



**SOLUTIONS
TO EVOKE EMOTIONS**



TOUR AUDIO & LIGHTING

AUDIO

LIGHTING

HARMAN Professional Solutions

FOLLOW THE SIGNAL

MICROPHONES

SIGNAL PROCESSORS

MIXING CONSOLES

AMPLIFIERS

LOUDSPEAKERS

CONTROL SOFTWARE

LIGHTS & LED VIDEO

The visuals and sounds of the stage work in tandem for something that can never be recorded, streamed or duplicated. It is a single moment in time, a glorious flash of connectedness, of greatness, that can only be preserved in memory.

At HARMAN Professional Solutions, we all live for that moment.

Developing and providing the best gear to make big moments bigger, is what we do.

HARMAN Professional Solutions is the largest professional audio, lighting, video and control manufacturer in the world. With 11 iconic brands that deliver scalable, high-impact products for every point in the audio and lighting signal chain, HARMAN Professional Solutions is your single point of contact to meet all your tour sound and lighting needs. Tested under the toughest conditions, HARMAN's lightweight, high power products define "roadworthy". Through advanced design and product development, HARMAN places a relentless focus on creating audio solutions that use clear, powerful and consistent output to deliver great experiences to every seat in the house. From microphones and loudspeakers to amplifiers, lighting fixtures, video products and signal processing, and every point in between, HARMAN Professional Solutions have been engineered to meet the highest standards of quality and reliability. With complete system solutions that bring the world's best technological advances in a range of products and price points, there is a HARMAN tour audio and lighting solution for every application.

SOLUTIONS TO EVOKE EMOTIONS



AKG

AMX

ES

CROWN

dbx

DigTech

JBL
PROFESSIONAL

lexicon

Martin

Soundcraft

STUDER

Volbeat photo by Brittany Bowman

We are audio and lighting professionals **WE GET PEOPLE IN THE ZONE**

When the always-on generation loses track of time and space, that's when our job is done. In a hyper-connected era where the success of a live performance seems measured by the number of phones in the air, as audio and lighting professionals, our benchmark is to offer a sound so profoundly crisp and a visual impact so breathtaking that the audience is put in a state of now, where social updates, live streaming and mobile devices cease to exist for an infinite moment.

"When I was a teenager, I saved money for an entire summer to go to a concert—and when I finally went to the show, it sounded horrible. As an engineer, I take that to heart. Everything that I strive for in my career has stemmed from that bad concert experience. Now, technology has really raised the bar in regards to emotions, because you can now hear all the nuances no matter where you are sitting in an arena and experience a record-quality mix with impact."

Ken "Pooch" Van Drueten

FOH engineer for Linkin Park, Alice in Chains, Kid Rock, and System of a Down

"As a lighting designer, what it really comes down to is your ability to make the lighting support the expression of the artist. You need to be focused on the full solution. Timing is king, as you must be able to quickly sidestep your pre-programmed material to manually punt and launch cues on the fly to follow an extended solo or an improvised song that wasn't on the set list. This is the moment I live for and it's what gives a show nerve and authenticity."

Niller Bjerregaard

Lighting designer for world touring heavy metal band Volbeat

"Now, technology has really raised the bar in regards to emotions"

Ken "Pooch" Van Drueten
Front of House Engineer

"This is the moment I live for and it's what gives a show nerve and authenticity"

Niller Bjerregaard
Lighting Designer



**SOLUTIONS
TO EVOKE EMOTIONS**

Turn **peak** experiences
into long lasting memories

Scorpions

MARTIN SHINES ON SCORPIONS 50TH ANNIVERSARY WORLD TOUR

Legendary German hard rockers Scorpions celebrate their 50th anniversary with their biggest world tour. With 50 MAC Viper Profile, 42 MAC 2000 Wash XB, 20 Atomic 3000 LED and 36 MAC Quantum Wash, Martin are integral fixtures on the lighting trusses on this impressive 3-year world tour.

Gear:

MAC Viper Profile, 50 pcs.
MAC 2000 Wash XB, 42 pcs.
Atomic 3000 LED, 20 pcs.
MAC Quantum Wash, 36 pcs.

Show Director: Manfred Nikitser
Lighting Operator: Rainer Becker
Production Director: Olaf Schröter
Production Manager: Roland Beckerle
Concert photo: Ralph Lammann
Portrait photo: René Langer Photography

"Basically, going to a Scorpions concert, people expect a classic rock show" says Manfred Nikitser, Associate Lighting Designer and Lighting Director on the Scorpions tour, outlining the scope of lighting required for this gigantic tour. It translates into big, strong looks with 99% of the key lighting made up by follow spots and effect lighting. Manfred is the young blood injecting new programming ideas into the well-greased touring machine. He was initially hired in on the tour to do the video programming, but soon advanced to lighting director, and was shortly after tasked with designing the entire North American leg of the tour.

Touring worldwide, there's a number of obvious challenges that must be taken into account when designing the lighting; the production team must work with a whole array of different tech providers. "Clearly, on a huge setup such as the Scorpions we work with a lot of rental companies, but still, not all carry identical product lines. What is different from a Scorpions production to others is the fact, that we play worldwide with 100% local equipment."

"Whatever idea I have, I must factor in to only use fixtures I can expect worldwide. That's why I have no doubt specifying the MAC Viper Profile as my main spotlight"

"The MAC Viper Profile is definitely my favorite fixture. It is not too big, not too heavy and has the necessary output and speed this show needs. You just know what you get and the output, weight, speed and size ratio is nothing short of perfect," says Manfred.

As for wash lights, his focus is on output: "I feel like the wash light category has gotten a bit underestimated over the years, but in my designs, wash light is a key element. Generally, the work horses in the show are wash lights since we don't use that many gobos. Colors and chases with their different beam shapes and looks are elements to evoke emotion and I design them to bring the right look to each song. I always specify two of my absolute darlings: the MAC 2000 Wash XB, which is still an amazing fixture after all those years, and the MAC Quantum Wash which totally surprised me when I saw them the first time. The beam is super narrow and sharp, and the output is a blast."

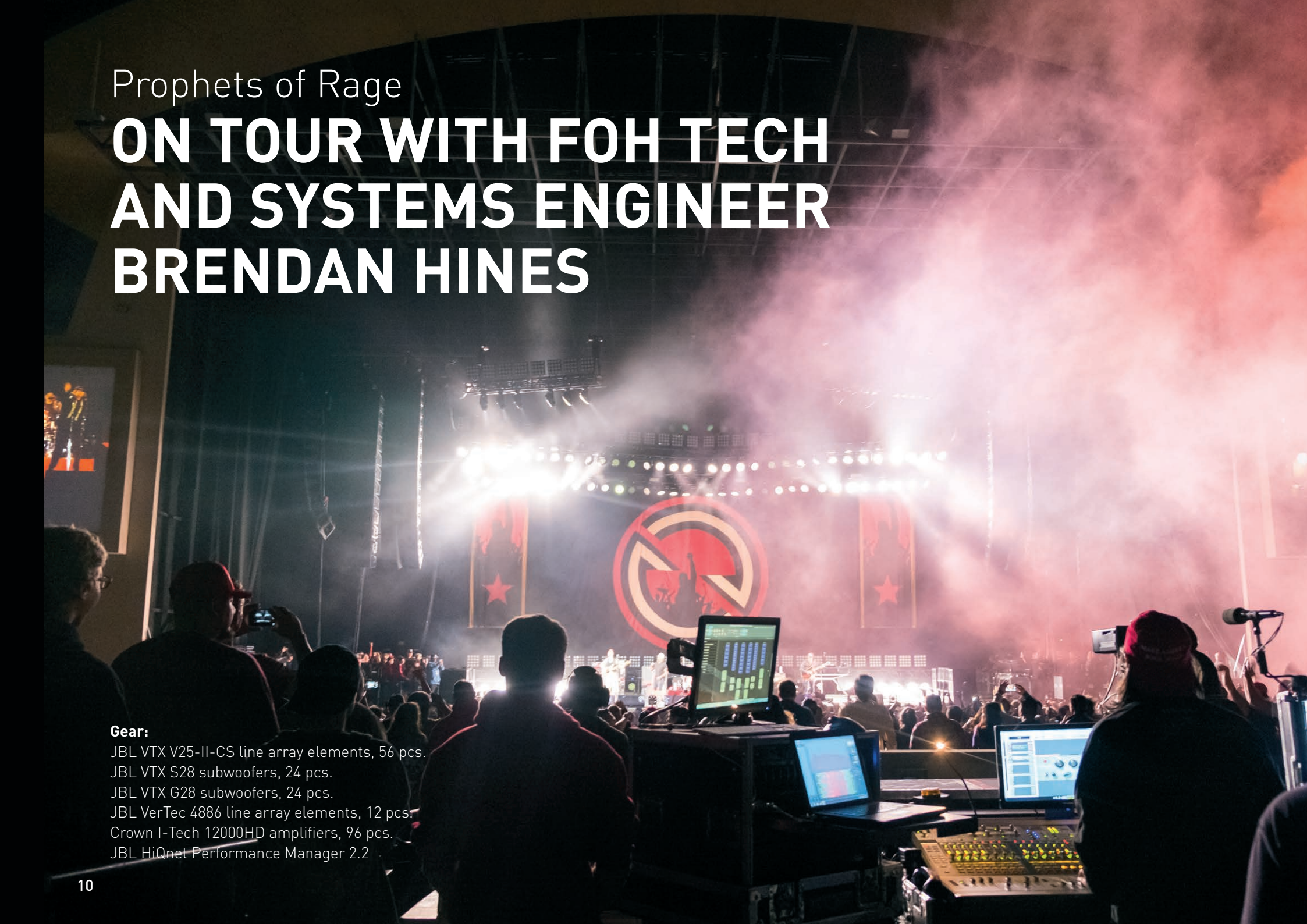
Topping off the visual impact of the Scorpions show, well any show for that matter, there's no getting around strobes—the ultimate weapon in the lighting toolbox. Manfred's take on strobes is very bold: "With the strobes, I think there is nothing else than the Atomic on the market. I love the high brightness of the Atomic 3000 LED version."

Designing a show, Mr. Nikitser's credo is quality over quantity: "The question is always: what does a show really need to still be authentic? Sometimes, just a few lights are enough. And at the end of the day, whatever ideas you come up with, success or failure always comes down to whether your design harmonizes and interacts with the stage performance and other show elements." And it seems like Manfred's selection of lighting fixtures for this tour was a perfect pick, because according to the press, this is the best Scorpions show ever.

"I was trying different fixtures for my side lighting on ladders, but the MAC Quantums just did the best job"

Manfred Nikitser
Lighting Designer





Prophets of Rage

ON TOUR WITH FOH TECH AND SYSTEMS ENGINEER BRENDAN HINES

Gear:

JBL VTX V25-II-CS line array elements, 56 pcs.

JBL VTX S28 subwoofers, 24 pcs.

JBL VTX G28 subwoofers, 24 pcs.

JBL VerTec 4886 line array elements, 12 pcs.

Crown I-Tech 12000HD amplifiers, 96 pcs.

JBL HiQnet Performance Manager 2.2

Brendan Hines is an audio professional who loves being on the road. From serving as the front of house tech and systems engineer on a recent Prophets of Rage tour, to his work with Pharrell Williams, to years on the road with Brad Paisley, Brendan cherishes the opportunity to tour with different artists.

Often serving as both a front of house [FOH] tech and systems engineer on tours, Brendan explained how the roles, while connected, have different responsibilities. "As a front of house tech, your main concerns are the front of house position and anything to do with audio that happens from the front of the stage for the audience. The main focus is the console, mixing and how the system is tuned," he said.

"As a systems engineer, the focus is much broader. You need to be well-rounded and experienced with every aspect of putting on a show. That not only includes front of house stuff and what the audience hears, but how the system flies—how it's rigged, powered and how you communicate with it," said Brendan.

"During the Prophets of Rage tour, we usually loaded in at 10 a.m. I would come in earlier to mark the floor and measure for my rigging points," he said. "At 10, the trucks started dumping. We'd get all of our motors and rigging out and about an hour later, the speaker cabinets and amplifiers would roll in. We would position them in the desired locations and hook everything up. By about 1 p.m., the PA would be flown, trimmed and tested. Once the system was live and wired, we would fire up JBL Performance Manager and go through each component of each zone to make sure it was working like it was supposed to and use the components within it to tune the system."

