SC28 Biamp Connection Diagram for QSC's WideLine-10 Loudspeaker System (WL2102)

In the **Setup Menu**…
- In the **Input Sens** menu, set the input sensitivity to correspond with expected audio source levels.
- In the **Array Config** menu, select the crossover type as **WL10 2way**.
- In the **Array Size** menu, select the number of enclosures in each array.
- In the **Total Splay** menu, select the total of all the splay angles between the enclosures in each array. For more info go to http://www.qscaudio.com/products/dsp/sc28/sc28_array_compensation_eq.pdf
- In the **Subwoofer** menu, select the appropriate QSC sub, "None" for no sub, or "Bypass/Thru" to use an external crossover and EQ for the sub.
    If the system includes subwoofers…
    - In the **Sub Management** menu, configure the subwoofers as **Stereo** or **Summed Mono**.
    - In the **Sub Gain** menu, adjust the level to compensate for the use of more or fewer subwoofers than a typical system.
    - In the **Sub Delay** and **Array Delay** menus, you may add alignment delays if necessary.
- In the **Limiters** menu, configure the output limiters to protect the loudspeakers or for clip limiting only of the SC28 output. *Disabling the loudspeaker protection is not recommended.*
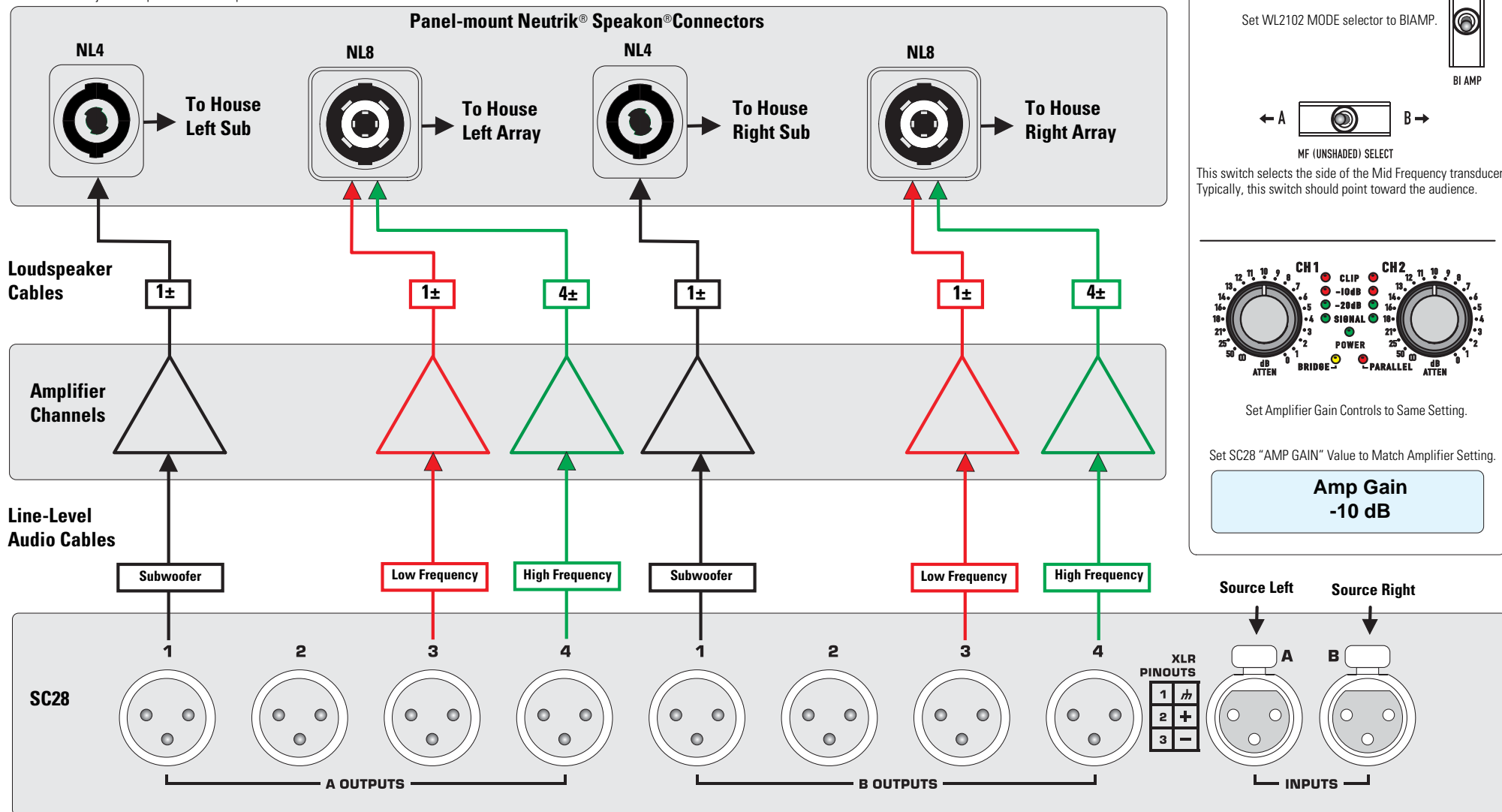- In the **Out Amp** menus, select the QSC amplifier attached to each output.
- In the **Out Amp Cfg** menus, select whether each amplifier is configured as **Stereo** or **Bridge Mono**.
- In the **Amp Gain** menu, select the gain to match the gain control settings of the amplifiers connected to the outputs. All amplifiers must be set to the same value.

