



BlueWave® MX-Series Multichannel Controllers

Independently Drive Up to Four BlueWave® MX-Series Emitters with One Controller

- Control up to 4 emitters with one controller
- Compatible with BlueWave® MX-Series emitters
- Admin and production modes
- Touch screen interface with full keyboard
- Instant on-off with no warm-up period
- LED temperature management and system monitoring for maximized continuous operation
- Remote I/O interface for incorporation into automated systems

BlueWave® MX-Series Multichannel Controllers are available in 2- and 4-channel versions, allowing manufacturers to use just one controller to run up to four emitter work stations. Each emitter can be controlled independently of the others or in any combination to produce flood and light bar patterns. Activation can be by foot pedal or through an enhanced PLC and interface. The controllers are compatible with all Dymax MX-series emitters including the BlueWave® MX-150 spot lamp, BlueWave® MX-250 flood lamp, and BlueWave® MX-275 light bar. Interconnect cables are available in 2-, 5-, 10-, and 20-meters lengths, allowing emitters to be stationed further from the controller.

The controllers are designed to provide manufacturers with greater curing flexibility. Users can start with a single emitter and add others as their applications grow. Emitter models can be utilized in different combinations with the same controller. For those requiring a spot-cure system, BlueWave MX-150 emitters can be outfitted with single or multi-pole lightguides to provide up to 16 individual cure spots from a single controller.



System Features & Benefits

Features	Benefits
One controller runs up to four emitters independently by footswitch or as an integrated light bar (50 mm x 200 mm)	<ul style="list-style-type: none"> • Reduces the number of controllers required • Reduces equipment footprint and cost
Compatible with BlueWave® MX-Series emitters*	<ul style="list-style-type: none"> • Users can easily switch between LED spot and flood curing configurations • All BlueWave® MX-series emitters available in 365, 385, and 405 nm versions
Admin and production modes	<ul style="list-style-type: none"> • Simple on/off operation using production mode • Application specific curing profiles/programs can be easily entered, stored, and recalled when needed • Units can be password protected so only production mode can be accessed by workers
Touch screen with full keyboard	<ul style="list-style-type: none"> • Improved user interface • Stylus aids easy menu navigation and attaches to unit
Instant on-off	<ul style="list-style-type: none"> • No warm-up period • More energy efficient
LED temperature management and system monitoring	<ul style="list-style-type: none"> • Maximized continuous operation without overheating • Temperature monitoring assures maximum LED life • Monitors critical system functions
Remote I/O interface	<ul style="list-style-type: none"> • Easily incorporated into automated systems • Improved PLC interface provides additional flexibility for automated applications

* Compatible with BlueWave® MX-150 and BlueWave® MX-250 emitters with firmware version 1.08 or higher. Dymax can easily upgrade emitter firmware to the latest versions by returning your emitter to our one of our service facilities.

Admin and Production Modes

Admin mode fully unlocks the device and allows for setting curing time and intensity cycles. Each individual curing cycle can be entered and saved as a program, and recalled when needed. The production mode is designed for simple operation by manufacturing personnel. Settings and access to admin mode can be password protected using the full QWERTY keyboard.

LED Light-Curing Technology

Dymax LED curing systems generate curing energy using high-intensity LEDs in lieu of conventional arc lamp technology. The relatively narrow frequency band of energy emitted by LEDs results in cooler curing environments and substrate temperatures compared to traditional UV-style lamp systems, making them ideal for curing thermally sensitive materials. Dymax LED-curing systems offer many energy and cost-saving benefits, such as no warm-up period, lower energy consumption, no bulbs to change, and more consistent frequency and intensity output for better process control.

System Specifications

Power Supply Input	100-240V \approx 2.5A, 50-60Hz
LED Timer	0.1 to 999 seconds, max (timer accuracy 0.1%)
LED Activation	Foot pedal, LCD touchscreen, or PLC
Cooling	Air cooled
Controller Dimensions (W x D x H)	5.14" x 7.19" x 7.35" [13.1 cm x 18.3 cm x 18.7 cm]
Weight	Controller: 2.6 lbs. [1.18 kg]
Unit Warranty	1 year from purchase date
Operating Environment	10 to 40°C (50°F to 104°F) 0-80% relative humidity, non-condensing

Ordering Information

Part Numbers		
System Components		
Controller/Power Supply	43184 BlueWave® MX-Series 2-Channel Controller* 443181 BlueWave® MX-Series 4-Channel Controller*	Note: Interconnect cables to connect controller to emitters and foot pedals sold separately.
Accessories		
Interconnect Cable	43453 12-Inch Interconnect Cable Assembly 42287 2-Meter Interconnect Cable Assembly 42889 5-Meter Interconnect Cable Assembly 43010 10-Meter Interconnect Cable Assembly 43011 20-Meter Interconnect Cable Assembly	
Foot Pedal	43106 Foot Switch 43496 Foot Switch with Extended 10-Meter Cable	
Emitter Stand	43070 MX Emitter Stand – Holds up to 4 Emitters and Includes an Acrylic Back Shield 43019 MX Emitter Stand Kit – Converts the BlueWave® LED Mounting Stand (41268) to an MX Emitter Stand (43070) 41395 3-Sided Acrylic Shield - Works with Stand 43070 60868 Dual Emitter Mount for MX Controller	

* For European customers, the appropriate power cord will be added.



Run up to Four Workstations from One Controller