The Prophets of Rage are a powerful, high-energy band that deployed a JBL VTX PA for the tour. The main array included 16 VTX V25s, 12 VTX S28 subwoofers and, in larger venues, an additional 12 VTX V25s in the auxiliary hang. They also used 24 VTX G28 ground subs with several VerTec 4886s for front fills and six double pairs across the front for fills. The entire setup was powered by 96 Crown I-Tech 12000HD amplifiers.

"We tried to keep it as consistent as possible day-to-day by keeping a high box count, so we could maintain that level of energy. The sound quality was great, with a lot of power behind it. If we wanted more power, it was always there. Some days, we had to put the breaks on, but the power was on tap whenever we needed it!"

Brendan noted that the ability to achieve such a huge sound is easier than ever. "Ten years ago, you couldn't do it nearly as well. If you were to try and replicate this system with what bands used to carry, you would have to almost double the amount of gear—especially at a distance of 200 to 300 feet," he said.

"Another major change is that more of a visual component has been introduced to live audio, especially with Performance Manager," said Brendan. "You can bring Smaart Live up in the background and see it overlaid with your system. You get used to looking at that kind of information [an FFT-based audio analysis]. You make judgments by looking at a screen and interpreting what you're seeing into what you're hearing."

"There have been huge changes in our industry, especially with digital amplifiers, processors integrated into amplifiers and the implementation of networking," he said. "Networking has been around for a while, but these days, to do your job, you need to be an IT guy as well as an audio guy. To be successful, you have to keep up with the times; otherwise, you'll fall behind and become a dinosaur."



**SOLUTIONS
TO EVOKE EMOTIONS**

Make the crowd **feel**
part of something bigger

AUDIO

The heart of the performance is the human connection. It's about people coming together to share a message, a talent, and an experience. The music draws you in, the artist connects with the audience and together we are all part of something bigger than ourselves.

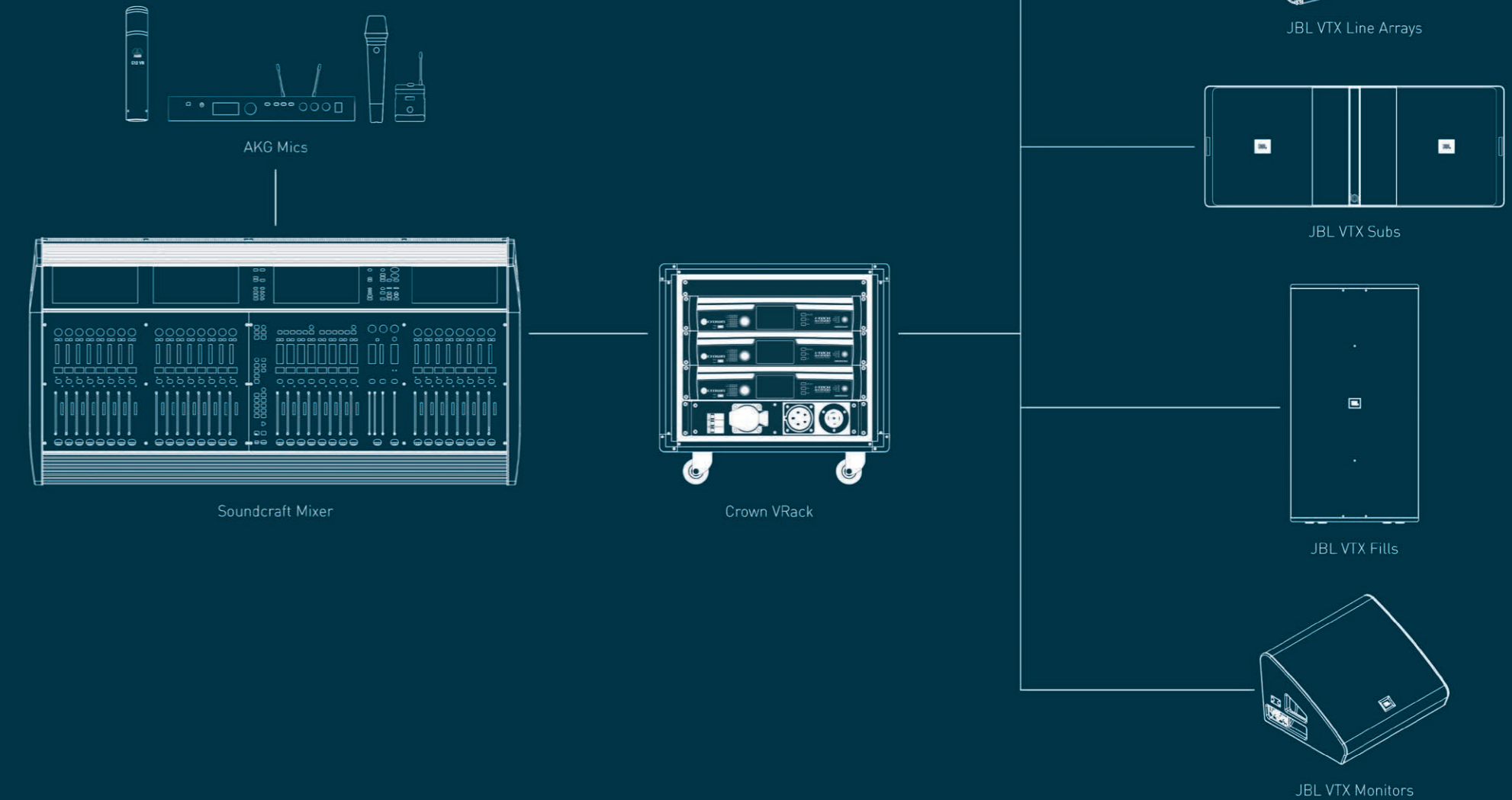
Great audio is the foundation of that experience. It's the connection that binds us together.

With great sound, the audience feels more, hears more, and is immersed more in the experience. The music reverberates inside them, shaking them to the core. The sights and sounds of the stage work in tandem for something that can never be recorded, streamed or duplicated. It is a single moment in time, a glorious flash of connectedness, of greatness, that can only be preserved in memory.

Music is a communal experience. Let nothing stand between you but pure, clear sound.

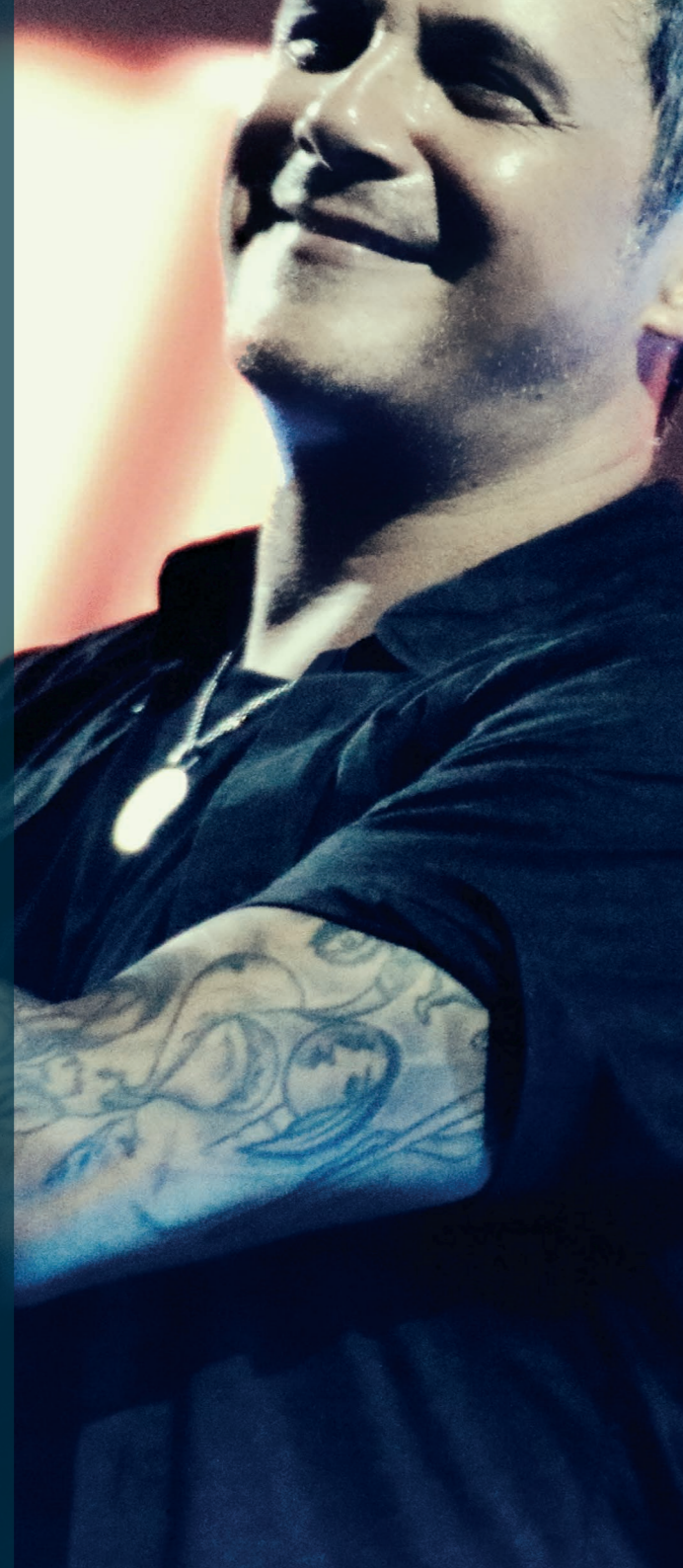
HARMAN TOUR AUDIO SOLUTIONS

Follow the signal



MICROPHONES HEADPHONES

AKG microphones and headphones are a synthesis of leading-edge industrial design, innovative electronics and world-class acoustics. For over 70 years, AKG's considerable expertise and know-how have brought us products that serve markets as diverse as touring and recording to broadcast and permanent installations.



C12 VR

The C12 VR multi-pattern studio tube condenser reference microphone features nine polar patterns selectable by a remote control. Among sound engineers, the AKG C12 is considered the holy grail of tube microphones and is one of the most famous in history. First built in the 1950s, the successor to this legendary microphone is the C12 VR. The C12 VR is carefully handcrafted in Vienna, Austria to build upon the C12 legacy—from the capsule sound to the original 6072A vacuum tube.

- Edge-terminated CK12 capsule and original 6072A vacuum tube provide a sound that is simply beyond words
- Selected state-of-the-art components ensure low noise and reliable operation
- Nine remotely selectable polar patterns for maximum flexibility and ease of use

| | |
|--|----------------|
| | 30 - 20,000 Hz |
| | 10 mV/Pa |
| | 22 dB-A |
| | 72 dB-A |
| | -10, -20 dB |
| | 100, 130 Hz |



C414 XLII

The C414 XLII offers the classic C12 sound in a multi-pattern condenser microphone. With a choice of nine polar patterns, the C414 captures perfect sonic clarity in every application and by allowing all controls to be easily disabled, it offers trouble free use in live-sound and permanent installations. The C414 XLII stands apart by offering an improved capsule with a slight presence boost and impressive spatial reproduction that are both similar to the legendary AKG C12 microphone from 1953.

- Three attenuation levels (-6, -12, -18 dB) for close-up recording or high-output sources of up to 158 dB SPL
- Three switchable different bass-cut filters to reduce wind noise, stage vibration or proximity effect
- Overload warning with audio peak hold LED to detect shortest audio peaks

| | |
|--|-----------------|
| | 20 - 20,000 Hz |
| | 23 mV/Pa |
| | 6 dB-A |
| | 88 dB-A |
| | -6, -12, -18 dB |
| | 160, 80, 40 Hz |



DMS800

The DMS800 digital wireless reference microphone system provides accurate signal transmission and reliability for theaters, conferences, live productions and tour sound. Designed for maximum flexibility and the right sound for every application, the DMS800 provides DANTE and AES EBU outputs and selectable AKG microphone heads (D5 WL1, D7 WL1 and C5 WL1). Powerful and versatile, the DMS800 features 512-bit encryption, 150 MHz ultra-wide frequency range, digital wireless audio transmission and more.

