

iColor Accent MX Powercore

Precision-controlled direct view linear exterior LED fixture with intelligent color light



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iColor Accent MX Powercore is a direct view linear LED fixture ideally suited for creating long ribbons of color and color-changing effects. Variable resolution offers the precision to display large-scale video, graphics, and intricately designed effects in a host of architectural, retail, and entertainment settings. iColor Accent MX Powercore offers the efficiency and cost-effectiveness of Powercore technology in an outdoor-rated, road-ready aluminum housing.

- Integrates patented Powercore technology —
 Powercore technology rapidly, efficiently, and
 accurately controls power output to iColor
 Accent MX Powercore fixtures directly from
 line voltage. Philips Data Enabler Pro merges line
 voltage and control data and delivers them to the
 fixture over a single cable, dramatically simplifying
 installation and lowering total system cost.
- Native, onboard Ethernet Fixtures accept
 Ethernet input from Data Enabler Pro to support
 long control runs not subject to DMX data and
 addressing limitations.
- Precise resolution control Fixtures can be addressed and controlled in increments down to 1.2 inches (30 mm), or up to 4 ft (1.2 m).
- Two fixture lengths 2 ft and 4 ft lengths are easily connected to create long, continuous columns of intense, dynamic color.
- Rugged, durable construction This IP66rated fixture is designed to meet the taxing requirements of outdoor and entertainment applications. The extruded aluminum housing resists shock, vibration, and other forms of rough handling.

- Flexible positioning Over-molded end-to-end locking connectors supply both power and data.
 Connectors can make 180° turns for easy layout.
 Jumper cables of 1 ft (305 mm), 2 ft (610 mm),
 5 ft (1.5 m), and 10 ft (3 m) can add extra space between fixtures.
- Industry-leading controls Works seamlessly
 with the complete Philips line of controllers,
 including Video System Manager Pro, Light System
 Manager, and iPlayer 3, and any third-party
 controllers.
- Universal power input range Accepts a universal power input range of 100 to 240 VAC for consistent installation anywhere in the world. Each Data Enabler Pro can support multiple fixtures for creating long lines of video or ribbons of intricately changing color.



Exceptional Viewing Angles

The diffused plastic lens, specifically designed for direct viewing, provides exceptional viewing angles of 250° x 180°, and ensures uniform color mixing.

Linear Lighting — Redefined

iColor Accent MX Powercore fixtures are designed to create columns of dynamic color for a wide range of architectural accenting, retail, and entertainment applications, including large-scale video displays. iColor Accent MX Powercore combines the benefits of precise resolution control, patented Powercore technology, and onboard Ethernet control to redefine the capabilities of linear lighting. Using Philips Video System Manager Pro controller, iColor Accent MX Powercore can create seamless lines of video on building exteriors and other indoor and outdoor surfaces. Through appropriate sampling and optimization, displays can be visible from many hundreds of feet or meters away.

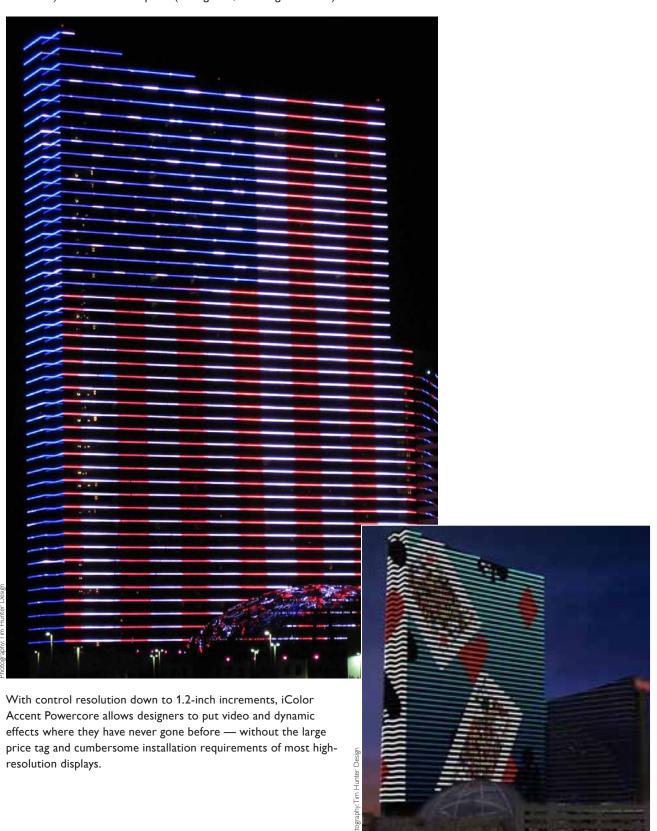
Towering Video

To get attention in Atlantic City and differentiate its exterior from that of its neighbors, Harrah's Resort and Casino created the world's largest outdoor video display by covering the façade of the 44-story Waterfront Tower in a linear array of over 4,500 iColor Accent Powercore fixtures.



