspeaker could be loaded in two dual channel amplifiers using one of these schemes:

Amplifier #1		Amplifier #1
Ch 1: LF		Ch 1: HF/LF
Ch 2: HF/LF		Ch 2: HF/LF
	- OR -	
Amplifier #2		Amplifier #2
Ch 1: LF		Ch 1: LF
Ch 2: HF/LF		Ch 2: LF

The output gains in bi-amplified loudspeaker presets require both amplifier channels to be set to the same voltage gain.

Using the Presets:

1) Unzip the contents of the "Powersoft M Series Level 2 Presets 22Dec16" file to a convenient location for recall in Step 4 below.
2) Add an M Series amplifier to Armonía's Workspace and double-click its icon.
3) Click the "Output Equalizer" tab at the bottom of the screen and then select the appropriate amplifier channel (e.g. Channel 1 or Channel 2). The Output Equalizer is also accessible from the "Scheme" tab when you click a "XOver & Output EQ" block.
4) Click the "Load" button in the *Options* block (lower left corner of the screen). Navigate to the folder containing the unzipped Output Equalizer Preset files, select the desired loudspeaker preset, and click "Open".
5) Lather, rinse, and repeat from Step 3 to load Output Equalizer Presets to additional amplifier channels.

Notes:

- The coaxial and low frequency transducers in bi-amplified 3-way loudspeakers both operate over the full bandwidth of the loudspeaker. When crossing into a subwoofer be sure to change the LF *and* HF/LF high pass filter frequencies for the following loudspeakers:
  - DX1226 / DX1265 / DX1277 / DX1295
  - DX1526 / DX1565 / DX1577 / DX1595
  - L
  - M
- Minimum recommended high pass frequencies are given for each loudspeaker in the *Preset Info* table on the following page.
- Please direct any questions to info@fulcrum-acoustic.com or give us a call at +1 866 234 0678 ext 1.

Changes since 24Apr15 release:

- Updated GX1265 Preset. Added CS118 and CS121 Presets.

Preset Info

Preset Name	File 1	File 2	Minimum HPF	Notes
CS118 v1	VLF		28 Hz, 24 Btrwrth	
CS121 v1	VLF		28 Hz, 24 Btrwrth	
CX896 v5	HF_LF		70 Hz, 24 Lnk/Rly	
CX1226 v1	HF_LF		65 Hz, 24 Lnk/Rly	
CX1265 v4	HF_LF		65 Hz, 24 Lnk/Rly	
CX1277 v1	HF_LF		65 Hz, 24 Lnk/Rly	
CX1295 v4	HF_LF		65 Hz, 24 Lnk/Rly	
CX1526 v1	HF_LF		50 Hz, 24 Lnk/Rly	
CX1565 v4	HF_LF		50 Hz, 24 Lnk/Rly	
CX1577 v1	HF_LF		50 Hz, 24 Lnk/Rly	
CX1595 v4	HF_LF		50 Hz, 24 Lnk/Rly	
DX896 v2	HF_LF		60 Hz, 24 Lnk/Rly	
DX1226 v1	LF	HF_LF	45 Hz, 24 Lnk/Rly	
DX1226 ROT v1	LF	HF_LF	45 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
DX1226fp v1	HF_LF		45 Hz, 24 Lnk/Rly	
DX1265 v5	LF	HF_LF	45 Hz, 24 Lnk/Rly	
DX1265 ROT v5	LF	HF_LF	45 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
DX1277 v2	LF	HF_LF	45 Hz, 24 Lnk/Rly	
DX1295 v6	LF	HF_LF	45 Hz, 24 Lnk/Rly	
DX1295 ROT v6	LF	HF_LF	45 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
DX1295fp v1	HF_LF		45 Hz, 24 Lnk/Rly	
DX1526 v1	LF	HF_LF	38 Hz, 24 Lnk/Rly	
DX1526 ROT v1	LF	HF_LF	38 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
DX1565 v5	LF	HF_LF	38 Hz, 24 Lnk/Rly	
DX1565 ROT v5	LF	HF_LF	38 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
DX1577 v1	LF	HF_LF	38 Hz, 24 Lnk/Rly	
DX1595 v5	LF	HF_LF	38 Hz, 24 Lnk/Rly	
DX1595 ROT v5	LF	HF_LF	38 Hz, 24 Lnk/Rly	Use when coax is rotated 90 deg
FA12 v2	HF_LF		42 Hz, 24 Lnk/Rly	
FA12-SM v2	HF_LF		42 Hz, 24 Lnk/Rly	Use for stage monitor application
FA15 v1	HF_LF		32 Hz, 24 Lnk/Rly	
FA15-SM v1	HF_LF		32 Hz, 24 Lnk/Rly	Use for stage monitor application
FA28 v1	HF_LF		40 Hz, 24 Lnk/Rly	
FA28-SM v1	HF_LF		40 Hz, 24 Lnk/Rly	Use for stage monitor application
FX1295 v1	HF_LF		70 Hz, 24 Lnk/Rly	
FX896 v1	HF_LF		70 Hz, 24 Lnk/Rly	
GX1226 v1	HF_LF		45 Hz, 24 Lnk/Rly	
GX1265 v2	HF_LF		45 Hz, 24 Lnk/Rly	
GX1277 v1	HF_LF		45 Hz, 24 Lnk/Rly	
GX1295 v1	HF_LF		45 Hz, 24 Lnk/Rly	
GX1526 v1	HF_LF		40 Hz, 24 Lnk/Rly	
GX1565 v1	HF_LF		40 Hz, 24 Lnk/Rly	
GX1577 v1	HF_LF		40 Hz, 24 Lnk/Rly	
GX1595 v1	HF_LF		40 Hz, 24 Lnk/Rly	
L v2	LF	HF_LF	30 Hz, 24 Lnk/Rly	
M v6	LF	HF_LF	45 Hz, 24 Lnk/Rly	
P v4	HF_LF		80 Hz, 24 Lnk/Rly	
RX599-16 v1	HF_LF		75 Hz, 24 Lnk/Rly	Use for 16 Ω operation
RX699-16 v2	HF_LF		65 Hz, 24 Lnk/Rly	Use for 16 Ω operation
RX699-70V v2	HF_LF		65 Hz, 24 Lnk/Rly	Use for 70 V operation
S v5	HF_LF		65 Hz, 24 Lnk/Rly	

Preset Info

Preset Name	File 1	File 2	Minimum HPF	Notes
Sub112 v3	VLF		38 Hz, 24 Btrwrth	
Sub115 v3	VLF		30 Hz, 24 Btrwth	
Sub118 v1	VLF		26 Hz, 24 Btrwrth	
Sub215 v7	VLF		26 Hz, 24 Btrwrth	
Sub218 v1	VLF		26 Hz, 24 Btrwrth	
Sub218L v1	VLF		25 Hz, 24 Btrwrth	
TS212 v1	VLF		20 Hz, 24 Btrwrth	
TS215 v2	VLF		31 Hz, 24 Btrwrth	
TS221 v1	VLF		24 Hz, 24 Btrwrth	
US212 v2	VLF		40 Hz, 24 Btrwrth	
US221 v2	VLF		28 Hz, 24 Btrwrth	
XL v6 [CLUB]	LF	HF	65 Hz, 24 Lnk-Rly	Use for EDM applications
XL v7 [FLAT]	LF	HF	65 Hz, 24 Lnk-Rly	Use for live applications