**Community L SERIES LVH-900 A&E Specifications**

The A&E specifications are ordered with the indoor models first, followed by weather-resistant models (with WR in the model name). Please choose the appropriate model for your needs.

**LVH-906/AS:** The modular, vertically arrayable loudspeaker shall be a triaxial, full-range sealed enclosure design incorporating four 12 in. (300 mm) LF drivers with inherently weather resistant cones, three M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and four 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 60° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors shall be one 4-position and one 8-position lever-actuated wire clamping terminal blocks on a single, recessed, input panel. Each input connection will be made to a pair of like drivers with two inputs each to the high, midrange and low frequency drivers. The loudspeaker shall be operated in passive, multi-amplifier, mode. Using patent-pending techniques, all drivers integrate into a single triaxial waveguide that fills the entire 36 x 31-inch face of the enclosure, providing pattern control to below 400 Hz. Each input shall be driven from an independent amplifier channel that includes pre-processing for DDLP crossovers, dedicated FIR beamforming settings for the selected vertical pattern, FIR power-response correction and loudspeaker voicing filters. The user may select a preset for vertical dispersion beamforming of 20°, 40° or 60°. The LVH-900 Active Standard (AS) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

The loudspeaker enclosure shall be 40° trapezoidal in shape. It shall be constructed of a combination of 15mm thick exterior grade Baltic birch plywood, finished with a low gloss, uniformly textured paintable coating, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. The enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosure shall be fitted with a wraparound powder-coated 1.5mm perforated steel grille backed with color-matched acoustically transparent woven fabric with mounting fasteners that are accessible on the top and bottom of the enclosure.

The system shall have an operating range of 50 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pair shall have a nominal impedance of 5 Ohms, an input capability of 26V, the single, center, midrange driver shall have a nominal impedance of 10 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The 60°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter. The 60°H x 40°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter. The 60°H x 60°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter.

The loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 250 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-906/AS.

**LVH-909/AS:** The modular, vertically arrayable loudspeaker shall be a triaxial, full-range sealed enclosure design incorporating four 12 in. (300 mm) LF drivers with inherently weather resistant cones, three M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and four 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 90° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors shall be one 4-position and one 8-position lever-actuated wire clamping terminal blocks on a single, recessed, input panel. Each input connection will be made to a pair of like drivers with two inputs each to the high, midrange and low frequency drivers. The loudspeaker shall be operated in passive, multi-amplifier, mode. Using patent-pending techniques, all drivers integrate into a single triaxial waveguide that fills the entire 36 x 31-inch face of the enclosure, providing pattern control to below 400 Hz. Each input shall be driven from an independent amplifier channel that includes pre-processing for DDLP crossovers, dedicated FIR beamforming settings for the selected vertical pattern, FIR power-response correction and loudspeaker voicing filters. The user may select a preset for vertical dispersion beamforming of 20°, 40° or 60°. The LVH-900 Active Standard (AS) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

The loudspeaker enclosure shall be 40° trapezoidal in shape. It shall be constructed of a combination of 15mm thick exterior grade Baltic birch plywood, finished with a low gloss, uniformly textured paintable coating, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. The enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosure shall be fitted with a wraparound powder-coated 1.5mm perforated steel grille backed with color-matched acoustically transparent woven fabric with mounting fasteners that are accessible on the top and bottom of the enclosure.

The system shall have an operating range of 50 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pair shall have a nominal impedance of 5 Ohms, an input capability of 26V, the single, center, midrange driver shall have a nominal impedance of 10 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The 90°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 101 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter. The 90°H x 40°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 133 dB SPL (with peak output of 139 dB SPL) on axis at one meter. The 90°H x 60°V nominal dispersion preset shall produce a broadband sound pressure level of 101 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter.

The loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 250 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-909/AS.

