

## 1 KF750 over 1 KF755 KF750 DSP SETTINGS

Assumed Trim Height: 20 ft.  
Assumed Distance to FOH: 50 ft.

### INPUT

DELAY 0.000msec

### LF

GAIN +6.5dB

DELAY 1.896msec

HPF 40.9Hz 24dB Butterworth

LPF 170Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	152Hz	-6.5dB	4.8	2.92	0.21

### MF

GAIN -1.5dB

DELAY 0.000msec

HPF 177Hz 24dB Link/Riley

LPF 1k39Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	1k19Hz	+4.5dB	1.1	1.54	0.91
EQ2	520Hz	-4.5dB	4.8	3.30	0.21
EQ3	1k00Hz	-4.5dB	5.7	3.92	0.18
EQ4	218Hz	-1.0dB	2.0	1.41	0.50

### HF

GAIN +0.0dB

DELAY 1.102msec

HPF 1k47Hz 24dB Link/Riley

LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	10k7Hz	+12.5dB	3.0	3.28	0.48
EQ2	2k62Hz	-6.0dB	1.8	1.23	0.56
EQ3	6k73Hz	-3.0dB	6.0	4.17	0.17

## KF755 DSP SETTINGS

### LF (take signal from KF750 LF)

### INPUT

DELAY 0.514msec

GAIN -6.0dB

### MF

GAIN -3.5dB

DELAY 0.000msec

HPF 354Hz 24dB Link/Riley

LPF 1k14Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	500Hz	-8.5dB	2.2	0.99	0.52
EQ2	874Hz	-5.5dB	10	6.84	0.10
EQ3	1k26Hz	-3.5dB	3.6	2.49	0.28

### HF

GAIN -2.0dB

DELAY 1.102msec

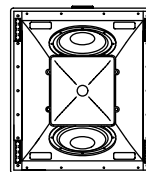
HPF 1k68Hz 24dB Butterworth

LPF 22k0Hz 24dB Link/Riley

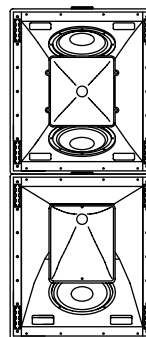
PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	11k3Hz	+9.0dB	2.1	2.41	0.57
EQ2	5k99Hz	-7.0dB	9.0	5.10	0.12
EQ3	2k33Hz	-9.5dB	1.8	0.69	0.68
EQ4	3k92Hz	-6.0dB	5.0	3.41	0.20

Single row of KF750's recommended for:  
> small to medium nightclubs with  
no balcony

Use One-Over-One KF750 DSP Settings



One-Over-One Configuration  
recommended for:  
theaters and performing arts centers  
where arrays may be flown



Downfill delay for this configuration is based on the trim height and distance to FOH listed above. For more information on adjusting gain and delay to account for different venue geometries, see Section 2 of this Guide.

\* Q, Bandwidth and USP-2Q all define the width of the EQ curve. Different DSP units use different nomenclature to define this parameter. If you are unsure which to use, contact the DSP manufacturer.

## 2 KF750 over 1 KF755 KF750 DSP SETTINGS

Assumed Trim Height: 20 ft.  
Assumed Distance to FOH: 60 ft.

### INPUT

DELAY 0.000msec

### LF

GAIN +2.5dB

DELAY 1.896msec

HPF 40.9Hz 24dB Butterworth

LPF 170Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	152Hz	-6.5dB	4.8	2.92	0.21

### MF

GAIN -0.5dB

DELAY 0.000msec

HPF 177Hz 24dB Link/Riley

LPF 1k62Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	1k19Hz	+4.5dB	1.1	1.54	0.91
EQ2	520Hz	-4.5dB	4.8	3.30	0.21
EQ3	1k00Hz	-4.5dB	4.2	2.89	0.24

### HF

GAIN +0.0dB

DELAY 1.102msec

HPF 1k68Hz 24dB Butterworth

LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	10k7Hz	+12.5dB	3.0	3.28	0.48
EQ2	2k57Hz	-6.0dB	2.0	1.36	0.50
EQ3	6k73Hz	-3.0dB	6.0	4.17	0.17

## KF755 DSP SETTINGS

### LF (take signal from KF750 LF)

### INPUT

DELAY 0.712msec

GAIN -6.0dB

### MF

GAIN -3.5dB

DELAY 0.000msec

HPF 354Hz 24dB Link/Riley

LPF 1k47Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	490Hz	-8.0dB	2.1	1.02	0.53
EQ2	874Hz	-5.5dB	10	6.84	0.10
EQ3	1k26Hz	-3.5dB	3.6	2.49	0.28

### HF

GAIN -2.0dB

DELAY 1.102msec

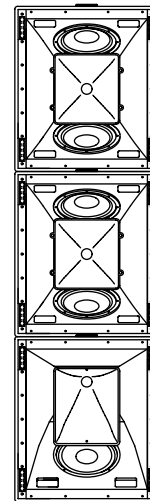
HPF 1k96Hz 24dB Butterworth

LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	11k3Hz	+9.0dB	1.8	2.07	0.66
EQ2	5k99Hz	-8.0dB	9.0	4.38	0.12
EQ3	2k33Hz	-10.5	1.8	0.58	0.72
EQ4	3k92Hz	-6.0dB	5.0	3.41	0.20

Two-Over-One Configuration  
recommended for:

> large theaters and performing  
arts centers where arrays may be flown



MF -3 dB

HF -6 dB

Downfill delay for this configuration is based on the trim height and distance to FOH listed above. For more information on adjusting gain and delay to account for different venue geometries, see Section 2 of this Guide.