In the **EQ Menu**…
- Adjust the equalization to compensate for environmental factors.

Setup Highlights:

In the SC28's "Setup Menu", select:

Array Config
WL10 2way

TRI AMP

Set WL2102 MODE selector to BIAMP.

BI AMP

← A   B →

MF (UNSHADED) SELECT

This switch selects the side of the Mid Frequency transducer. Typically, this switch should point toward the audience.

CH 1   CH 2
CLIP
–10dB
–20dB
SIGNAL
POWER
dB ATTEN   BRIDGE   PARALLEL   dB ATTEN

Set Amplifier Gain Controls to Same Setting.

Set SC28 "AMP GAIN" Value to Match Amplifier Setting.

Amp Gain
-10 dB

Panel-mount Neutrik® Speakon®Connectors

NL4	NL8	NL4	NL8

To House Left Sub

To House Left Array

To House Right Sub

To House Right Array

Loudspeaker Cables

1±   1±   4±   1±   1±   4±

Amplifier Channels

Line-Level Audio Cables

Subwoofer   Low Frequency   High Frequency   Subwoofer   Low Frequency   High Frequency

Source Left   Source Right

SC28

1   2   3   4   1   2   3   4

XLR PINOUTS

1	⏚
2	+
3	–

A   B

A OUTPUTS   B OUTPUTS   INPUTS

SC28 Triamp Connection Diagram for QSC's WideLine-10 Loudspeaker System (WL2102)
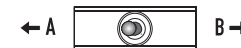
In the **Setup Menu**…
- In the **Input Sens** menu, set the input sensitivity to correspond with expected audio source levels.
- In the **Array Config** menu, select the crossover type as **WL10 3way** or **WL10 3way REV** for frequency shading reversed from selector switches on loudspeakers.
- In the **Array Size** menu, select the number of enclosures in each array.
- In the **Total Splay** menu, select the total of all the splay angles between the enclosures in each array. For more info go to http://www.qscaudio.com/products/dsp/sc28/sc28_array_compensation_eq.pdf
- In the **Subwoofer** menu, select the appropriate QSC sub, "None" for no sub, or "Bypass/Thru" to use an external crossover and EQ for the sub.
    - If the system includes subwoofers…
        - In the **Sub Management** menu, configure the subwoofers as **Stereo** or **Summed Mono**.
        - In the **Sub Gain** menu, adjust the level to compensate for the use of more or fewer subwoofers than a typical system.
        - In the **Sub Delay** and **Array Delay** menus, you may add alignment delays if necessary.
- In the **Limiters** menu, configure the output limiters to protect the loudspeakers or for clip limiting only of the SC28 output. *Disabling the loudspeaker protection is not recommended.*
- In the **Out Amp** menus, select the QSC amplifier attached to each output.
- In the **Out Amp Cfg** menus, select whether each amplifier is configured as **Stereo** or **Bridge Mono**.
- In the **Amp Gain** menu, select the gain to match the gain control settings of the amplifiers connected to the outputs. All amplifiers must be set to the same value.

In the **EQ Menu**…
- Adjust the equalization to compensate for environmental factors.

Setup Highlights:

TRI AMP

Set WL2102 MODE selector to TRIAMP.

BI AMP

← A   B →

MF (UNSHADED) SELECT

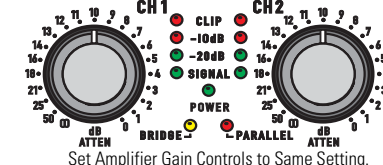This switch selects the side of the Mid Frequency transducer. Typically, this switch should point toward the audience.