**LVH-906/AP:** The modular, vertically arrayable loudspeaker system shall be a triaxial, full-range sealed enclosure design consisting of 2 x LVH-906/AP loudspeakers physically and acoustically coupled to create a single larger loudspeaker incorporating a total of eight 12 in. (300 mm) LF drivers with inherently weather resistant cones, six M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and eight 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 60° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors on each cabinet shall be one 4-position, one 6-position and one 8-position lever-actuated wire clamping terminal blocks distributed across two, recessed, input panels. Each input connection will be made to a pair of like drivers in pairs across the two cabinets, with four inputs to the high frequency drivers, three inputs to the midrange drivers and two inputs to the low frequency drivers in each cabinet. The loudspeaker shall be operated in passive, multi-amplifier mode. Using patent-pending techniques, the triaxial drivers in each cabinet are integrated to create half of the desired vertical coverage pattern and then, using advanced FIR techniques, the output from the two loudspeakers are seamlessly integrated into one coherent wavefront that fills the entire 72 x 31-inch face of the enclosure, providing pattern control to below 200 Hz. The user may select a preset for vertical dispersion beamforming of 20°, 80° and 100°. The LVH-900 Active Plus (AP) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

Each loudspeaker enclosure in the Active Plus array shall be 40° trapezoidal in shape. They shall be constructed of a combination of 15mm and 18mm thick exterior grade Baltic birch plywood, finished with a low gloss, uniformly textured paintable coating, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. Each enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosures shall each be fitted with a wraparound powder-coated 1.5mm perforated steel grille backed with color-matched acoustically transparent woven fabric with mounting fasteners that are accessible on the top and bottom of the enclosures.

The system shall have an operating range of 48 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pairs shall have a nominal impedance of 5 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The LVH-906/AP array 60°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 104 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 140 dB SPL (with peak output of 146 dB SPL) on axis at one meter. The LVH-906/AP array 60°H x 80°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 135 dB SPL (with peak output of 141 dB SPL) on axis at one meter. The LVH-906/AP array 60°H x 100°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 135dB SPL (with peak output of 141 dB SPL) on axis at one meter.

Each loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 250 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-906/AP.

**LVH-909/AP:** The modular, vertically arrayable loudspeaker system shall be a triaxial, full-range sealed enclosure design consisting of 2 x LVH-909/AP loudspeakers physically and acoustically coupled to create a single larger loudspeaker incorporating a total of eight 12 in. (300 mm) LF drivers with inherently weather resistant cones, six M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and eight 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 90° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors on each cabinet shall be one 4-position, one 6-position and one 8-position lever-actuated wire clamping terminal blocks distributed across two, recessed, input panels. Each input connection will be made to a pair of like drivers in pairs across the two cabinets, with four inputs to the high frequency drivers, three inputs to the midrange drivers and two inputs to the low frequency drivers in each cabinet. The loudspeaker shall be operated in passive, multi-amplifier mode. Using patent-pending techniques, the triaxial drivers in each cabinet are integrated to create half of the desired vertical coverage pattern and then, using advanced FIR techniques, the output from the two loudspeakers are seamlessly integrated into one coherent wavefront that fills the entire 72 x 31-inch face of the enclosure, providing pattern control to below 200 Hz. The user may select a preset for vertical dispersion beamforming of 20°, 80° and 100°. The LVH-900 Active Plus (AP) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

Each loudspeaker enclosure in the Active Plus array shall be 40° trapezoidal in shape. They shall be constructed of a combination of 15mm thick exterior grade Baltic birch plywood, finished with a low gloss, uniformly textured paintable coating, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. Each enclosure shall be fitted with a combination of 22 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosures shall each be fitted with a wraparound powder-coated 1.5mm perforated steel grille backed with color-matched acoustically transparent woven fabric with mounting fasteners that are accessible on the top and bottom of the enclosures.

The system shall have an operating range of 48 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pairs shall have a nominal impedance of 5 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The LVH-909/AP array 90°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 139 dB SPL (with peak output of 145 dB SPL) on axis at one meter. The LVH-909/AP array 90°H x 80°V nominal dispersion preset shall produce a broadband sound pressure level of 99 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter. The LVH-909/AP array 90°H x 100°V nominal dispersion preset shall produce a broadband sound pressure level of 99 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134dB SPL (with peak output of 140 dB SPL) on axis at one meter.