- 150 MHz ultra wide frequency range ideal for worldwide touring in frequency-crowded environments
- 512-bit encryption provides state-of-the-art protection for sensitive audio information
- Digital wireless audio transmission eliminates any distortion and significant noise level

| | |
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| | 500-530, 570-600, 650-680, 680-710, 720-750, 760-790, 790-820 MHz |
| | FM |
| | 35 - 20,000 Hz |
| | Up to 70 channels simultaneously |



IVM4500 IEM

IVM4500 IEM is the only wireless in-ear monitoring system that provides musicians, vocalists and presenters with a uniquely natural listening experience through binaural room simulation. Its high-end circuitry includes a manual radio signal attenuator for robust reception in crowded environments, enhanced frequency setup, and the ability for monitor engineers to quickly swap between different audio channels.

- Sophisticated, narrow RF filter design for best radio signal performance
- HiQnet network remote control and monitoring from PC via Harman software Audio Architect Apple iPhone/iPad/iPod® or Soundcraft Vi consoles
- Patented DSP filter technology for reference sound quality

| | |
|--|---|
| | 500-530, 570-600, 650-680, 680-710, 720-750, 760-790, 790-820 MHz |
| | FM |
| | 35 - 20,000 Hz |
| | Up to 14 channels simultaneously |

SIGNAL PROCESSORS

HARMAN's heritage in live, recording and post signal processing is directly linked to three of the industry's most iconic brands.

Continuing to build on the everlasting success of these brands, HARMAN is dedicated to ensuring our systems are always compatible with our customers' needs.



BSS Audio provides reliable equipment that addresses the real needs of musicians. Found in countless recording studios worldwide, top performing artists regularly choose BSS.



With years of expertise in the processing field, dbx's True RMS technology allows "true" sounds to be heard by the human ear. Along with patented integrated circuits that can detect and process natural sounds over a broad range of signals, it's no wonder musicians prefer dbx.



Lexicon stands alone as the worldwide choice in digital processing by engineers, producers and performers. History was made when our reverb line was introduced in 1978, and it's still known as the king of reverb today.



dbx 160A

From its inception in the 1970s, the dbx 160 series has been the world's most popular line of audio compressors. The dbx 160A provides the same classic sound, easy set-up and no compromise metering, now with an improved signal path and stronger chassis. The result: industry standard compression and limiting, but now digital-ready and road tough.

- OverEasy® or classic hard knee compression with dbx's® ultra-musical program dependent attack and release times
- Compression ratio variable from 1:1 through infinity:1 to negative compression
- Precision dual RMS LED display monitors input/output and gain reduction over a wide range, and calibrates for different operating levels

| | |
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| | OverEasy or hard knee |
| | Variable 1:1 to :1 thru to -1:1; →60 dB maximum compression |
| | True RMS Power summing |
| | 1/4" TRS and XLR, Floating Balanced; XLR: Pin 2 hot Phone: Tip Hot |
| | 1/4" TRS phone, Unbalanced; XLR, floating balanced; pin 2 hot |

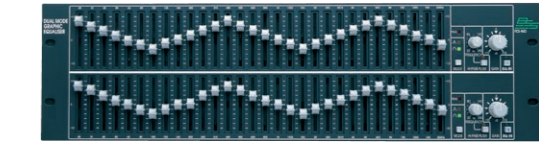


Lexicon PCM 96

An artful blend of heritage and innovation, the PCM96 stereo reverb/effects processor delivers modern and classic Lexicon reverbs, delays and modulation effects, including room, hall and mono reverbs and effects. Multimode filters allow more exact sound shaping, and Lexicon's Room algorithm can easily select, scale, and equalize reflection patterns for extended decays or more "liveness." Ready to go out of the box with 1,200 factory presets, including the recognizable classics you know and love.

- 28 legendary Lexicon reverbs, delays, and modulation effects
- Lexicon's Room algorithm to generate a vast array of room-related effects for music and post
- Over 1,200 factory presets, including recognizable classics from Lexicon's immense library of sounds

| | |
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| | 32-bit floating point |
| | 2 channels XLR analog, 2 channels XLR digital AES/EBU MIDI (in, out, and thru) |
| | Analog/Digital; up to 2 inputs and 2 outputs in 6 configurations |
| | FireWire; up to 4 inputs and 4 outputs in 5 configurations |



BSS 960 EQ

A 2-channel, 30-band graphic equalizer featuring Dual Mode (Normal and Fine filter width) switching on each channel. Constant Q-filters with filter-bypass center taps are controlled by high grade, 45 mm faders with molded knobs, that eliminate visual parallax errors even under low light conditions. Also features sweepable/switchable Hi-pass filter, Gain control and balanced I/O.

- 30-band graphic EQ featuring Dual Mode switching between Normal and Fine filter width settings on each channel
- Constant Q-filters with filter-bypass centre taps controlled by high grade, 45 mm faders with moulded polymer fader knobs which eliminate visual parallax error even under low light conditions.
- Sweepable/switchable Hi-pass filter, Gain control and electronic balanced inputs and outputs

| | |
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| | XLR (2) |
| | XLR (2) |
| | 30 per channel (60 total) |
| | Constant-Q |
| | - inf to +10 dB |
| | +18 dBu Peak Indicator (LED) |

MIXING CONSOLES

More than 40 years of mixing console design and manufacturing expertise have built Soundcraft a global reputation for delivering optimum performance. From live sound to recording and broadcast, Soundcraft consoles are built to excel and deliver thousands of daily events, all around the world.

Soundcraft®



Vi1

The Soundcraft Vi1 mixing console brings the acclaimed Vistonics™ UI, optimal sound quality and other legendary features into a small, low-priced desk. The 22" widescreen touch interface displays all 16 channels' parameters side by side, offering 'walk-up' user-friendliness. The desk also includes Soundcraft FaderGlow™, 4 stereo Lexicon effects engines, BSS Audio graphic EQs on all output busses, and integral dynamics on all channels.

- Smaller, lower-priced desk with acclaimed Vistonics user interface
- Up to 8 busses can be configured as Matrix mixes, each with up to 16 sources
- Also compatible with Vi2, 4 and 6 show files

| | |
|--|---|
| | 64 |
| | 24 |
| | 24 |
| | 394 x 1034 x 711 mm (15.5 x 40.7 x 28.0 in) |
| | 37 kg (82 lb) |



Vi2000

The Soundcraft Vi2000 includes three Vistonics II touch interfaces in a highly compact package. The console features the Soundcraft SpiderCore™ internal DSP and IO engine, and provides 28 faders, 96 mix inputs, 24 mono/stereo busses and 246 channels of I/O. There are also two 64 channel D21m option card slots, an additional MADI/Dante 64 channel record interface and 4 channels of AES/EBU I/O. Audio processing includes 4 Lexicon multi-effects units and 8 BSS Dynamic EQ units, all freely assignable, plus 30-band BSS Graphic EQs on every bus.

- High-performance control, sound quality, DSP processing and digital audio/network connectivity
- Built-in 64 x 64-channel Dante interface provides direct recording/playback connection to any PC- or Mac-based recording software via Ethernet
- Ultra-compact frame design with 16 input faders and 8 output faders, allowing the console to fit into both space- and budget-restricted applications

| | |
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| | 96 |
| | 28 |
| | 24 |
| | 351 x 1155 x 784 mm (13.8 x 45.5 x 30.8 in) |
| | 45.2 kg (99.5 lb) |



Vi3000

Building on the same audio and I/O as the Vi2000, but with a more extensive, 36-fader/four Vistonics II touch-screen control surface, the Vi3000 is a mainstay of tour and installed audio. In addition to a full complement of analog and digital I/O, including Dante and MADI, the Vi3000 can be controlled by Soundcraft's ViSi iPad remote, and has BSS Dynamic EQ, Graphic EQ and Lexicon multi-effects processing.

- Virtual Vi offline set up
- Copy/Paste channel bus, FX settings and processing elements
- Settings library

| | |
|--|---|
| | 96 |
| | 36 |
| | 24 |
| | 351 x 1446 x 803 mm (13.8 x 56.9 x 31.6 in) |
| | 54 kg (119 lb) |



Vi5000

The Vi5000 digital mixing console delivers exceptional sound, flexibility, and road-worthiness with up to 96 kHz processing, high channel counts, and reliable hardware making it live sound's most popular mix interface. Pairing a compact control surface with Local Rack and Active Breakout box hardware, Vi5000 delivers simultaneous mixing of up to 128 inputs and 32 mono/stereo busses. Robust processing includes 8 Lexicon multi-FX units, BSS DPR901ii™ integration and a BSS graphic EQ on every bus. Plus expansion options for EtherSound™, CobraNet™, Dante™, MADI and more.

- Robust lightweight frame with internal cooling fans
- State-of-the-art Surface CPU with DisplayLink™
- DVI out for external screen

| | |
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| | 128 |
| | 36 |
| | 32 |
| | 326.9 x 1437 x 725.11 mm (12.9 x 56.6 x 28.5 in) |
| | 53 kg (117 lb) |



Vi7000

Vi7000 delivers the same unrivaled sound (up to 96 kHz) of the Vi5000 with more FaderGlow™ faders and 5 Vistonics™ interfaces. Excellent audio quality is provided by 8 Lexicon multi-FX units, BSS DPR901ii™ integration and BSS graphic EQ on every bus. Rapid configuration, powerful automation features, radio mic status monitoring and extensive ViSi Connect I/O expansion (EtherSound™, CobraNet™, Dante™, MADI, etc.) complete the package.

- Robust lightweight frame with internal cooling fans
- State-of-the-art Surface CPU with DisplayLink™
- DVI out for external screen

| | |
|--|---|
| | 128 |
| | 44 |
| | 32 |
| | 333.39 x 1732 x 725.11 mm (13.1 x 68.1 x 28.5 in) |
| | 63 kg (139 lb) |

AMPLIFIERS

For over 70 years, Crown has pioneered the design and manufacturing of world-class pro audio equipment, including amps and control products for systems integration, tour sound, cinema and portable PA.

Today, Crown products are utilized by some of the largest sound companies in the world for live and fixed installation applications and the biggest names in entertainment rely on Crown to provide the highest quality sound on the biggest stages in music.



VRACK 4x3500HD

The checklist for each performance setup is a demanding one. Building amplifier racks. Configuring systems. Safety approvals. Keeping technicians working efficiently. The VRack complete amplification system from Crown now makes the job much easier for you and your team. Designed for optimum performance and setup simplicity, the VRack gives you a customized, turnkey amplification package, complete with full safety approvals.

With Crown-engineered components already built in and no assembly required, it's an easy-to-configure, all-in-one amplifier solution that eliminates the time-consuming process of building amp racks. This frees up your technical team to handle other important setup tasks.

The VRack delivers superb power distribution anywhere in the world and features innovative software for convenient, simplified control, giving you a versatile, worry-free rack system that's always ready to go.

The Crown VRack complete amplification system makes performance setup, building amplifier racks, configuring systems, and full safety approvals much easier and more efficient for you and your team.

Designed for optimum performance and setup simplicity, the VRack gives you a customized, turnkey amplification package with no assembly required. With superb power distribution anywhere in the world and innovative software for convenient, simplified control, VRack is the versatile, worry-free rack system that's always ready to go.

- A custom package from one source
- Simplified configuration capabilities for easier setup in any market
- Power distribution, rigging hardware and entire rack are safety certified to UL/CSA/ETL

| | |
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| ➔ | Three I-Tech 4 x 3500 amps |
| ⊗ | 5 pin CEE form and 5 pin Hubbell Twist Lock |
| 📏 | 184 lb (84.5 kg) |
| 📏 | 22.5" x 23.5" x 31.25" (57.2 x 59.7 x 79.4 cm) |



VRACK 12000HD

| | |
|---|--|
| ➔ | Three I-Tech HD 12000 HD |
| ⊗ | 5 pin CEE form and 5 pin Hubbell Twist Lock |
| 📏 | 184 lb (84.5 kg) |
| 📏 | 22.5" x 23.5" x 31.25" (57.2 x 59.7 x 79.4 cm) |



LOUDSPEAKERS

Playback the last 70 years of music and motion picture recording and one name stands alone: JBL. Before THX® and Dolby®, before stereo and even hi-fi, there was JBL. Today, JBL's well-earned reputation has placed its speakers in all types of professional institutions, including legendary recording studios, famous concert venues and premier movie houses. Building on 70 years of technical breakthroughs and award-winning product design, JBL continues its legacy as the leader in loudspeaker manufacturing.