\* Q, Bandwidth and USP-2Q all define the width of the EQ curve. Different DSP units use different nomenclature to define this parameter. If you are unsure which to use, contact the DSP manufacturer.

### 3 KF750 over 1 KF755 KF750 DSP SETTINGS

Assumed Trim Height: 20 ft.  
Assumed Distance to FOH: 80 ft.

#### INPUT

DELAY 0.000msec

#### LF

GAIN +1.5dB

DELAY 1.896msec

HPF 40.9Hz 24dB Butterworth

LPF 170Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	152Hz	-6.5dB	4.8	2.92	0.21

#### MF

GAIN -1.5dB

DELAY 0.000msec

HPF 173Hz 24dB Link/Riley

LPF 1k62Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	1k17Hz	+4.0dB	1.1	1.54	0.91
EQ2	520Hz	-4.0dB	4.8	3.32	0.21

#### HF

GAIN +0.0dB

DELAY 1.102msec

HPF 1k75Hz 24dB Link/Riley

LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	10k7Hz	+12.5dB	3.0	3.28	0.48
EQ2	2k77Hz	-7.0dB	2.1	1.19	0.50
EQ3	6k73Hz	-5.0dB	6.0	4.12	0.17
EQ4	5k14Hz	+1.5dB	4.2	5.95	0.24

### KF755 DSP SETTINGS

#### LF (LF is muted)

#### INPUT

DELAY 0.859msec

GAIN 0.0dB

#### MF

GAIN -3.5dB

DELAY 0.000msec

HPF 354Hz 24dB Link/Riley

LPF 1k47Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	490Hz	-8.0dB	2.1	1.02	0.53
EQ2	874Hz	-5.5dB	10	6.84	0.10
EQ3	1k26Hz	-3.5dB	3.6	2.49	0.28

#### HF

GAIN -2.0dB

DELAY 1.102msec

HPF 1k96Hz 24dB Butterworth

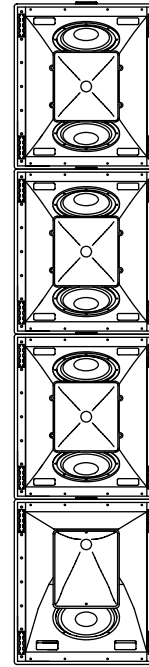
LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	11k3Hz	+9.0dB	1.7	1.95	0.70
EQ2	5k99Hz	-8.0dB	12	5.84	0.09
EQ3	2k33Hz	-11.0dB	1.8	0.54	0.74
EQ4	3k92Hz	-6.0dB	5.0	3.41	0.20

Three-Over-One Configuration  
recommended for:

> pavilion (shed)

> small to medium arena (one row of upfill  
KF755's may also be required)



Downfill delay for this configuration is based on the trim height and distance to FOH listed above. For more information on adjusting gain and delay to account for different venue geometries, see Section 2 of this Guide.

\* Q, Bandwidth and USP-2Q all define the width of the EQ curve. Different DSP units use different nomenclature to define this parameter. If you are unsure which to use, contact the DSP manufacturer.

**4 KF750 over 1 KF755  
KF750 DSP SETTINGS**

Assumed Trim Height: 20 ft.  
Assumed Distance to FOH: 100 ft.

**INPUT**

DELAY 0.000msec

**LF**

GAIN +1.5dB

DELAY 1.896msec

HPF 40.9Hz 24dB Butterworth

LPF 170Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	152Hz	-6.5dB	4.8	2.92	0.21

**MF**

GAIN -1.5dB

DELAY 0.000msec

HPF 173Hz 24dB Link/Riley

LPF 1k62Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	1k19Hz	+4.5dB	1.1	1.54	0.91
EQ2	520Hz	-4.5dB	4.8	3.30	0.21
EQ3	1k00Hz	-4.5dB	4.2	2.89	0.24
EQ4	218Hz	-1.0dB	2.0	1.41	0.50

**HF**

GAIN +0.0dB

DELAY 1.102msec

HPF 1k68Hz 24dB Butterworth

LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	10k7Hz	+12.5dB	3.0	3.28	0.48
EQ2	2k57Hz	-6.0dB	2.0	1.36	0.50
EQ3	6k73Hz	-3.0dB	6.0	4.17	0.17