Each loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 250 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-909/AP.

**LVH-906WR/AS:** The modular, vertically arrayable loudspeaker shall be a triaxial, full-range sealed enclosure design incorporating four 12 in. (300 mm) LF drivers with inherently weather resistant cones, three M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and four 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 60° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors shall be one 4-position and one 8-position lever-actuated wire clamping terminal blocks on a single, recessed, input panel. Each input connection will be made to a pair of like drivers with two inputs each to the high, midrange and low frequency drivers. The loudspeaker shall be operated in passive, multi-amplifier, mode. Using patent-pending techniques, all drivers integrate into a single triaxial waveguide that fills the entire 36 x 31-inch face of the enclosure, providing pattern control to below 400 Hz. Each input shall be driven from an independent amplifier channel that includes pre-processing for DDLP crossovers, dedicated FIR beamforming settings for the selected vertical pattern, FIR power-response correction and loudspeaker voicing filters. The user may select a preset for vertical dispersion beamforming of 20°, 40° or 60°. The LVH-900 Active Standard (AS) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

The loudspeaker enclosure shall be 40° trapezoidal in shape. It shall be constructed of a combination of 15mm and 18mm thick thermally stabile, dense structural-grade composite panels embedded with dual layers of fiberglass cloth, finished with a dual-layer finish of heavy exterior-grade paint and a UV-resistant top coat, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. The enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts, all constructed of 316 stainless steel and water-sealed with miniature o-ring gaskets. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosure shall be fitted with a wraparound powder-coated 1.5mm perforated marine-grade aluminum grille backed with hydrophobic treatment on acoustically transparent woven fabric with 316 stainless steel mounting fasteners that are accessible on the top and bottom of the enclosure. The included pair of aluminum input panel covers shall provide each provide 2 x 1” (25.4mm) dia. holes for user-fitted water-tight gland nuts or conduit fittings and shall provide a sealed connection to the recessed input panels.

The system shall have an operating range of 50 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pair shall have a nominal impedance of 5 Ohms, an input capability of 26V, the single, center, midrange driver shall have a nominal impedance of 10 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The 60°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter. The 60°H x 40°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter. The 60°H x 60°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 136 dB SPL (with peak output of 142 dB SPL) on axis at one meter.

The loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 210 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-906WR/AS.

**LVH-909WR/AS:** The modular, vertically arrayable loudspeaker shall be a triaxial, full-range sealed enclosure design incorporating four 12 in. (300 mm) LF drivers with inherently weather resistant cones, three M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and four 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 90° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors shall be one 4-position and one 8-position lever-actuated wire clamping terminal blocks on a single, recessed, input panel. Each input connection will be made to a pair of like drivers with two inputs each to the high, midrange and low frequency drivers. The loudspeaker shall be operated in passive, multi-amplifier, mode. Using patent-pending techniques, all drivers integrate into a single triaxial waveguide that fills the entire 36 x 31-inch face of the enclosure, providing pattern control to below 400 Hz. Each input shall be driven from an independent amplifier channel that includes pre-processing for DDLP crossovers, dedicated FIR beamforming settings for the selected vertical pattern, FIR power-response correction and loudspeaker voicing filters. The user may select a preset for vertical dispersion beamforming of 20°, 40° or 60°. The LVH-900 Active Standard (AS) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

The loudspeaker enclosure shall be 40° trapezoidal in shape. It shall be constructed of a combination of 15mm and 18mm thick thermally stabile, dense structural-grade composite panels embedded with dual layers of fiberglass cloth, finished with a dual-layer finish of heavy exterior-grade paint and a UV-resistant top coat, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. The enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts, all constructed of 316 stainless steel and water-sealed with miniature o-ring gaskets. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosure shall be fitted with a wraparound powder-coated 1.5mm perforated marine-grade aluminum grille backed with hydrophobic treatment on acoustically transparent woven fabric with 316 stainless steel mounting fasteners that are accessible on the top and bottom of the enclosure. The included pair of aluminum input panel covers shall provide each provide 2 x 1” (25.4mm) dia. holes for user-fitted water-tight gland nuts or conduit fittings and shall provide a sealed connection to the recessed input panels.