VTX A12

JBL VTX A12 line array loudspeakers represent our completely redesigned solution for mid- to large-size touring productions and high-end fixed installations. Built from the ground up with entirely new and proprietary transducer and high-frequency waveguide designs, innovations in the rigging and suspension hardware, and refinements to the physical aspects of the cabinet, JBL VTX A12 addresses the most important needs of tour sound professionals and represents a renewed commitment by JBL to the tour sound community.

- Designed from scratch to address the unique challenges of rental companies, FOH engineers and tour sound production crews
- New HF, MF and LF sections combine to deliver a system with the highest output per weight, great low-frequency extension, and 90-degree directivity down to 250 Hz
- Best-in-class rigging enables fast setup and precise configuration; patented locking mechanism automatically locks the cabinet angles to the desired position
- Accessories are lightweight, durable and sized to fit both US and International truck dimensions, simplifying transport and logistics

| | |
|--|---|
| | Compact 3-way, high-output line array element |
| | LF: 2 x JBL 2264H, 12 in diameter, dual 3 in diameter voice-coil, Neodymium Differential Drive MF: 4 x JBL 2165H, 5.5 in diameter, dual 2 in diameter voice-coil, Neodymium Differential Drive HF: 3 x JBL 2423K, 2 in diameter annular diaphragm, 2 in diameter voice-coil, Neodymium Magnet |
| | 330.2 x 1.118 x 495.3 mm 13.0 x 44.0 x 19.5 in |
| | 60.8 kg (134.0 lb) |



VTX V25-II

The VTX V25-II full size 3-way high-directivity line array speaker provides better acoustic loading, improved sound and performance of high frequencies including 10 dB higher sensitivity for sounds above 10 kHz, and extreme output advantages over conventional systems through our proprietary 4th generation HF Waveguide and D2 Dual Driver—all with 30% less weight and the same footprint.

- JBL's patented RBI (Radiation Boundary Integrator®)
- Cardioid-Arrayable Subwoofer Enclosure Models
- Aluminum front baffles for reduced cabinet height, weight and improved heat transfer

| | |
|--|---|
| | Full Size 3-Way High-Directivity Line Array |
| | LF: 2 x 2267H 15" Differential Drive MF: 4 x 2169H 8" Differential Drive HF: 3 x 2430K D2 Dual Driver |
| | 1223 x 414 x 614 mm [48.2" x 16.3" x 24.2"] |
| | 82.6 kg (182 lb) |

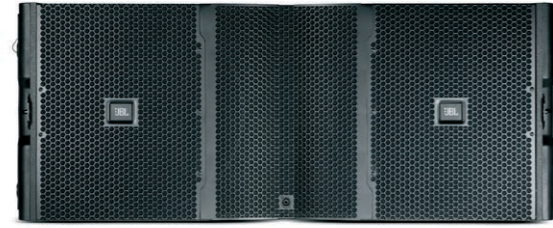


VTX V20

VTX V20 features the same advances and extraordinary performance of the VTX V25 in a small format, high power density, 3-way system. The V20 suspension system provides easy transport, fast setup and precise configuration, and Differential Drive® technology dramatically reduces driver weight and increases performance. VTX V20 provides stable 105-degree horizontal coverage while delivering linear, high output, transparent sound that's surprising for its compact size.

- 4th generation advanced high frequency waveguide
- Small Format Version of Patented D2 Dual Compression Driver
- V5 System Integration

| | |
|--|--|
| | 3-Way High Directivity Line Array Element |
| | LF: 2 x 2261H Differential Drive 10" MF: 4 x 2164H Ultra-Linear 5" HF: 3 x D2415K Dual Diaphragm Compression Drivers |
| | 279.9 x 911.4 x 402.2 mm 11.0 x 35.9 x 15.8 in |
| | 40 kg (88 lb) |

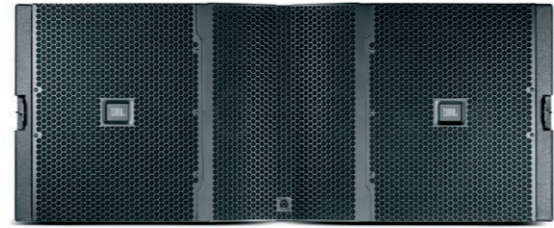


VTX S28

The VTX S28 dual subwoofer employs 18" transducers with Differential Drive technology for extended ultra-low frequency performance. VTX S28 can be cardioid-arrayed in suspended or ground-stacked configuration for improved rear rejection. Providing flexible deployment, S28 can be suspended atop V25 arrays to extend the effective low frequency line length, providing improved vertical pattern control combined with improved rear rejection (in cardioid mode); or S28 arrays can be suspended beside or behind V25 arrays.

- Aluminum front baffles for reduced cabinet
- Crown VRack DSP and Amplification
- JBL HiQnet™ Performance Manager System

| | |
|--|--|
| | Dual 18" Subwoofer - Suspendable |
| | LF: 2 x 2269H Differential Drive 18" |
| | 1222 x 493.3 x 926.5 mm (48.1" x 19.4" x 36.5") |
| | 83.0 kg (183 lb) |



VTX G28

The VTX G28 ground-stackable dual subwoofer delivers extended ultra-low frequency performance by employing 2269H 18" transducers with Differential Drive technology and two voice coils, two neodymium magnets and extremely high peak-to-peak excursion capabilities. The VTX G28's practical form factor makes for convenient stacking and additional enclosure volume—plus its innovative port tuning provides true sub performance down to 22 Hz @ -10 dB.

- JBL's patented Differential Drive® technology
- Crown VRack DSP and Amplification
- JBL HiQnet Performance Manager™ System

| | |
|--|---|
| | Dual 18" Subwoofer - Ground Stackable |
| | LF: 2 x 2269H Differential Drive 18" |
| | 1210.8 x 493.3 x 1211.1 mm (47.7" x 19.4" x 47.7") |
| | 92.5 kg (204 lb) |



VTX M20

The VTX M Series dual 10" M20 professional stage monitor combines a high performance Differential Drive woofer and large-format D2 dual-diaphragm, dual voice-coil HF driver. The option of single- or dual-channel (passive vs. bi-amp) operation comes standard, allowing you to choose the right option for your application, without compromise. Plus, Image Control Waveguide Technology gives the M20 broad and stable 60H x 60V coverage for maximum gain before feedback.

- Elegant, low profile, compact design
- State-of-the-art JBL transducers
- 60 x 60 High Frequency patented Image Control Waveguide Technology

| | |
|--|---|
| | Dual 10" Professional Stage Monitor |
| | LF: 2 x 2261H, 254 mm (10 in) diameter, dual 76 mm (3 in) diameter voice coil, NDD®, Direct Cooled™ HF: 1 x D2430H, D2 dual diaphragm, dual 76 mm (3 in) diameter voice coil |
| | 342.9 x 575.0 x 515.3 mm (13.6 x 22.6 x 20.3 in) |
| | 23 kg (51 lb) |



VTX M22

The VTX M22 dual 12" professional stage monitor provides increased input power and higher SPL output over the M20 for the most demanding of applications. M22 offers premium, tour-ready features in a modern, low profile, lightweight design for high profile concerts or broadcast events. And with the same single- and dual-channel operation and 60H x 60V coverage as the M20, the M22 offers no compromise in performance.

- Elegant, low profile, compact design
- State-of-the-art JBL transducers
- 60 x 60 High Frequency patented Image Control Waveguide Technology

| | |
|--|---|
| | Dual 12" Professional Stage Monitor |
| | LF: 2 x 2262H, 304 mm (12 in) diameter, dual 76 mm (3 in) diameter voice coil, NDD, Direct Cooled HF: 1 x D2430H, D2 dual diaphragm, dual 76 mm (3 in) diameter voice coil |
| | 380.1 x 670.8 x 555.0 mm (15.0 x 26.4 x 21.8 in) |
| | 27 kg (60 lb) |



VTX F35

Designed to deliver high-impact, high-fidelity audio in the form factor of a trapezoidal full-range system, VTX F35 is the go-to choice for customers needing high-power side-fills, mains, or a V5-compliant high-performance complement to a larger VTX system. With a flexible design configurable in 60 x 40 or 90 x 50 coverage patterns, and stackable or suspendable, VTX F35 delivers uncompromising performance.

- High output 3-way enclosure
- Differential Drive™, Dual Neodymium Magnet, Dual Voice Coil, Direct Cooled™ MF and LF cone transducers
- Multiple M10 attachment points facilitate a variety of suspension options

| | |
|--|---|
| | High Performance Dual 15" 3-Way Loudspeaker |
| | LF: 2 x 2265H, 254 mm (15 in) diameter, dual 76 mm (3 in) diameter voice coil, NDD, Direct Cooled MF: 1 x 2169H, 203 mm (8 in) dia., 76 mm (3 in) Dual Voice Coil, Neodymium Differential Drive, Direct Cooled HF: 1 x D2430H, D2 dual diaphragm, dual 76 mm (3 in) diameter voice coil |
| | 1051.5 x 568.9 x 528.3 mm (41.4 x 22.4 x 20.8 in) |
| | 52.6 kg (116 lb) |



Photo: Brittany Bowman

SYSTEM CONTROL SOFTWARE

Boasting intuitive interfaces and powerful features, HARMAN's suite of system control software ensures tour success from planning through execution. Leveraging HARMAN's role in every part of the signal chain, these tools help design systems that perfectly cover any space—from simplified design to sophisticated performance monitoring and troubleshooting.



Performance Manager

A software application used to configure networked audio systems for theatres, houses of worship, and corporate venues along with other live sound events. It dramatically reduces design time, simplifies networking and automates control interface configuration. With expert system design knowledge embedded directly into the software, Performance Manager reduces complexity and helps even less-experienced users achieve optimal results.

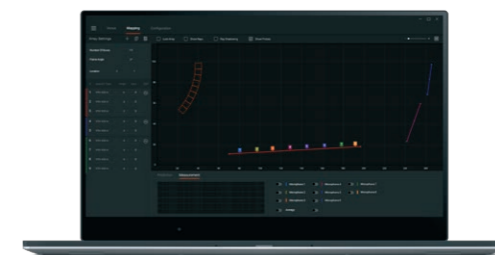
- Designed to configure and control networked audio systems
- Step-by-step guidance through system design, configuration and control process
- Dedicated “show mode” provides monitoring and control for complete picture of how the system is performing in real time



Line Array Calculator 3

Simply enter known venue dimensions into Line Array Calculator 3 to accurately predict line array response and also generate correct inter-enclosure angles, array dimensions, and critical safety and suspension weights—all in real-time for fast and accurate system deployment. You can even apply array length and throw distance to the prediction, and have those adjustments immediately available to the system DSPs upon deployment via HiQnet Performance Manager.

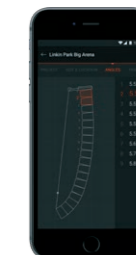
- Predicts the acoustical performance of Line Array systems as well as flown and ground stacked subwoofer arrays
- Subwoofer delay values can be generated for electronic delay steering (EDS) using the built in coverage calculator
- Can also be used for mechanical validation of all used hardware and calculating weight limits and safety warnings



Array Link

JBL Array Link is a mobile companion app that works in conjunction with JBL's Line Array Calculator (LAC) software to assist with deploying JBL VTX Series systems. Array Link uses a QR code system to transfer all mechanical array information from the main LAC application to a mobile phone. All relevant rigging and mechanical options are presented in an easy-to-understand layout. The application is compatible with iOS® and Android® and can be obtained from the respective app stores.

- QR code enabled system transfers all array information from LAC to a mobile phone
- All rigging and mechanical options are presented in a simple layout
- Compatible with iOS and Android operating systems





**SOLUTIONS
TO EVOKE EMOTIONS**

Lighting a flame
doesn't always require a match

LIGHTING

Martin Professional and tour lighting go way back—it's in our DNA! Your job is to apply your creativity and come up with the most stunning lighting designs. Our job is to deliver the best tools and equipment to leverage your work bringing those designs to life.

We've got everything you need: A complete solution with lighting, creative video, atmospheric effects, control, data distribution and video processing. And we're right there with you all the way—no matter the time or the location.