**KF755 DSP SETTINGS****LF (LF is muted)****INPUT**

DELAY 0.931msec

GAIN 0.0dB

**MF**

GAIN -3.5dB

DELAY 0.000msec

HPF 354Hz 24dB Link/Riley

LPF 1k47Hz 24dB Butterworth

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	490Hz	-8.0dB	2.1	1.02	0.53
EQ2	874Hz	-5.5dB	10	6.84	0.10
EQ3	1k26Hz	-3.5dB	3.6	2.49	0.28

**HF**

GAIN -2.0dB

DELAY 1.102msec

HPF 1k96Hz 24dB Butterworth

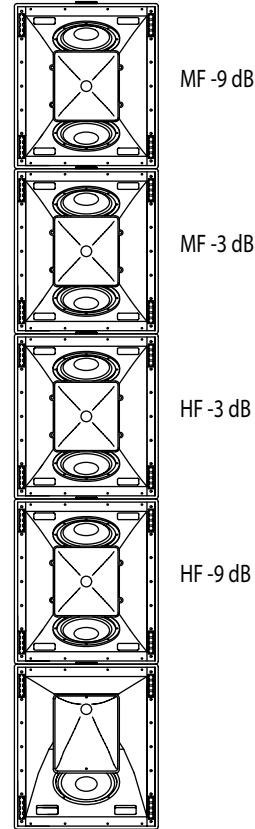
LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	11k3Hz	+6.0dB	1.8	2.50	0.56
EQ2	5k99Hz	-8.0dB	10	4.87	0.11
EQ3	2k33Hz	-10.5	1.8	0.58	0.72
EQ4	3k92Hz	-6.0dB	5.0	3.41	0.20

Four-Over-One Configuration  
recommended for:

> large pavilion

> large arena (one or two rows of upfill  
KF755's may be required)



Downfill delay for this configuration is based on the trim height and distance to FOH listed above. For more information on adjusting gain and delay to account for different venue geometries, see Section 2 of this Guide.

\* Q, Bandwidth and USP-2Q all define the width of the EQ curve. Different DSP units use different nomenclature to define this parameter. If you are unsure which to use, contact the DSP manufacturer.

# Upfill

## KF755 UP FILL (1 or 2 modules) KF755 DSP SETTINGS

### LF (LF is muted)

#### INPUT

When only 1 row of upfill is used (theater or small arena)

DELAY 0.300msec  
GAIN 0.0dB

When 2 rows of upfill are used (large arena)

Top Up Fill Module  
DELAY 1.237msec  
GAIN -5.0dB  
Second Up Fill Module  
DELAY 1.756msec  
GAIN -5.0dB

#### MF

GAIN -1.5dB  
DELAY 0.000msec  
HPF 195Hz 24dB Butterworth  
LPF 1k44Hz 24dB Butterworth

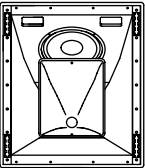
PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	1k19Hz	+4.5dB	1.1	1.54	0.91
EQ2	520Hz	-3.0dB	2.4	1.67	0.42
EQ3	841Hz	-3.0dB	3.4	2.36	0.29
EQ4	218Hz	-1.0dB	2.0	1.41	0.50

#### HF

GAIN 0.0dB  
DELAY 0.646msec  
HPF 1k56Hz 24dB Link/Riley  
LPF 22k0Hz 24dB Link/Riley

PEQ	Frequency	Boost/Cut	Q*	USP-2 Q*	Bandwidth*
EQ1	10k7Hz	+12.5dB	3.0	3.28	0.48
EQ2	2k88Hz	-13.0dB	3.8	0.80	0.39
EQ3	4k94Hz	-2.0dB	8.5	5.95	0.12

One Row of Upfill KF755's  
recommended for:  
> theater where arrays cannot be flown  
> medium arenas where the balcony  
is above the level of the array

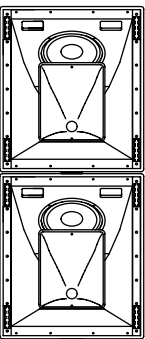


The delay of a single row of KF755 upfill modules is calibrated to meet the acoustic origin of an array comprising 3-high KF750's over a single KF755 downfill module (Three-Over-One Configuration).

When used with smaller arrays, the delay should be decreased. When used with larger arrays, the delay should be increased.

Gain adjustment for a single row of upfill KF755 modules is based on a throw distance of 235 ft. to the midpoint of the balcony. If a given venue's throw is longer, gain should be increased and vice versa for a shorter throw.

See Section 2 of this Guide for more details on adjusting these parameters.



Two rows of Upfill KF755's  
recommended for:  
> large arenas where the balcony  
is above the level of the array

The delays for two rows of KF755 upfill modules are calibrated to meet the acoustic origin of an array comprising 4-high KF750's over a single KF755 downfill module (Four-Over-One Configuration).

When used with smaller arrays, the delays should be decreased. When used with larger arrays, the delays should be increased.

Gain adjustments for two rows of upfill KF755 modules are based on a throw distance of 300 ft. to the midpoint of the balcony. If a given venue's throw is longer, gain should be increased and vice versa for a shorter throw.

See Section 2 of this Guide for more details on adjusting these parameters.