The system shall have an operating range of 50 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pair shall have a nominal impedance of 5 Ohms, an input capability of 26V, the single, center, midrange driver shall have a nominal impedance of 10 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The 90°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 101 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter. The 90°H x 40°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 133 dB SPL (with peak output of 139 dB SPL) on axis at one meter. The 90°H x 60°V nominal dispersion preset shall produce a broadband sound pressure level of 101 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter.

The loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 210 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-909WR/AS.

**LVH-906WR/AP:** The modular, vertically arrayable loudspeaker system shall be a triaxial, full-range sealed enclosure design consisting of 2 x LVH-906WR/AP loudspeakers physically and acoustically coupled to create a single larger loudspeaker incorporating a total of eight 12 in. (300 mm) LF drivers with inherently weather resistant cones, six M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and eight 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 60° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors on each cabinet shall be one 4-position, one 6-position and one 8-position lever-actuated wire clamping terminal blocks distributed across two, recessed, input panels. Each input connection will be made to a pair of like drivers in pairs across the two cabinets, with four inputs to the high frequency drivers, three inputs to the midrange drivers and two inputs to the low frequency drivers in each cabinet. The loudspeaker shall be operated in passive, multi-amplifier mode. Using patent-pending techniques, the triaxial drivers in each cabinet are integrated to create half of the desired vertical coverage pattern and then, using advanced FIR techniques, the output from the two loudspeakers are seamlessly integrated into one coherent wavefront that fills the entire 72 x 31-inch face of the enclosure, providing pattern control to below 200 Hz. The user may select a preset for vertical dispersion beamforming of 20°, 80° and 100°. The LVH-900 Active Plus (AP) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

Each loudspeaker enclosure in the Active Plus array shall be 40° trapezoidal in shape. They shall be constructed of a combination of 15mm and 18mm thick thermally stabile, dense structural-grade composite panels embedded with dual layers of fiberglass cloth, finished with a dual-layer finish of heavy exterior-grade paint and a UV-resistant top coat, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. Each enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts, all constructed of 316 stainless steel and water-sealed with miniature o-ring gaskets. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosures shall be fitted with a wraparound powder-coated 1.5mm perforated marine-grade aluminum grille backed with hydrophobic treatment on acoustically transparent woven fabric with 316 stainless steel mounting fasteners that are accessible on the top and bottom of the enclosures. The included pair of aluminum input panel covers for each cabinet shall provide each provide 2 x 1” (25.4mm) dia. holes for user-fitted water-tight gland nuts or conduit fittings and shall provide a sealed connection to the recessed input panels.

The system shall have an operating range of 48 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pairs shall have a nominal impedance of 5 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The LVH-906/AP array 60°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 104 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 140 dB SPL (with peak output of 146 dB SPL) on axis at one meter. The LVH-906/AP array 60°H x 80°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 135 dB SPL (with peak output of 141 dB SPL) on axis at one meter. The LVH-906/AP array 60°H x 100°V nominal dispersion preset shall produce a broadband sound pressure level of 100 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 135dB SPL (with peak output of 141 dB SPL) on axis at one meter.