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Approximately 33,000 linear feet – almost six linear miles – of LED-based "tubes" wrap around the four façades of the Waterfront Tower. From dusk to dawn, the entire building turns into a large video screen displaying scenes that range from the celestial (stars, comets, shooting stars) to the patriotic (a waving American flag and fireworks) to the casino-inspired (rolling dice, scrolling card suits).



Tommy Hilfiger Denim

The Tommy Hilfiger Denim store in New York City prominently features an innovative and eye-catching installation comprised entirely of iColor Accent Powercore fixtures. The chandelier-like structure, titled "Monument to an



Amaranth" in homage to the colorful flower that never fades, is designed to be the decorative focal point of the store. 135 iColor Accent Powercore fixtures create seamless columns of intricately changing color in a captivating centerpiece 6 ft (1.8 m) high and 4 ft (1.2 m) wide. Fixtures are installed on a custom-designed steel chaise suspended from the ceiling on aircraft cables.

By setting the fixtures to maximum resolution, the video designer was able to use individually controllable light segments of just 1.2 in (30 mm) to display low-resolution video, graphics, and intricately designed effects

The video designer used 3D animation software to create a 12-minute, looping video reproduced by the lighting installation. The installation uses Philips Video System Manager Pro, an integrated software / hardware control solution, to convert the video signals and stream the content to the iColor Accent Powercore fixtures.

The inaugural video included images of celebration and nature, beginning with fireworks

that morph sequentially into fire, falling water, and growing vines that bloom into a sea of flowers. At the beginning of every season, the designer creates new video content to keep the installation fresh.





Specifications

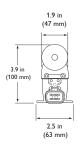
Due to continuous improvements and innovations, specifications may change without notice.

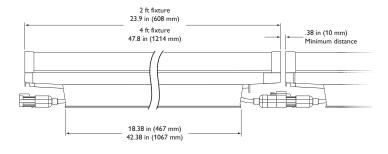
Item	Specification	2 ft (610 mm)	4 ft (1.2 m)	
Output	Viewing Angle	220°		
	On-Axis Candela	52 (4 ft fixture)		
	Lumens*	327 (4 ft fixture)		
	Lumen Maintenance†	50,000+ hours L50 @ 50° C (full output)		
	LED Channels	Red / Green / Blue		
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz via Data Enabler Pro		
	Power Consumption	10 W per foot maximum at full output, steady state		
Control	Interface	Data Enabler Pro (DMX / Ethernet)		
	Control System	Philips full range of controllers, including Video System Manager Pro, Light System Manager, and iPlayer 3, or third-party controllers		
	Dimensions (Height x Width x Depth)	$3.9 \times 23.9 \times 2.5$ in $(100 \times 606 \times 64 \text{ mm})$	3.9 × 47.8 × 2.5 in (100 × 1213 × 64 mm)	
	Weight	4.5 lb (2 kg)	9.3 lb (4.2 kg)	
	Housing	Sealed plastic and extruded aluminum		
	Lens	Translucent plastic		
Physical	Fixture Connections	Over-molded, integral male / female connectors		
ŕ	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage		
	Maximum Fixtures Per Data Enabler Pro	25	25	
	Humidity	0 – 95%, non-condensing		
Certification and Safety	Certification	UL / cUL, CE		
	Environment	Dry / Damp / Wet Location, IP66		

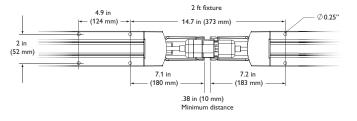
 $^{^{}st}$ Lumen measurement complies with IES LM-79-08 testing procedures.

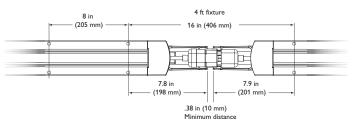
CE \dagger L50 = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/ lm-80-08.pdf for more information.