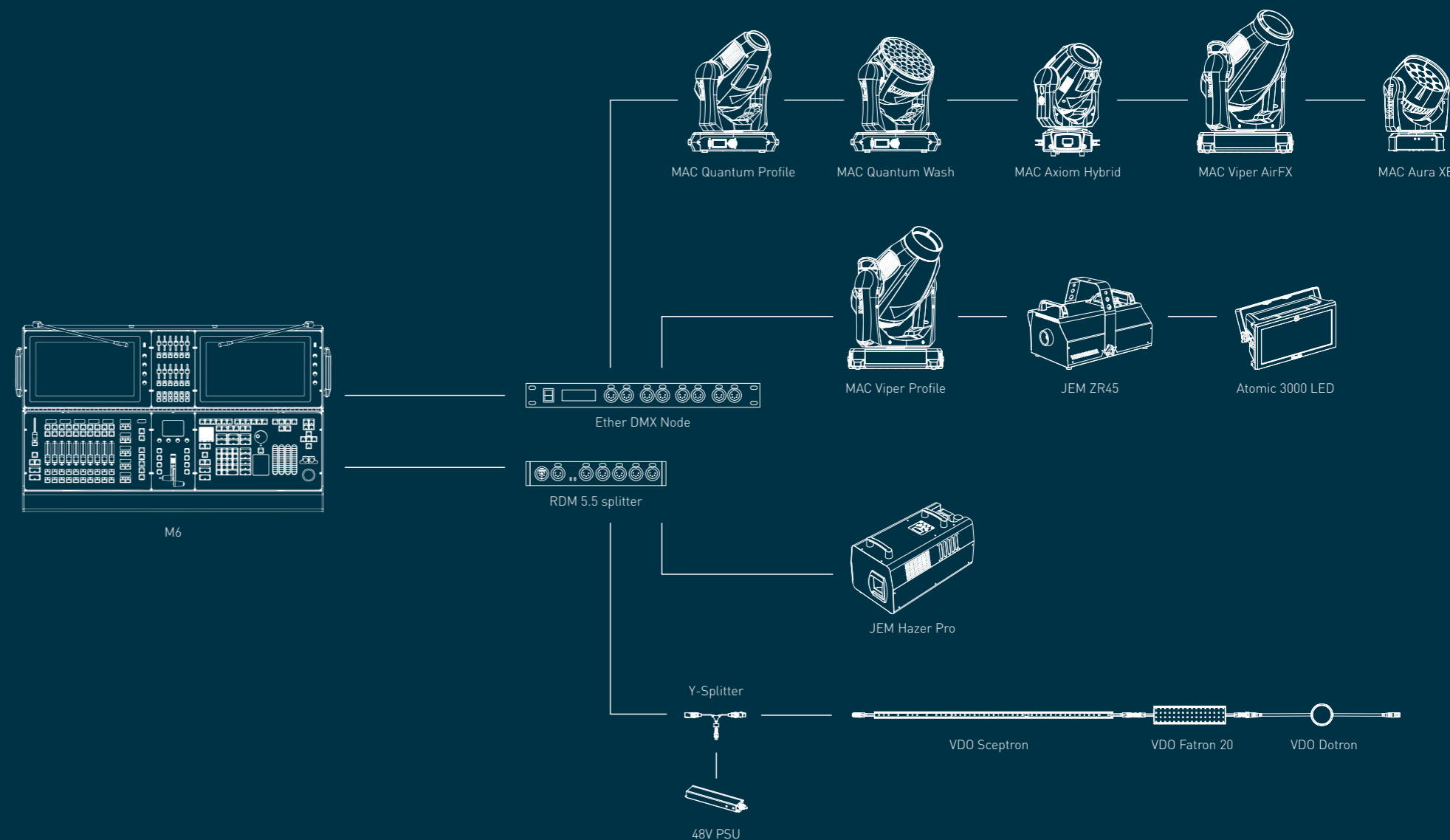
Martin



Photo: Ralph Larmann

MARTIN TOUR LIGHTING SOLUTIONS

Easy configuration and control



AUDIO

LIGHTING

MAC QUANTUM

This LED-based fixture family addresses the need for dependable, midsized workhorses across the entertainment industry, from rock 'n' roll to corporate events, cruise ships and house of worship. Capitalizing on the latest cutting-edge LED technology for maximum output with high efficiency and Martin's unique proprietary optics, the MAC Quantum™ family satisfies the needs of any lighting professional.



MAC Quantum Wash

The MAC Quantum Wash features tight beams, beautiful wash fields, a market leading color palette and uniform color mixing for the most demanding applications. 750 W of RGBW LED power and Martin's renowned optical system provide maximum output and superior performance.

- RGBW LED color mixing with unique extended color mode
- 1:5 zoom for tight beams and even washes
- Beam twister effects: Rotating front lens for stunning mid-air and projection effects

| | |
|----|--|
| ☀️ | LED 750 W |
| ☀️ | 16,000 lm |
| ☀️ | RGBW plus virtual color wheel |
| 📐 | 11°–55° [1:5] |
| ★ | MAC Aura Effect, rotating front lens, internal FX macros |
| 📏 | 452 x 431 x 581 mm [17.8 x 17 x 22.9 in] |
| 📖 | 21 kg [46.3 lb] |



MAC Quantum Profile

This extremely bright hard-edge fixture combines top-quality white light with a fast, yet smooth CMY color mixing system, crisp gobo projection on surfaces as well as mid-air, and never-before-seen beam animations with the Animation™ FX system.

- Flat field, crisp image, high contrast
- Pure white LED with 6,500 K combined with quick and even CMY color mixing
- Very low weight and compact design

| | |
|----|--|
| ☀️ | LED 475 W |
| ☀️ | 13,000 lm |
| ☀️ | CMY plus static color wheel |
| 📐 | 12°–36° [1:3] |
| ★ | Gobos, prism, iris, internal FX macros |
| 📏 | 452 x 431 x 648 mm [17.8 x 17.0 x 25.5 in] |
| 📖 | 23.2 kg [51.1 lb] |



MAC Axiom Hybrid

The MAC Axiom™ Hybrid is true all-in-one fixture combining beam, spot and diffused wash functionality into one compact unit. The high precision optical system offers super-high contrast, both in mid-air and projection.

- All-in-one product—packed with effects
- Tight and narrow beam—amazing intensity
- MAC Viper Color Palette—superior CMY color mixing

| | |
|----|---------------------------------------|
| ☀️ | Osram SIRIUS HRI 440 W |
| ☀️ | 16,000 lm |
| ☀️ | CMY plus variable CTO and color wheel |
| 📐 | 2–44° |
| ★ | Gobos, animation pattern, prisms |
| 📏 | 610 x 355 x 400 mm [24 x 14 x 16 in] |
| 📖 | 23 kg [51 lb] |



MAC Aura XB

The MAC Aura™ XB takes the award-winning MAC Aura LED wash light to the next level, incorporating many new features first introduced in the MAC Quantum Wash. The MAC Aura XB offers almost twice the amount of brightness compared to its predecessor and features a new superior color mixing system and an optimized lens design. Martin's unique and patented eye candy MAC Aura Effect™ is also part of the package.

- Super bright single lens wash light with fully pre-mixed color
- Compact design and low weight
- High efficiency, low power consumption, long service life

| | |
|----|--|
| ☀️ | LED 285 W |
| ☀️ | 6,000 lm |
| ☀️ | RGBW plus virtual color wheel |
| 📐 | 10°–60° [1:6] |
| ★ | MAC Aura Effect, internal FX macros |
| 📏 | 302 x 302 x 360 mm [11.9 x 11.9 x 14.2 in] |
| 📖 | 6.5 kg [14.4 lb] |



Atomic 3000 LED

15 Years of legendary Atomic™ 3000 DMX strobe success honed and transformed into cutting-edge LED technology that offers extreme brightness with a radically lower peak power consumption than traditional strobes. Internal FX macros and optimized re-use of the original color scroller make this the ultimate creative lighting tool.

- Brightest LED strobe on the market
- Unique RGB-controlled MAC Aura backlight for stunning eye candy looks
- Same output, look and feel as the original Atomic 3000 DMX

| | |
|----|--|
| ☀️ | LED 2,700 W (peak) |
| ☀️ | Max. 180,000 lm |
| ☀️ | White strobe with RGB-controlled backlight |
| 📐 | 140° x 90° |
| ★ | MAC Aura Effect (backlight) and internal FX macros |
| 📏 | 425 x 245 x 240 mm [16.7 x 9.6 x 9.4 in] |
| 📖 | 6.5 kg [14.3 lb] |

MAC VIPER

The launch of the MAC Viper™ family can be considered a milestone in the history of automated lighting. The award-winning MAC Viper Profile and its companions quickly became an industry standard all over the world. No matter the challenge, with a total of five variants and additional front lens accessories there will always be a MAC Viper that can do the job properly—with the added bonus of worldwide availability.



MAC Viper Profile

Brightness and speed in an industry standard, high-output profile luminaire with an exceptional feature set, superior light quality and a highly efficient optical system. At only 1,000 W, its output is equal to most 1,500 W fixtures in the market.

- 26,000 lm: excellent light quality with a very flat and uniform field
- 1:4 zoom: fast and precise with auto-linked focus
- Large aperture front lens for fat beam looks

| | |
|----|--|
| ☀️ | 1,000 W HID |
| ☀️ | 26,000 lm |
| ☀️ | CMY plus variable CTO and static color wheel |
| ⊕ | 10°–44° [1:4] |
| ★ | Gobos, animation pattern, prism, iris, frost |
| 📏 | 472 x 335 x 748 mm [18.6 x 13.2 x 29.5 in] |
| 📏 | 37.2 kg [82.0 lb] |



MAC Viper Performance

The MAC Viper Performance is a full-featured, hard-edge framing fixture that delivers an unparalleled output and performance for a fixture this size. This unit allows simultaneous visibility of framed edges, gobos and animation patterns and sports lively colors, beautiful CTO and variable frost.

- 26,000 lm: excellent light quality with a very flat and uniform field
- 1:4 zoom: high precision zoom with auto-linked focus
- Four shutter blades individually adjust +/- 30° (entire system +/- 55°)

| | |
|----|--|
| ☀️ | 1,000 W HID |
| ☀️ | 26,000 lm |
| ☀️ | CMY plus variable CTO and static color wheel |
| ⊕ | 10°–44° [1:4] |
| ★ | Framing system, animation wheel, gobos, iris, prism, frost |
| 📏 | 472 x 335 x 748 mm [18.6 x 13.2 x 29.4 in] |
| 📏 | 37.9 kg [83.6 lb] |



MAC Viper Wash DX

The MAC Viper Wash DX is a full-feature wash luminaire with a unique internal barndoor system that enables designers to shape and control light projection onto stages, performers or any set element with great precision. This makes it a highly capable, automated substitute for a conventional daylight Fresnel fixture—with the added bonus of CMY color mixing. Also available without barndoor system.

- 33,000 lm: excellent light quality with a uniform field and 6,000 K
- 1:5 zoom: continuous and fast
- Internal barndoor system—one pair of indexing shutters

| | |
|----|--|
| ☀️ | 1,000 W HID |
| ☀️ | 33,000 lm |
| ☀️ | CMY plus variable CTO and static color wheel |
| ⊕ | 13.5°–59° [1:5] |
| ★ | Internal barndoors, iris, frost |
| 📏 | 472 x 335 x 749 mm [18.6 x 13.2 x 29.5 in] |
| 📏 | 34.1 kg [75.2 lb] |



MAC Viper AirFX

The MAC Viper AirFX was engineered to replace 1,500 W fixtures, previously seen in a lot of shows mainly for mid-air effects, with no projection and often with a few, simple gobos. It is everything you love about the MAC Viper family in one versatile fixture which makes it ideal for tours and festivals, and it gives most 1,500 W fixtures a run for their money.

