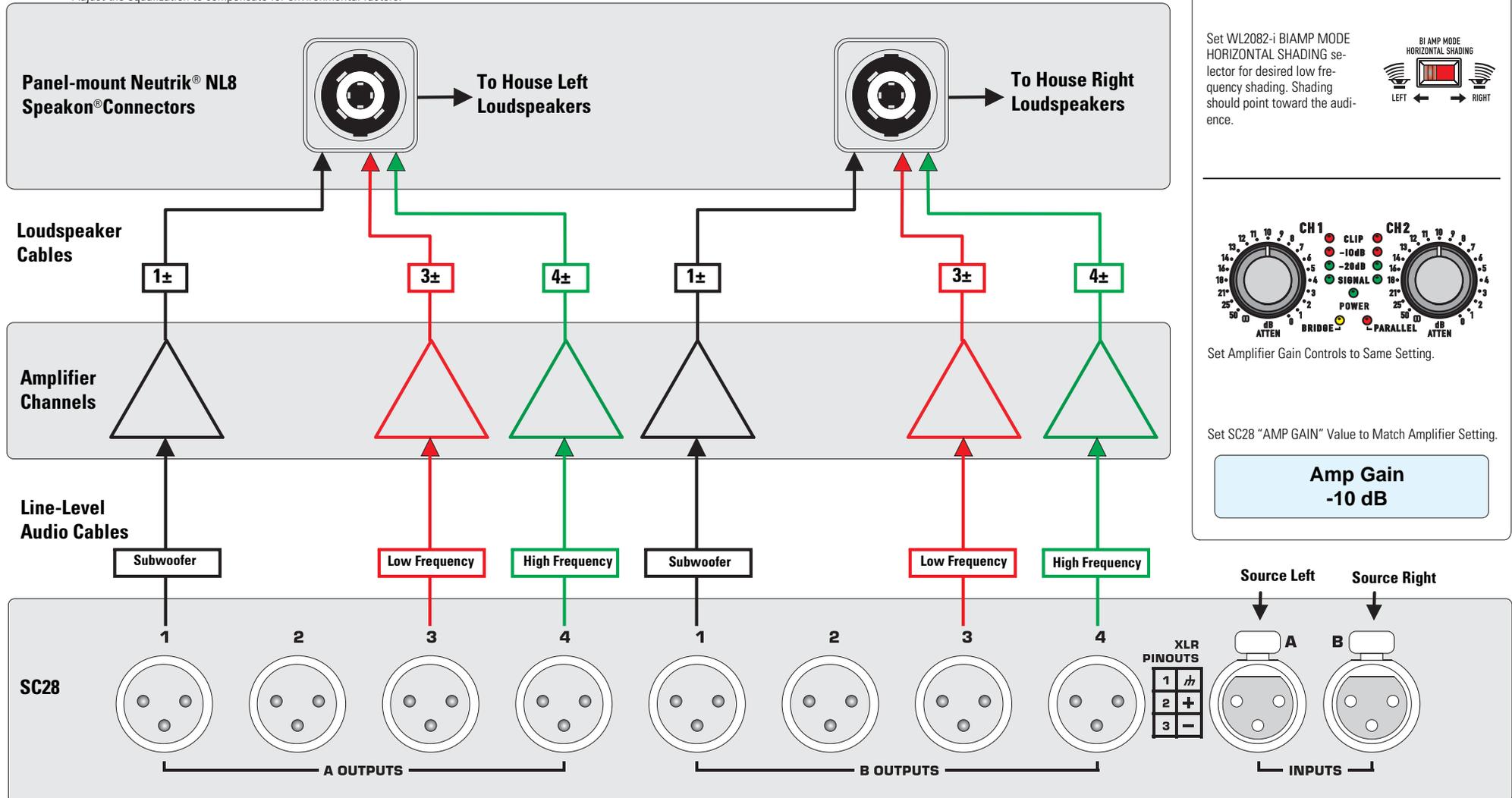# SC28 Biamp Connection Diagram for QSC's ILA Loudspeaker System (WL2082-i)