On the SC28, select:

**Array Config
WL10 3way**

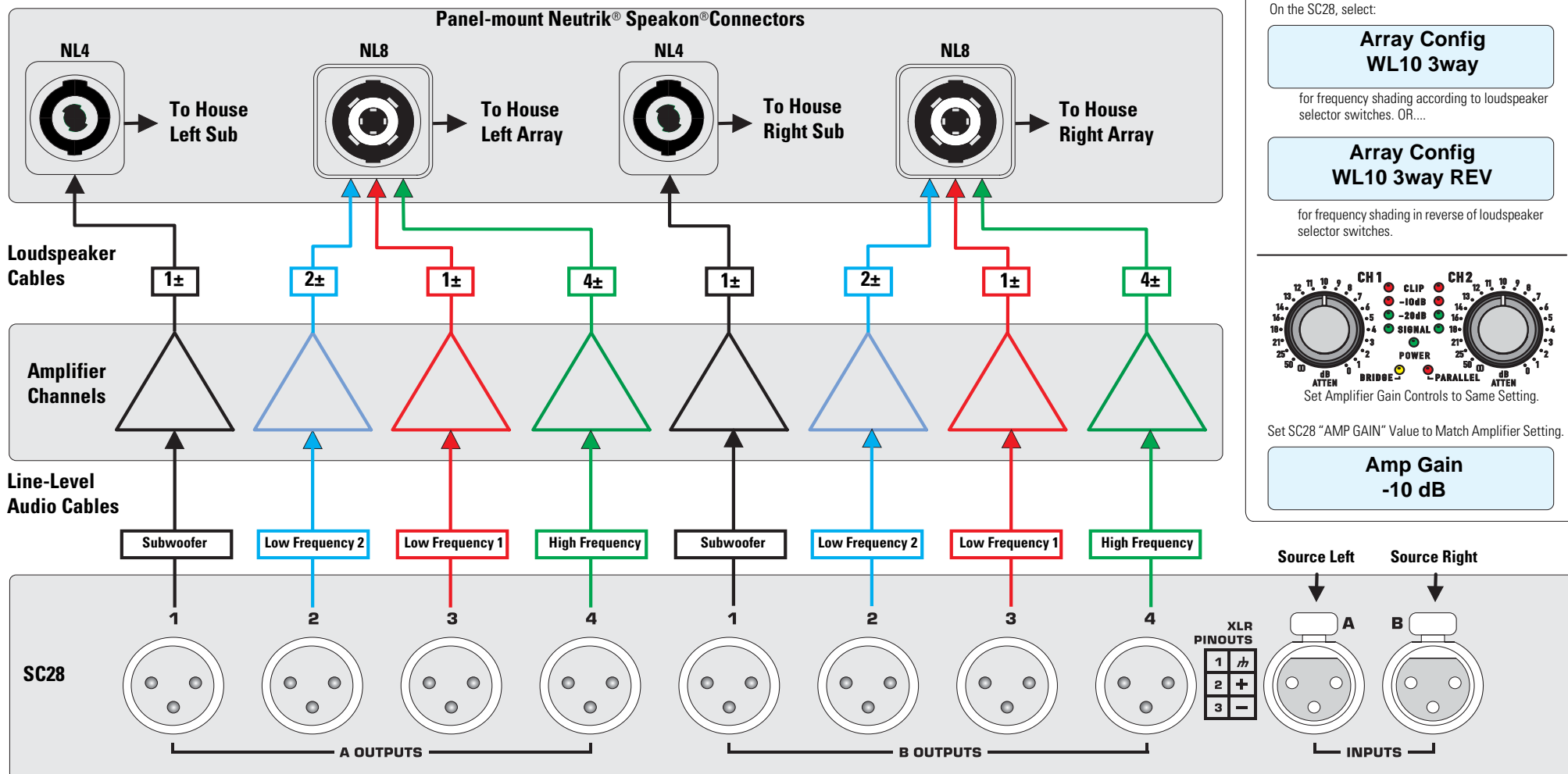for frequency shading according to loudspeaker selector switches. OR....

**Array Config
WL10 3way REV**

for frequency shading in reverse of loudspeaker selector switches.

Set Amplifier Gain Controls to Same Setting.

Set SC28 "AMP GAIN" Value to Match Amplifier Setting.

**Amp Gain
-10 dB**

Panel-mount Neutrik® Speakon® Connectors

NL4 → To House Left Sub
NL8 → To House Left Array
NL4 → To House Right Sub
NL8 → To House Right Array

Loudspeaker Cables

1±   2±   1±   4±   1±   2±   1±   4±

Amplifier Channels

Line-Level Audio Cables

Subwoofer | Low Frequency 2 | Low Frequency 1 | High Frequency | Subwoofer | Low Frequency 2 | Low Frequency 1 | High Frequency

Source Left   Source Right

SC28

1   2   3   4   1   2   3   4

XLR PINOUTS

1	⏚
2	+
3	−

A   B

A OUTPUTS   B OUTPUTS   INPUTS

TD-000273-00 rev.B