HUMAN CENTRIC LIGHTING (HCL)

ADVANCED TUNABLE LIGHTING CONTROL MADE SIMPLE

Vantage’s full line of Human Centric Lighting (HCL) products leverage our expertise in precise dimming and lighting controls and pairs it with sophisticated tunable light LED driver technology from Lumenetix®.

The result is the world’s first tunable lighting systems that are simple to design, install, and control. Once implemented, these solutions deliver the highest possible quality of light, replicating the visual comfort of natural daylight.

The Vantage family of HCL products provides ultimate flexibility in design with options for dim to dark, tunable white, and tunable color logic modules that integrate into a broad range of lighting fixtures. These provide room or fixture-based control with a variety of logic module options.

SPECIFIABLE FEATURES & BENEFITS

- Vantage HCL technology delivers high quality, natural tunable light, making any space more visually comfortable
- The proprietary Lumenetix algorithm mixes multicolored LEDs to precisely deliver a wide range of color temperatures at 90+ Color Rendering Index* (CRI)
- Both lumen and color maintenance ensure consistent light output throughout the life of the fixture
- Vantage’s control system delivers precise dimming for any araya® enabled fixture via DMX for both tunable white and color applications with fixed and mobile user interfaces

* The Color Rendering Index (CRI) is a scale from 0 to 100 percent indicating how accurate a “given” light source is at rendering color when compared to a “reference” light source. The higher the CRI, the better the color rendering ability.

LOGIC MODULE

Tunable Color

http://lumenetix.com

Fixtures with Lumenetix LED light engines replicate natural daylight for optimization of aesthetics, comfort, wellness, visual acuity and even color communications. araya® light engines deliver light for living – with the range, beauty and consistency of daylight. A full range of round and linear light engines share a uniform set of features for easy integration across fixture lines.

Mixes five channels for advanced tunable color simulating the range, color quality, and consistency of natural sunlight and is ideal for a wide range of residential applications (1650K – 8000K).
LOAD CONTROL OPTIONS

**Lighting Load Controls**
(For fixtures containing araya® modules enabled for DMX control)

**DMX DALI Gateway**
**DMX-DALI-GW**

The DMX-DALI-GATEWAY provides a full DMX universe of 512 channels in one simple solution, to manage today’s complex lighting solutions.

This product is Ethernet based and is a native solution inside of Vantage’s Design Center software, which provides simple setup and programming for HCL color control via DMX.

**InFusion Controller**
**IC-36-II**

The controller is the “main brain” of the system where system programming resides. It is capable of supporting all Vantage user interfaces, including Equinox touchscreens. The InFusion Controller possesses the required processor speed, RAM, and flash memory to meet the demands for delay-free control of large, complex systems. These requirements include control precision (where commands are completed instantaneously), real time feedback, a highly scalable system architecture, and programming for individual system personalization.

The controller is the aggregation point for multi-faceted lighting type control and input point for Equinox.
**Human Centric Lighting Controls**

(For fixtures containing araya® modules enabled for DMX control)

Provides control of all logic modules using the DMX protocol. araya® modules not only allow for control of intensity and Correlated Color Temperature (CCT)*, but also hue and saturation. Through the Equinox UI, CCT levels, personalized scenes, and HCL schedules (i.e. circadian rhythm) can be created that allow users advanced and simple control of tunable white and tunable color fixtures.

* In order to differentiate the various hues of white, artificial light sources like LEDs are labeled with a correlated color temperature, or CCT. CCT is measured in degrees Kelvin (K), and this temperature rating indicates what tone of white light will be emitted from the light fixture.

**Equinox 41 and Equinox 73**

(EQ41 and EQ73) – 4.3” or 7” glass LCD touchscreens and mobile apps that provide CCT control of lighting functions.

**Equinox 40**

(EQ40) – A small form factor glass LCD touchscreen that provides control of up to 15 discrete lighting loads, scenes, and shades in a single-gang keypad. Provides an easily programmable interface for selecting color temperature scenes as a fixed function or as a dimmable scene.

**EasyTouch II**

(KSxxxxxx) – With up to five buttons available, the engravable keypad provides a simple, yet effective, control interface. A simple programmable interface for selecting color temperature scenes as a fixed function or as a dimmable scene.

**Software and Programming**

Design Center Software provides the installer the ability to configure and program most types of lighting sources.

**Design Center**

With the latest version of Design Center 3.8.0, DMX control of tunable white and color fixtures has been added. Improved programming for control of intensity, hue, saturation, and correlated color temperature (CCT) for araya® logic modules as well as other compatible HCL fixtures is even simpler. In addition, the DMX emulator facilitates DMX scenario testing and optimization.
**PRODUCT NAME** | **CONTROL PROTOCOL** | **PART NUMBER**
---|---|---
arya® Logic Module | DMX | Fixture Manufacturer Part Number
Equinox 40 Touchscreen | DMX | EQ40TB-TI-II
Equinox 41 Touchscreen | DMX | EQ41-LCAP
Equinox 73 Touchscreen | DMX | EQ73-LCAP
EasyTouch II | DMX | KSxxxxxx

**ROOM TYPE** | **TYPICAL MIXED LOAD APPLICATIONS**
---|---
Lamps | Cans | Cove | Pendants | Sconces | Art | Landscape
Kitchen | | | | | | **Luminaires Available with araya® - Lumenetix**
Media Rooms | | | | | | **Luminaires Available with araya® - Lumenetix**
Master Bedroom | | | | | | **Luminaires Available with araya® - Lumenetix**
Master Bath | | | | | | **Luminaires Available with araya® - Lumenetix**
Landscape | | | | | | **Luminaires Available with araya® - Lumenetix**

**OEM Partners**
Fixture manufacturers that have integrated Vantage HCL

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