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 **ILA 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. If the array is suspended below the subwoofer, the Sub Delay and Array Delay should be the same. If the array is suspended in front of the subwoofer, the Array Delay should be 3.0 ms greater than the Sub Delay setting.
- 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**…
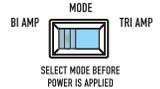- Adjust the equalization to compensate for environmental factors.
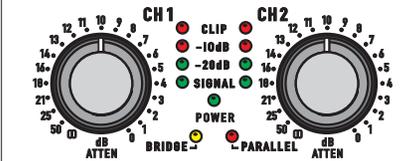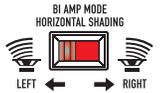
Setup Highlights:

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

**Array Config
ILA 2way**

Set WL2082-1 MODE selector to BIAMP.
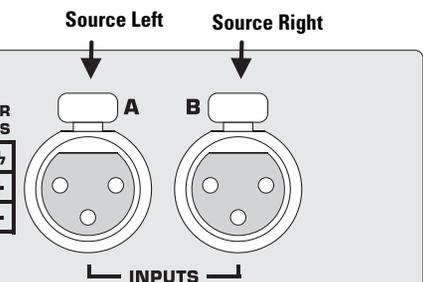
MODE
BI AMP — TRI AMP
SELECT MODE BEFORE
POWER IS APPLIED

Set WL2082-i BIAMP MODE HORIZONTAL SHADING selector for desired low frequency shading. Shading should point toward the audience.

BI AMP MODE
HORIZONTAL SHADING
LEFT ← → RIGHT

Set Amplifier Gain Controls to Same Setting.

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

**Amp Gain
-10 dB**

Panel-mount Neutrik® NL8 Speakon® Connectors

To House Left Loudspeakers

To House Right Loudspeakers

Loudspeaker Cables

1± | 3± | 4± | 1± | 3± | 4±

Amplifier Channels

Line-Level Audio Cables

Subwoofer | Low Frequency | High Frequency | Subwoofer | Low Frequency | High Frequency