- Hard-edge, mid-air effects and wash all-in-one
- Output superior to 1,500 W spot fixtures
- Vibrant colors known from the MAC Viper family

| | |
|----|--|
| ☀️ | 1,000 W HID |
| ☀️ | 35,000 lm |
| ☀️ | CMY plus variable CTO and static color wheel |
| ⊕ | 11°–58° [1:5] |
| ★ | Gobos, iris, frost |
| 📏 | 472 x 335 x 749 mm [18.6 x 13.2 x 29.5 in] |
| 📏 | 35.7 kg [78.7 lb] |

JEM HAZER

With the JEM™ hazers, Martin offers a broad and professional range of water based hazers, including the CO2 based JEM Ready 365. Designed to produce small-particle haze for optimum optical clarity and reflectivity the JEM hazers feature low fluid consumption and leave no residue or smell. Low noise-level operation makes them ideal for noise sensitive applications in television and theatre.

JEM ZR

JEM ZR is a family of powerful fog machines designed to deliver superior and uninterrupted performance in demanding professional applications. Equipped with 1,150–2,000 W heat exchangers they deliver large amounts of fog and fantastic peak output, ideal for venues of all sizes in both install and rental markets. The JEM ZRs feature variable output control for more subtle effects and are fully up-to-date with digital remote, DMX and RDM. The entire range is compatible with a wide range of JEM Pro fog fluids. As machines designed and built to last, the JEM ZRs will continue to perform with great output and low consumption.



JEM Hazer Pro

The JEM Hazer Pro is a robust, yet small and lightweight top-of-the-range hazer, designed for the professional market. Its ability to quickly produce exceptionally fine atmospheric haze makes it an ideal choice for rental houses and medium to large shows.

- Finest haze production in its class
- Water-based fluid with long hang time
- Battery-powered automatic shutdown prevents clogging

| | |
|----|---|
| 🔥 | 600 W – thermally protected |
| 📦 | Sealed 2.5 l |
| ⚙️ | Continuous output – 5,500 m³ [194,230 ft³]/minute |
| ✓ | 6 minutes |
| 🕒 | 10.5/65 hours [min/max] |
| 📏 | 565 x 271 x 298 mm [22.2 x 10.6 x 11.7 in] |
| 📖 | 15 kg [33 lb] or 17.5 kg [38.5 lb] when filled |



JEM Ready 365

The JEM Ready 365 is a revolutionary CO2 hazer that produces atmospheric effects for large venues, shows and events. Using an advanced water-based fluid with a performance comparable to oil, this premium hazer produces the ultimate transparent haze.

- Water-based fluid with long hang time
- Integrated airflow director for smooth haze distribution
- Robust, fixed regulator without gauges for maximum durability

| | |
|----|---|
| 🔥 | 600 W – thermally protected |
| 📦 | Sealed 3.8 l |
| ⚙️ | Continuous output – 5,500 m³ [194,230 ft³]/minute |
| ✓ | 7.5 minutes |
| 🕒 | 60/200 hours [min/max] |
| 📏 | 760 x 320 x 280 mm [29.9 x 12.5 x 11 in] |
| 📖 | 16 kg [35.2 lb] or 19.8 kg [43.6 lb] when filled |



JEM ZR25

The JEM ZR25 is a small, yet powerful fog machine designed to deliver superior and uninterrupted performance in demanding applications. Its 1,150 W heat exchanger produces large amounts of fog ideal for small to midsize venues and stages.

- Small, but powerful fog machine
- Exceptional performance and output for its size
- Simple plug-and-play operation via remote control or DMX

| | |
|----|--|
| 🔥 | 1,150 W – thermally protected |
| 📦 | Sealed 2.5 l |
| ⚙️ | Continuous output – 600 m³ [21,189 ft³]/minute |
| ✓ | 7 minutes |
| 🕒 | 100 ml/minute at max output |
| 📏 | 485 x 335 x 242 mm [19 x 13.1 x 9.5 in] |
| 📖 | 11.2 kg [24.6 lb] or 13.7 kg [30.2 lb] when filled |



JEM ZR35

The rugged, yet weight-optimized JEM ZR35 is a midsize fog machine designed to deliver superior and uninterrupted performance in demanding professional applications. Via its powerful 1,500 W heat exchanger, the JEM ZR35 produces a fantastic peak output ideal for mid to large-sized venues and stages in both install and rental markets.

- High endurance midsize fog machine
- Exceptional performance and output
- Various control options via digital remote control or DMX

| | |
|----|--|
| 🔥 | 1,500 W – thermally protected |
| 📦 | Sealed 4 l |
| ⚙️ | Continuous output – 800 m³ [28,251 ft³]/minute |
| ✓ | 9 minutes |
| 🕒 | 140 ml/minute at max output |
| 📏 | 590 x 395 x 264 mm [23.2 x 15.5 x 10.3 in] |
| 📖 | 15.1 kg [33.2 lb] or 19.1 kg [42.1 lb] when filled |



JEM ZR45

The rugged, yet weight-optimized JEM ZR45 is a high-end fog machine designed to deliver superior and uninterrupted performance in professional applications. Its enhanced and powerful 2,000 W heat exchanger generates an exceptional peak output perfect for major venues and stages.

- High endurance high-end fog machine
- Exceptional performance and output
- Various control options via digital remote and DMX

| | |
|----|--|
| 🔥 | 2,000 W [EU version] – 1,800 W [US Version] |
| 📦 | Sealed 5 l |
| ⚙️ | Continuous output – 1,300 m³ [45,909 ft³]/minute |
| ✓ | 10 minutes |
| 🕒 | 210 ml/minute at max output |
| 📏 | 602 x 395 x 306 mm [23.7 x 15.5 x 12 in] |
| 📖 | 17.7 kg [39 lb] or 27.7 kg [60 lb] when filled |



JEM AF-1 MkII

The JEM AF-1 MkII is a versatile and highly responsive compact industry-standard fan that raises the bar for quality, performance and durability. Fully DMX or remote controllable, with advanced controls, rotation, speed range and incremental adjustment, it is the ideal fan for a large variety of indoor and outdoor applications.

- Reduced motor noise at low speeds
- Stand-alone and truss mountable

| | |
|--|--|
| | 1,815 m ³ [64,000 ft ³]/hour, 1,083 CFM |
| | 200–2,500 rpm (instant on) |
| | 70 dBA (maximum) |
| | 12" axial fan, sealed motor housing |
| | 397 x 406 x 176 mm [15.6 x 15.9 x 6.9 in] |
| | 8.5 kg [18.7 lb] |



JEM AF-2

A high-output, fully DMX controllable industry-standard fan that meets the highest performance and durability requirements. Responsive despite its powerful performance, and like the AF-1 MkII, it features advanced controls, rotation, speed range and incremental adjustment.

- On-board controls, remote, or DMX
- Advanced control, rotation, speed range and increment adjustments
- Stand-alone and truss mountable

| | |
|--|---|
| | 5,700 m ³ [201,295 ft ³]/hour, 3,355 CFM |
| | 0–1,400 rpm (instant on) |
| | 73 dBA (maximum) |
| | 24" axial fan, sealed motor housing |
| | 700 x 680 x 310 mm [27.5 x 26.7 x 12.2 in] |
| | 17.5 kg [38.5 lb] |

M-SERIES CONTROLLERS

The Martin M-Series controllers offer several solutions for concert and stage lighting. Each console and module of the M-Series family is specifically designed with users in mind. All M-Series consoles and modules run on the same software allowing you to easily move shows between any console or PC application. The simple and efficient MaxNet network system makes it easy to connect multiple M-Series devices for tracking backup as well as full remote access.

A full family of controllers customized for all setup and configuration sizes requiring professional lighting control.



M6

Our flagship lighting console that doubles as a highly advanced visual control surface. Controlling everything from conventional fixtures and moving lights to the most advanced media servers, the M6 is designed for today's multimedia shows and tomorrow's challenges. Delivers up to 64 DMX universes directly from its network ports.

- Dual BriteTouch monitor—readable in direct sunlight
- T-Bar control for cuelist and parameter control
- Access to 44 direct playbacks for live performances

| | |
|--|---|
| | up to 64 |
| | 44 |
| | 16 |
| | 2 x 15.3", 2 x 3.5" |
| | 12 |
| | 668 x 1,058 x 204 mm [26.3 x 41.7 x 8.1 in] |
| | Weight: 37.5 kg [82.7 lb] |



M1 HD

An all-in-one lighting console offering best-in-class processing power. With the full power of a large desk and the agility of a small one, it continues the tradition of the M1, one of the most heralded lighting consoles in the market, setting a new standard in powerful and affordable full-featured lighting consoles.

- Legendary M-Series ergonomics
- Bright multi-touch head display
- Built-in 40-universe processor

| | |
|--|---|
| | 40 |
| | 34 |
| | 8 |
| | 1 x 15.3" |
| | 12 |
| | 464 x 823 x 180 mm [18.3 x 32.4 x 7.5 in] |
| | Weight: 14.4 kg [31.8 lb] |



M2GO HD

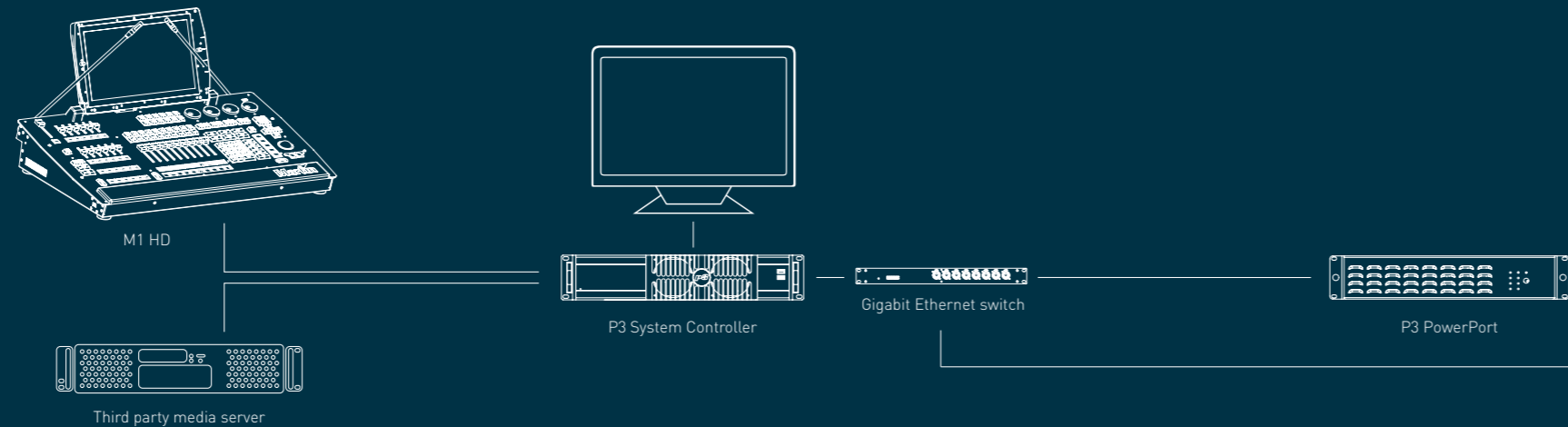
The M2GO HD is a powerful lighting console for on-the-go solutions. With its small footprint and large built-in touchscreen, the M2GO HD is a compact, yet powerful all-in-one lighting console that meets tomorrow's demands in a cost-effective and portable package.

- Portable design
- Bright multi-touch head display
- Built-in 20-universe processor

| | |
|--|--|
| | 20 |
| | 10 |
| | 8 |
| | 1 x 15.3", 1 x 3.5" |
| | 8 |
| | 300 x 540 x 99 mm [11.9 x 21.3 x 3.9 in] |
| | 9 kg [19.8 lb] |

P3 SYSTEM CONTROLLERS

Any size Martin P3 System Controller will run all Martin LED video products no matter how you mix and match them. Simplicity is key and the P3 System Controllers' usability makes even the most demanding creative LED video setup simple to create and easy to use.