Each loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 210 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-906WR/AP.**LVH-909WR/AP:** The modular, vertically

arrayable loudspeaker system shall be a triaxial, full-range sealed enclosure design consisting of 2 x LVH-909WR/AP loudspeakers physically and acoustically coupled to create a single larger loudspeaker incorporating a total of eight 12 in. (300 mm) LF drivers with inherently weather resistant cones, six M200 midrange 2 in (51 mm) exit compression drivers with ketone polymer diaphragms and eight 1.5 in. (38 mm) ketone polymer diaphragm, neodymium compression drivers loaded onto a custom waveguide with a nominal 90° horizontal dispersion. The loudspeaker shall be acoustically and mechanically capable of integrating into a multi-cabinet array with additional LVH-900 model loudspeakers.

Input connectors on each cabinet shall be one 4-position, one 6-position and one 8-position lever-actuated wire clamping terminal blocks distributed across two, recessed, input panels. Each input connection will be made to a pair of like drivers in pairs across the two cabinets, with four inputs to the high frequency drivers, three inputs to the midrange drivers and two inputs to the low frequency drivers in each cabinet. The loudspeaker shall be operated in passive, multi-amplifier mode. Using patent-pending techniques, the triaxial drivers in each cabinet are integrated to create half of the desired vertical coverage pattern and then, using advanced FIR techniques, the output from the two loudspeakers are seamlessly integrated into one coherent wavefront that fills the entire 72 x 31-inch face of the enclosure, providing pattern control to below 200 Hz. The user may select a preset for vertical dispersion beamforming of 20°, 80° and 100°. The LVH-900 Active Plus (AP) models allow DSP settings and control of individual driver pairs to provide uniform sound to the audience areas.

Each loudspeaker enclosure in the Active Plus array shall be 40° trapezoidal in shape. They shall be constructed of a combination of 15mm and 18mm thick thermally stabile, dense structural-grade composite panels embedded with dual layers of fiberglass cloth, finished with a dual-layer finish of heavy exterior-grade paint and a UV-resistant top coat, and shall be fitted with multiple internal integral aluminum plates on each side that allow connection to aluminum color-matched adjustable rigging plates. Each enclosure shall be fitted with a combination of 24 x M10 flying/rigging inserts and 4 x M12 flying/rigging inserts, all constructed of 316 stainless steel and water-sealed with miniature o-ring gaskets. The vertical splay shall be adjustable from 0° to 30° in 10° increments with front or back splay configurations. The front of the enclosures shall be fitted with a wraparound powder-coated 1.5mm perforated marine-grade aluminum grille backed with hydrophobic treatment on acoustically transparent woven fabric with 316 stainless steel mounting fasteners that are accessible on the top and bottom of the enclosures. The included pair of aluminum input panel covers for each cabinet shall provide each provide 2 x 1” (25.4mm) dia. holes for user-fitted water-tight gland nuts or conduit fittings and shall provide a sealed connection to the recessed input panels.

The system shall have an operating range of 48 Hz to 20 kHz (-10dB SPL). Each low frequency driver pair shall have a nominal impedance of 8 Ohms, an input capability of 87V, the midrange driver pairs shall have a nominal impedance of 5 Ohms, an input capability of 26V, and each high frequency pair shall have a nominal impedance of 8 Ohms, an input capability of 23V.

The nominal dispersion is user-selectable via FIR filter DSP presets, the SPL and maximum output of each preset varies. The LVH-909/AP array 90°H x 20°V nominal dispersion preset shall produce a broadband sound pressure level of 103 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 139 dB SPL (with peak output of 145 dB SPL) on axis at one meter. The LVH-909/AP array 90°H x 80°V nominal dispersion preset shall produce a broadband sound pressure level of 99 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134 dB SPL (with peak output of 140 dB SPL) on axis at one meter. The LVH-909/AP array 90°H x 100°V nominal dispersion preset shall produce a broadband sound pressure level of 99 dB (averaged SPL between -10 dB points) on axis at one meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 134dB SPL (with peak output of 140 dB SPL) on axis at one meter.

Each loudspeaker shall be 37.3 in. (948 mm) H (front) x 31.4 in. (797 mm) W x 30.5 in. (775 mm) D, and weigh 210 lbs. (113.4 kg). The loudspeaker shall be the Biamp LVH-909WR/AP.