1 | 2 | 3 | 4 | 1 | 2 | 3 | 4

Source Left | **Source Right**

A | B

SC28

XLR PINOUTS
1 ⏚
2 +
3 −

A OUTPUTS | B OUTPUTS | INPUTS

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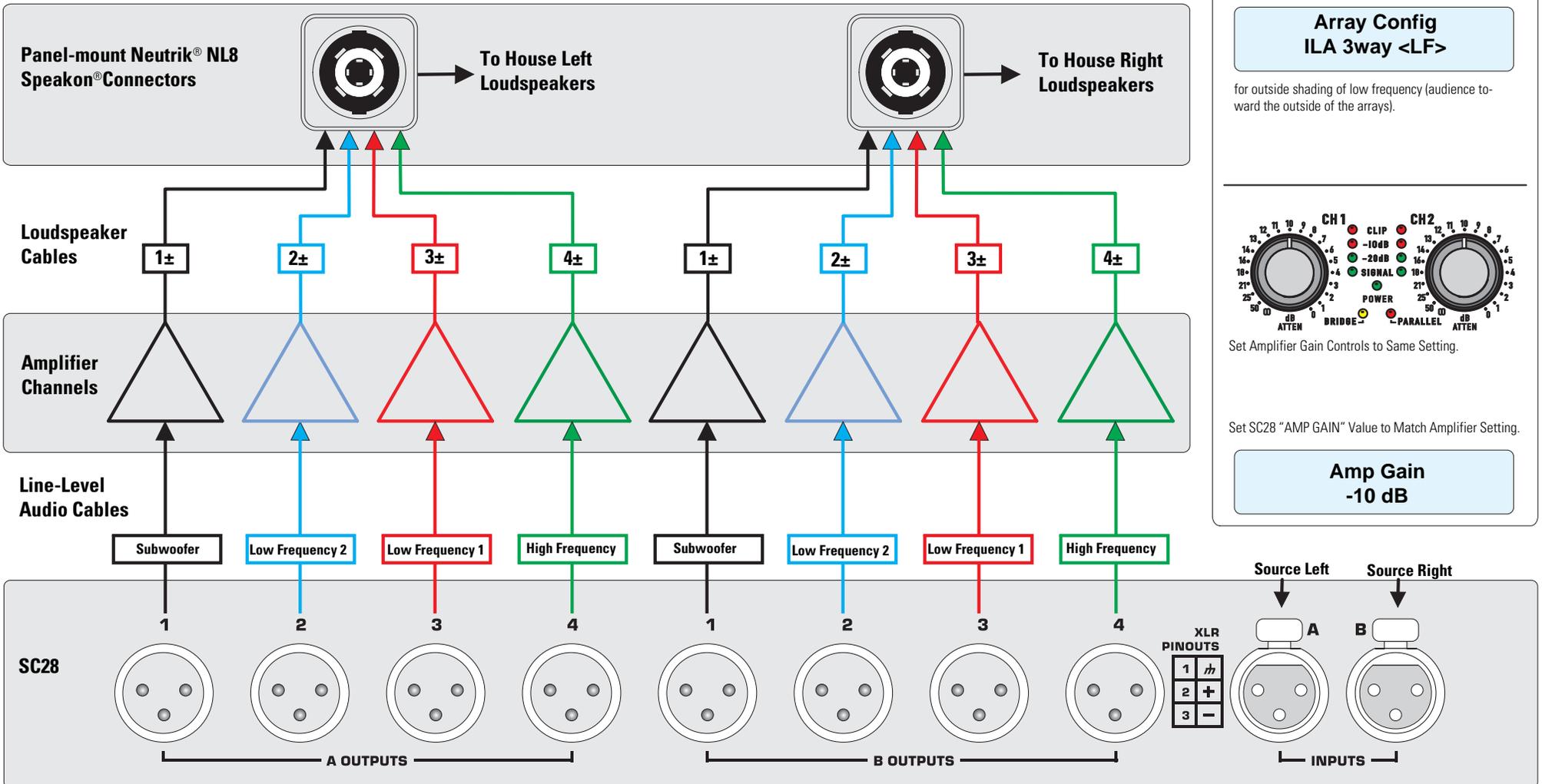BRIDGE | PARALLEL
dB ATTEN | dB ATTEN

SC28 Triamp Connection Diagram for QSC's ILA Loudspeaker System (WL2082-i)

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 **ILA 3way >LF<** for inside shading of low frequencies or **ILA 3way <LF>** for outside shading of low frequencies.
- 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. If the array is suspended below the subwoofer, the Sub Delay and Array Delay should be the same. If the array is suspended in front of the subwoofer, the Array Delay should be 3.0 ms greater than the Sub Delay setting.
- 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.
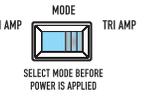
In the **EQ Menu**…
- Adjust the equalization to compensate for environmental factors.

Setup Highlights:

Set WL2082-1 MODE selector to TRIAMP.

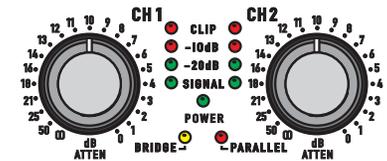BI AMP — MODE — TRI AMP

SELECT MODE BEFORE POWER IS APPLIED

On the SC28, select:

Array Config
ILA 3way >LF<

for inside shading of low frequency (audience between the arrays) OR....

Array Config
ILA 3way <LF>

for outside shading of low frequency (audience toward the outside of the arrays).

Set Amplifier Gain Controls to Same Setting.

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

Amp Gain
-10 dB

Panel-mount Neutrik® NL8 Speakon® Connectors

To House Left Loudspeakers

To House Right Loudspeakers

Loudspeaker Cables

1± 2± 3± 4±   1± 2± 3± 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

A OUTPUTS   B OUTPUTS

XLR PINOUTS

1	⏚
2	+
3	−

A   B

INPUTS

TD-000240-00 revD