Martin P3-050/150/300 System Controllers

Awarded most user-friendly LED video processor on the market, the Martin P3 System Controllers make life easy for anyone working with LED video products. Mix and match different products without increasing complexity. The three different System Controller models offer different video input formats (DVI, SDI, HDMI) and pixel capacities [up to 2,000,000 output pixels from one P3 System Controller].

| | P3-050 | P3-150 | P3-300 |
|--|---------------------------|---------------------------|---------------------------|
| | 100,000 pixels | 500,000 pixels | 2,000,000 pixels |
| | DVI | DVI | DVI & 2 x 3G-SDI |
| | DMX & Art-Net | DMX & Art-Net | DMX & Art-Net |
| | Integrated scaler | Integrated scaler | Integrated scaler |
| | Integrated user interface | Integrated user interface | Integrated user interface |

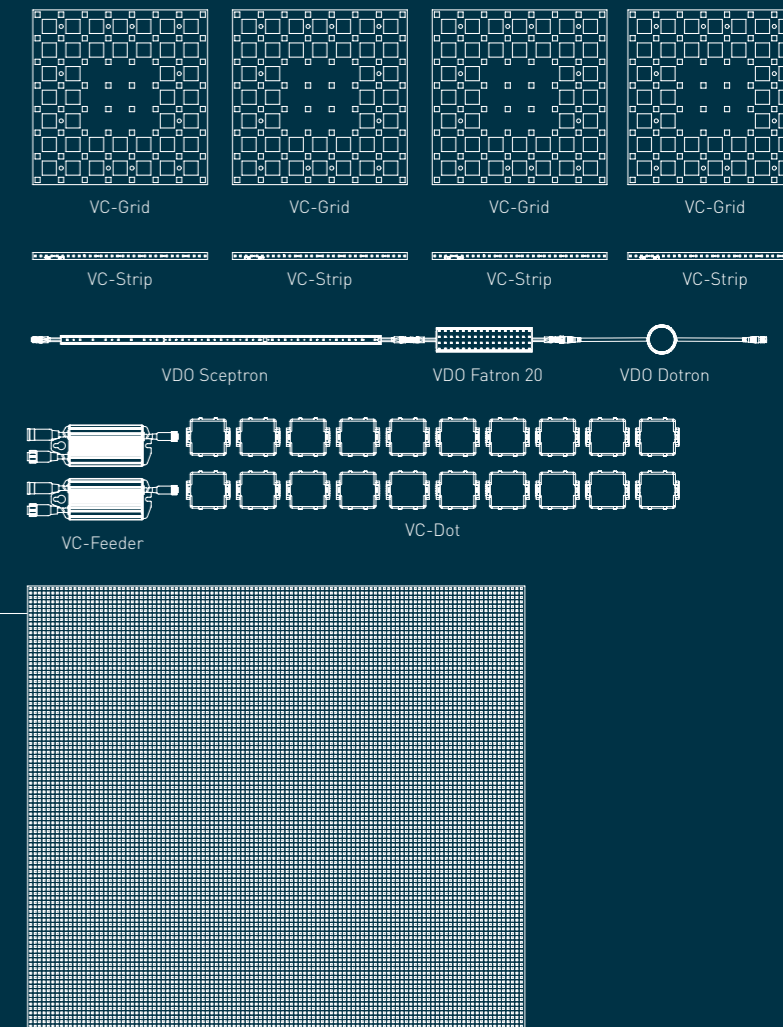
MARTIN P3 LED VIDEO CONTROL SOLUTION

Different products, one control solution

Martin P3 PowerPort 1500/1000 IP

The Martin P3 PowerPort 1500 and the Martin P3 PowerPort 1000 IP are integrated power and data processors for Martin's range of creative LED video products, including the VDO Sceptron, VDO Dotron, VDO Fatron and more. When connected to award-winning Martin P3 System Controllers, they power connected products with high-quality image processing capabilities and offer extremely easy setup.

| | P3 PowerPort 1500 | P3 PowerPort 1000 IP |
|--|-----------------------------|-------------------------|
| | IP20 (indoor only) | IP65 (outdoor & indoor) |
| | Rack, Truss & Wall-mounting | Truss-mounting |
| | 4 x 48 V/7.5 A out | 4 x 48 V/5.0 A out |



VDO Face 5

VDO

Designed for the road, all Martin VDO products are robust and easy to deploy thanks to their easy cabling and integration with the P3 System Controller. Create exciting and innovative designs mixing traditional video panels with creative elements such as VDO Sceptron and VDO Dotron.



VDO Face 5 HB

The VDO Face 5 HB is a high-brightness outdoor-rated LED video panel for the rental market with a 5.2 mm pixel pitch. Driven by the same P3 System Controller as all other Martin LED video products the VDO Face 5 is the perfect fit for integration in a total video solution. Its consistent pixel-to-pixel calibration not only gives the best image quality, it also enables panels from different batches and customers to be combined quickly and hassle-free.

- Bright, flicker-free video output
- Consistent calibration allowing cross-renting between different batches
- Easy setup, mapping and configuration, and easy mix with other Martin LED video products

| | |
|--|---|
| | IP65 |
| | 5,000 nt |
| | 5.21 mm |
| | P3 |
| | Calibrated |
| | 500 x 562.5 x 105 mm (19.7 x 22.2 x 4.2 in) |
| | 10.5 kg (23.2 lb) |



VDO Face 5 HC

The VDO Face 5 HC is your solution when maximum contrast is required. The blackface LEDs make the panel surface dark for increased contrast on video playback and offers vivid colors. Apart from the increased contrast and reduced output, it is identical to VDO Face 5 HB. Accessories such as rigging system and flightcase are fully interchangeable between the two, and except for the LED modules they share identical spareparts.

- Flicker-free video output with very high contrast
- Consistent calibration allowing cross-renting between different batches
- Easy setup, mapping and configuration, and easy mix with other Martin LED video products

| | |
|--|---|
| | IP65 |
| | 3,000 nt |
| | 5.21 mm |
| | P3 |
| | Calibrated |
| | 500 x 562.5 x 105 mm (19.7 x 22.2 x 4.2 in) |
| | 10.5 kg (23.2 lb) |



AUDIO

LIGHTING

VDO SCEPTRON VDO FATRON VDO DOTRON

The ultimate creative LED video toolbox. All driven by P3 and/or DMX and using the same cabling infrastructure. They come with a variety of field-exchangeable diffusers and lenses for a wealth of different looks. An extensive range of brackets, floor stands and couplers allows them to be used in any application, standalone or combined in creative designs.

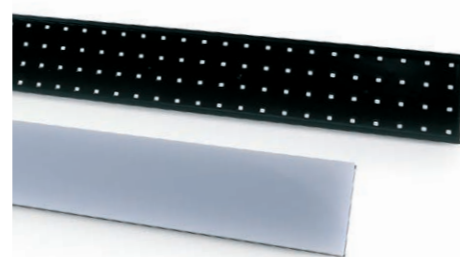


VDO Sceptron 10/20/40

Family of 10/20/40 mm pixel pitch linear outdoor-rated LED video fixtures that offer maximum creative design options with minimal complexity. The entire family is driven by Martin P3 System Controllers for easy configuration, mapping and setup, and is backwards compatible with DMX for small applications. The integrated power and data cabling allows long daisy chains with many fixtures per cable-run, while the power supply can be located backstage (up to 50 m away) for a clean setup.

- The backbone of your creative VDO toolbox
- Extensive range of field-exchangeable diffusers and lenses offers a great variety of looks
- Easy setup, mapping and configuration via P3 System Controller

| | 10 | 20 | 40 |
|--|--|--|--|
| | IP65 | IP65 | IP65 |
| | 750 lm/m | 375 lm/m | 187 lm/m |
| | 250 cd/m | 125 cd/m | 62 cd/m |
| | 10 mm | 20 mm | 40 mm |
| | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM |
| | Calibrated | Calibrated | Calibrated |
| | 320/1,000 x 27 x 28 mm (12.6/39.4 x 1.07 x 1.10 in) | 320/1,000 x 27 x 28 mm (12.6/39.4 x 1.07 x 1.10 in) | 320/1,000 x 27 x 28 mm (12.6/39.4 x 1.07 x 1.10 in) |
| | 1.2 kg/m [0.81 lb/ft] | 1.2 kg/m [0.81 lb/ft] | 1.2 kg/m [0.81 lb/ft] |



VDO Fatron 20

20 mm pixel pitch outdoor-rated LED video batten with an extensive range of optical accessories for a wide variety of looks that allows you to seriously play with creativity in 3D stage designs. Easy video-mapping and creative mix'n'match with other Martin LED video products via the P3 System Controller.

- The perfect expansion of your creative VDO toolbox for exciting 3D stage setups
- Extensive range of field-exchangeable diffusers and lenses for a great variety of looks
- Easy setup, mapping and configuration via P3 System Controller

| | |
|--|---|
| | IP65 |
| | 1,500 lm/m |
| | 6,250 nt |
| | 20 mm |
| | P3, DMX/RDM |
| | Calibrated |
| | 320/1,000 x 80 x 28 mm (12.6/39.4 x 3.15 x 1.10 in) |
| | 2.5 kg/m [1.68 lb/ft] |

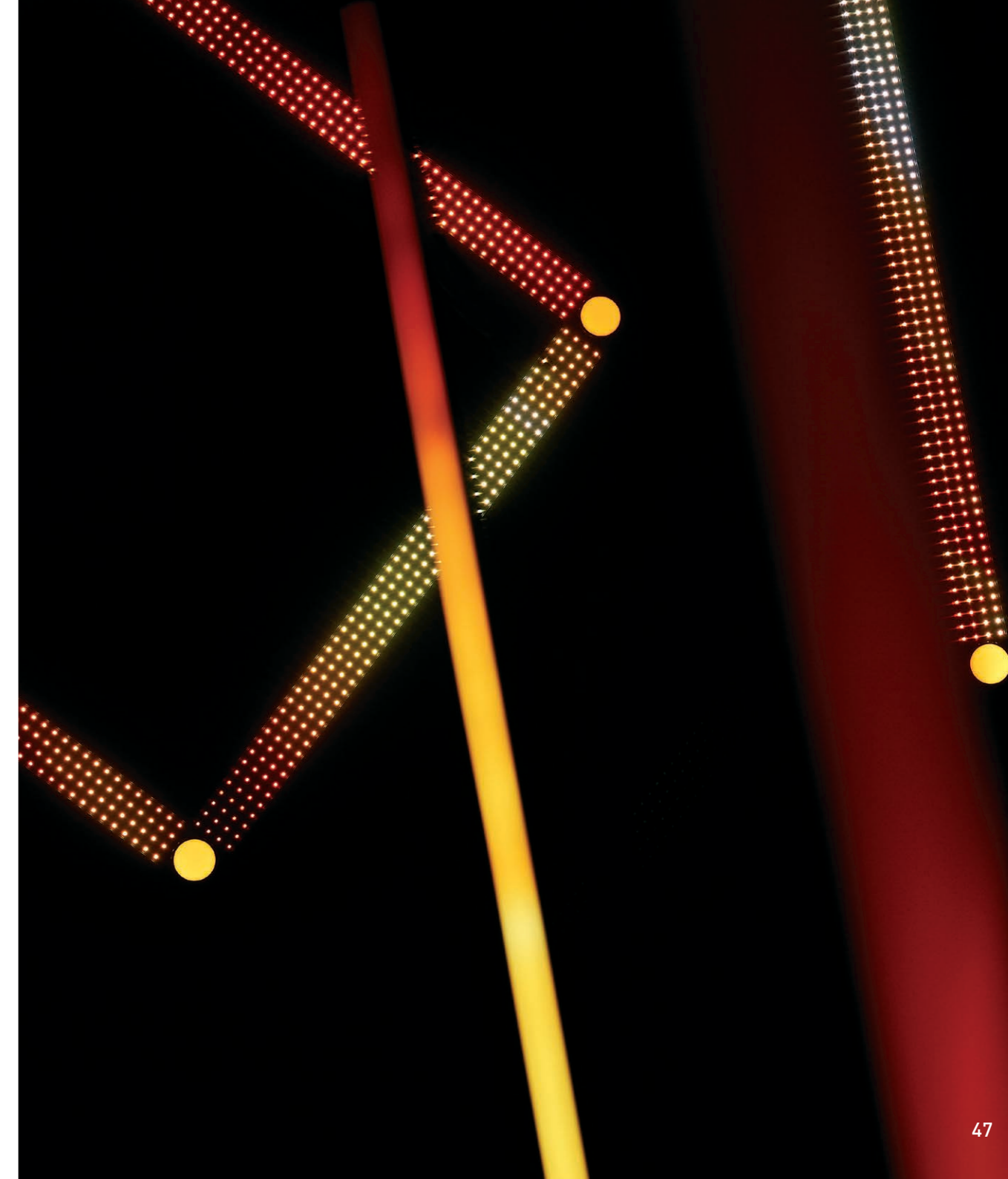


VDO Dotron

Compact and powerful outdoor-rated video pixel with many faces that truly sparks creativity for 3D stage setups. A wide variety of lenses and diffusers offers a wealth of different looks—or go with no front for a raw look. It uses the same integrated power and data cabling as VDO Sceptron and VDO Fatron, making installation a breeze.

