

## GAE BR series BR118-MHE / BR218-MHE

BR118 with Mid/High Extension  
BR218 with Mid/High Extension

### **BR118 / BR218**

Gain: adjust    Delay: adjust    Phase: +

HPF: 30Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 90Hz    Linkwitz/Riley 24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 38Hz    Q=3,0    B/W=0,48    Gain: +1,0...+4,0dB (Bass boost)

### **Top (full-range loudspeaker 12"...15" vented)**

Gain: 0dB    Delay: 0,0ms    Phase: +

HPF: 108Hz    Butterworth 24dB/oct. (4<sup>th</sup> order)

LPF: bypass

### **Input EQs (Pre-EQs)**

PEQ1: 105Hz    Q=3,0    B/W=0,48    Gain: 0...-3,0dB (Level reduction crossover)

## GAE BR series BR115-MHE / BR215-MHE

BR115 with Mid/High Extension  
BR215 with Mid/High Extension

### **BR115 / BR215**

Gain: adjust    Delay: adjust    Phase: +

HPF: 30Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 90Hz    Linkwitz/Riley 24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 40Hz    Q=3,0    B/W=0,48    Gain: +1,5...+4,5dB (Bass boost)

### **Top (full-range loudspeaker 12"...15" vented)**

Gain: 0dB    Delay: 0,0ms    Phase: +

HPF: 108Hz    Butterworth 24dB/oct. (4<sup>th</sup> order)

LPF: bypass

### **Input EQs (Pre-EQs)**

PEQ1: 105Hz    Q=3,0    B/W=0,48    Gain: 0...-3,0dB (Level reduction crossover)

## GAE BR series BR15N

### BR15N with full-range top

#### **BR15N**

Gain: adjust    Delay: adjust    Phase: +

HPF: 30Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 100Hz    Linkwitz/Riley 24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 42Hz    Q=4,0    B/W=0,36    Gain: **+3,0...+6,0dB** (Bass boost)

Band-EQ2: 300Hz    HiSHF 2<sup>nd</sup> (Q=0,7)    Gain: -3,0dB

Band-EQ3: 330Hz    Q=3,0    B/W=0,48    Gain: -4,0dB

#### **Top (full-range loudspeaker, vented)\***

Gain: 0dB    Delay: 0,0ms    Phase: +

HPF: 105Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: bypass

*\* Depending on type and application of the top system the crossover frequency and slope of the full-range high pass filter may vary.*

#### **Input EQs (Pre-EQs)**

PEQ1: 105Hz    Q=4,0    B/W=0,36    Gain: **0,0...-3,0dB** (Level reduction crossover)

## GAE BR series BR12N

### BR12N with full-range top

**BR12N**

Gain: adjust    Delay: adjust    Phase: +

HPF: 35Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 100Hz    Linkwitz/Riley 24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 45Hz    Q=4,0    B/W=0,36    Gain: **+3,0...+6,0dB** (Bass boost)

Band-EQ2: 300Hz    HiSHF 2<sup>nd</sup> (Q=0,7)    Gain: -3,0dB

Band-EQ3: 300Hz    Q=4,0    B/W=0,36    Gain: -3,0dB

**Top (full-range loudspeaker, vented)\***

Gain: 0dB    Delay: adjust    Phase: +

HPF: 105Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: bypass

*\* Depending on type and application of the top system the crossover frequency and slope of the full-range high pass filter may vary.*

**Input EQs (Pre-EQs)**

PEQ1: 105Hz    Q=4,0    B/W=0,36    Gain: **0,0...-3,0dB** (Level reduction crossover)

## GAE BR series BR8N

### BR8N with full-range top

#### **BR8N (-IN)**

Gain: adjust    Delay: adjust    Phase: +

HPF: 35Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 100Hz    Butterworth 24dB/oct. (4<sup>th</sup> order) (if applicable Linkwitz/Riley)\*

Band-EQ1: 54Hz    Q=2,5    B/W=0,57    Gain: +3,0dB

Band-EQ2: 204Hz    LoSHF 2<sup>nd</sup> (Q=0,7)    Gain: +3,0dB

Band-EQ3: 420Hz    Q=4,0    B/W=0,36    Gain: -12,0dB

#### **Top (full-range loudspeaker, vented)\***

Gain: 0dB    Delay: adjust    Phase: +

HPF: 105Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: bypass

*\* Depending on type and application of the top system the crossover frequency and slope of the full-range high pass filter may vary.*

#### **Input EQs (Pre-EQs)**

PEQ1: 105Hz    Q=4,0    B/W=0,36    Gain: **0,0**...-3,0dB (Level reduction crossover)

## GAE BR series BR15-MHE

### BR15 with Mid/High Extension

#### **BR15**

Gain: adjust    Delay: adjust    Phase: +

HPF: 30Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: 95Hz    Linkwitz/Riley 24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 40Hz    Q=3,0    B/W=0,48    Gain: +3,0...+5,0dB (Bass boost)

#### ***Top (small full-range loudspeaker 6" ...10" vented)***

Gain: 0dB    Delay: 0,0ms    Phase: +

HPF: 105Hz    Butterworth 18dB/oct. (3<sup>rd</sup> order)

LPF: bypass

## GAE BR series BR12-40

### BR12 (40Hz) with full-range top

#### **BR12**

Gain: adjust    Delay: adjust    Phase: +

HPF: 30Hz    Butterworth    18dB/oct. (3<sup>rd</sup> order)

LPF: 100Hz    Linkwitz/Riley    24dB/oct. (4<sup>th</sup> order)

Band-EQ1: 42Hz    Q=3,0    B/W=0,48    Gain: 0,0...+5,0dB (Bass boost)

#### **Top (small full-range loudspeaker 6"...10" vented)**

Gain: 0dB    Delay: adjust    Phase: +

HPF: 100Hz    Butterworth    12dB/oct. (2<sup>nd</sup> order)

LPF: bypass

#### **Input EQs (Pre-EQs)**

PEQ1 : 66Hz    Q=4,5    B/W=0,32    Gain: -6,0dB    (-3,0...-6,0dB variable)

PEQ2 :100Hz    Q=5,0    B/W=0,29    Gain: 0...-3,0dB (Level reduction crossover)