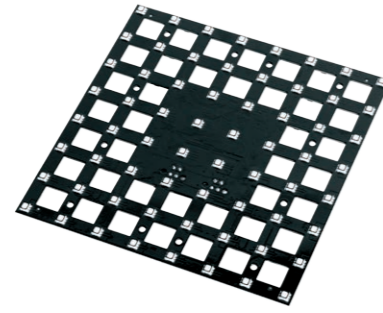
- The perfect expansion of your creative VDO toolbox for exciting 3D stage setups
- Extensive range of field-exchangeable diffusers and lenses for a great variety of looks
- Easy setup, mapping and configuration via P3 System Controller

| | |
|--|---|
| | IP65 |
| | 100 lm |
| | 40 cd |
| | N/A |
| | P3, DMX/RDM |
| | Calibrated |
| | Diameter: 72 mm (2.9 in) Height: 34 mm (1.4 in) |
| | 0.3 kg (0.7 lb) |



VC

Martin's VC range of creative LED video building blocks allows LED video to be integrated in almost every part of a set or stage. It also proves that "creative" doesn't necessarily mean "complicated," as cabling and configuration of this system is very simple. Only a single power and data driving box is needed, no matter how you mix and match the products. All fixtures in the VC range can be driven by the Martin P3 System Controllers for easy setup, mapping and use and are also backwards compatible with DMX for smaller shows.



VC-Grid

These compact rectangular LED video tiles can be integrated into set designs, risers, TV studios and more. An optional mounting frame offers consistent installation.

- 15, 25, 30 and 60 mm pixel pitch
- Easy cabling, mapping and configuration
- Bright and fully calibrated for optimal consistency

| | 15 | 25 | 30 | 60 |
|--|---|---|---|---|
| | IP20 | IP20 | IP20 | IP20 |
| | 15,000 lm/m ² – 161,000 lm/ft ² | 12,000 lm/m ² – 129,000 lm/ft ² | 8,250 lm/m ² – 89,000 lm/ft ² | 2,250 lm/m ² – 24,000 lm/ft ² |
| | - | - | - | - |
| | 5,000 nt | 4,000 nt | 2,750 nt | 750 nt |
| | 15 mm | 25 mm | 30 mm | 60 mm |
| | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM |
| | Calibrated | Calibrated | Calibrated | Calibrated |
| | 240x240x15 mm (9.4x9.4 x 0.6 in) | 200x200x18 mm (7.9x7.9x0.7 in) | 240x240x15 mm (9.5x9.5x0.6 in) | 480x480x15 mm (18.9x18.9x0.6 in) |
| | 311 g (0.69 lb) | 140 g (0.3 lb) | 157 g (0.35 lb) | 500 g (1.1 lb) |



VC-Strip

The narrow design of the VC-Strips and their ability to be cut to a custom length on site make them perfect for outlining set-pieces, stairs and more. Daisy chains up to 30 meters can be created, requiring just a single cable.

| | 15 | 25 | 30 | 60 |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | IP20 | IP20 | IP20 | IP20 |
| | 225 lm/m (675 lm/ft) | 300 lm/m (900 lm/ft) | 248 lm/m (744 lm/ft) | 135 lm/m (405 lm/ft) |
| | 75 cd/m (225 cd/ft) | 100 cd/m (300 cd/ft) | 83 cd/m (248 cd/ft) | 45 cd/m (135 cd/ft) |
| | 5,000 nt | 4,000 nt | 2,750 nt | 750 nt |
| | 15 mm | 25 mm | 30 mm | 60 mm |
| | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM |
| | Calibrated | Calibrated | Calibrated | Calibrated |
| | 480x19x15 mm (18.9x0.8x0.6 in) | 400x20x18 mm (15.8x0.8x0.7 in) | 480x19x15 mm (18.9x0.8x0.6 in) | 480x19x15 mm (18.9x0.8x0.6 in) |
| | 54 g (0.12 lb) | 43 g (0.1 lb) | 51 g (0.12 lb) | 53 g (0.12 lb) |

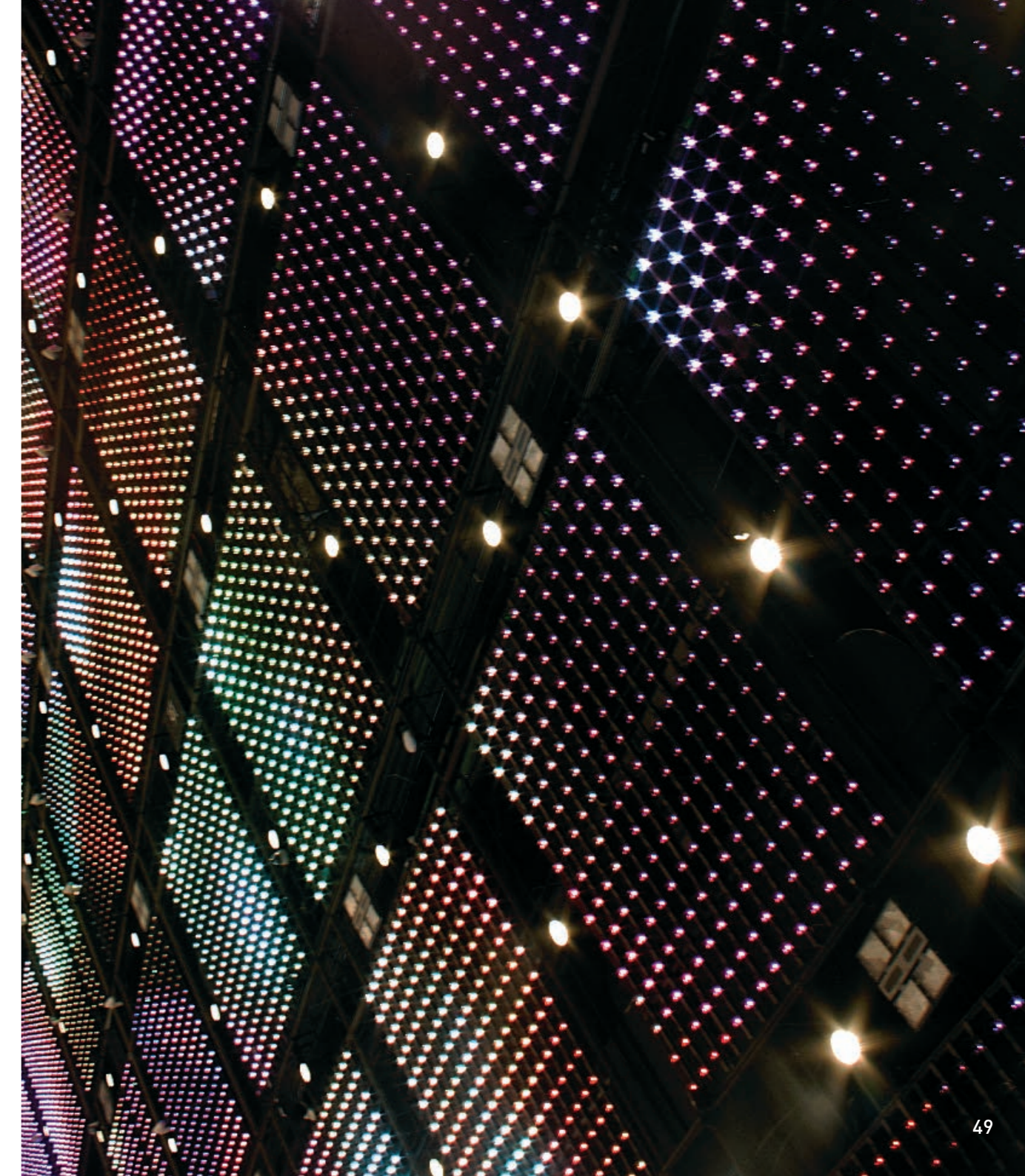


VC-Dot

The VC-Dots offer the most flexible integration of LED video pixels thanks to customizable pixel-to-pixel distance and a wide array of mounting and optical accessories, resulting in the most stunning designs in various applications such as custom set designs.

- Available in three different sizes and brightness variants
- Easy cabling, mapping and configuration
- Bright and fully calibrated for optimal consistency

| | 1 | 4 | 9 |
|--|---|---|---|
| | IP65 | IP65 | IP65 |
| | 5.4 lm/dot | 18.8 lm/dot | 55.3 lm/dot |
| | 2 cd/dot | 6 cd/dot | 18 cd/dot |
| | N/A | N/A | N/A |
| | 50–1,000 mm | 60–2,000 mm | 70–2,000 mm |
| | P3, DMX/RDM | P3, DMX/RDM | P3, DMX/RDM |
| | Calibrated | Calibrated | Calibrated |
| | 28 x 23 x 11 mm (1.1 x 0.9 x 0.5 in) | 36 x 30 x 13 mm (1.5 x 1.2 x 0.6 in) | 48 x 40 x 13 mm (1.9 x 1.6 x 0.6 in) |
| | N/A | N/A | N/A |



WORLDWIDE AVAILABILITY

HARMAN products are available across the globe through an extensive network of rental houses. We make significant investments in ensuring compliance with international standards and regulations. This way you can rest assured that there will be no compliance issues with your stock.

TOTAL SOLUTIONS

We offer complete, dynamic audio and lighting solutions. Because we are a large group of pro audio and lighting brands, you get a one-stop-shopping experience with access to all of HARMAN Professional's exclusive range of audio, video and lighting equipment.

GLOBAL SERVICE, LOCAL SUPPORT

We offer you the industry's most elaborate service and support system across the globe. We have a 24-hour hotline and local specialists ready to support you in local languages. We also offer you peace of mind with extended warranty programmes for our lighting portfolio.



HIGHEST RETURN ON INVESTMENT

With products from HARMAN, you're sure to capitalize on your investment. Products from HARMAN have a high resale value as well as various attractive financing options to fit your demands.

SCALABLE SOLUTIONS

The HARMAN product offering fits into all types of shows—from small venues all the way up to the biggest tours and festivals.

GLOBAL TRAINING

To ensure your optimal success with the use of our products, we care about teaching you how to use, service and maintain our products. We offer a wide selection of comprehensive product and technical training programs, both directly and via our local distributors—in English as well as in local languages.

UNBEATABLE TRACK RECORD

HARMAN is an established player in the industry and a leading supplier in the field of audio and dynamic lighting. Our history and financial power, combined with our long-standing ties with the industry gives you that all-important piece of mind to make the right business decisions.

Legend: Audio icons

| | | | | | |
|--|------------------------------|--|-------------------------|--|-----------------|
| | Size: L x W x H in mm/in | | Compressor ratio | | Inputs to mix |
| | Weight: kilos and pounds | | Stereo coupling | | Faders |
| | Audio frequency bandwidth | | Input connectors | | Stereo busses |
| | Sensitivity | | Output connectors | | Amplification |
| | Equivalent noise level | | CPU | | Power connector |
| | Signal to noise | | I/O | | System type |
| | Preattenuation pad | | Standalone mode routing | | Components |
| | Bass cut filter | | Plug-In mode routing | | |
| | RF Carrier Frequency Rangers | | EQ bands | | |
| | Modulation | | Filter width (Q) | | |
| | Channels | | EQ Gain | | |
| | Input | | Metering | | |

Legend: Lighting icons

| | | | | | |
|--|--------------------------|--|---------------------------|--|---------------------|
| | Size: L x W x H in mm/in | | Fluid consumption | | Mounting |
| | Weight: kilos and pounds | | Number of universes | | Power & data output |
| | Light source type | | Playback fader | | Nits |
| | Lumen output | | Encoders | | Pixel pitch |
| | Color system | | Built-in screen | | Control |
| | Beam angle | | F-keys | | Calibrated |
| | Effects | | Number of P3 pixels | | Candela |
| | Zoom range | | Video input | | Maximum airflow |
| | Heat exchanger | | External inputs (trigger) | | Fan speed |
| | Fluid reservoir | | Video scaler | | Noise |
| | Effect output | | User interface | | Fan and motor |
| | Ready time | | IP rating | | |



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