CHROMASIC POWERCORE CKTECHNOLOGY CHROMACORE*









Included in the box

iColor Accent MX Powercore fixture	
Strain relief fitting	
Washer	
Ear clamp	
Fixture terminator	
Installation Instructions	

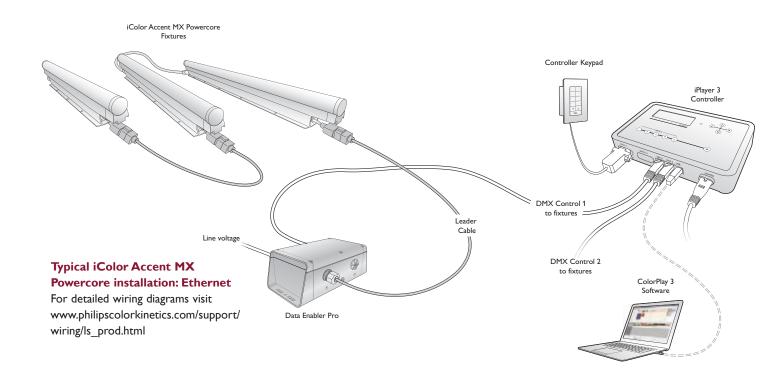
Fixtures and Accessories

iColor Accent MX Powercore is part of a complete system which includes fixtures and:

- · One or more Data Enabler Pro devices
- One Leader Cable to connect each Data Enabler Pro output to a series of fixtures
- Optional Jumper Cables to add space between fixtures in a series, if necessary
- Any Philips controller, including Video System Manager, Light System Manager 3, iPlayer 3, or any third-party controller

Item	Туре	Item Number	Philips 12NC
iColor Accent MX Powercore	2 ft	123-000018-00	910503701068
ICOIOT Accent MA Powercore	4 ft	123-000018-01	910503701069
Leader Cable with terminator and strain relief	50 ft (15.2 m)	108-000028-00	910503700086
	1 ft (305 mm)	108-000029-03	910503700087
lumanan Cabla	2 ft (610 mm)	108-000029-06	910503700090
Jumper Cable	5 ft (1.5 m)	108-000029-05	910503700089
	10 ft (3 m)	108-000029-04	910503700088
Data Enabler Pro	3/4 in / 1/2 in NPT (U.S. trade size conduit)	106-000004-00	910503701210
Data Enabler F1'0	PG21 / PG13 (metric size conduit)	106-000004-01	910503701211

Use Item Number when ordering in North America.



Installation

iColor Accent MX Powercore fixtures are ideally suited for creating long ribbons of color and color-changing effects. Variable node size offers the precision to display large-scale video, graphics, and intricately designed effects in a host of architectural, retail, and entertainment settings, including permanent building-covering displays.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate iColor Accent MX Powercore fixtures in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

Installing in Damp or Wet Locations

When installing in damp or wet locations, seal all fixture connections, power / data supplies, and junction boxes with electronics-grade RTV silicone sealant so that water or moisture cannot enter or accumulate in wiring compartments, cables, or other electrical parts. Use suitable outdoor-rated junction boxes when installing in damp or wet locations. Additionally, use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes.

Planning Your Installation

Because of their potential complexity, iColor Accent MX Powercore installations require upfront planning for configuring, positioning, and mounting fixtures. iColor Accent MX Powercore fixtures receive power and data from the Philips Data Enabler Pro. Planning includes understanding how to set fixtures' node size (pixel resolution), how to position fixtures in relation to Data Enabler Pro devices, the number of fixtures you can connect together in a single run, and whether you need to connect fixtures end-to-end or use jumper cables to add extra space between them. Planning for video displays involves additional considerations such as pixel pitch, minimum and maximum viewing distances, sampling, and display resolution.

All installations involve three main steps:

- 1. Create a lighting design plan and layout grid
- 2. Address and configure fixtures
- 3. Mount and test fixtures

If you're creating a simple installation with relatively few lights, or if you're running an Ethernet lighting network with an accessible Ethernet switch, you can install the lights first, then address and configure them after installation. For more complex installations, especially for installations that require fixtures to be hung in locations that are difficult to access or installations in which fixtures are not all visible from a single location, you may want to address fixtures in a staging area before installing them.

Understanding Node Size and Pixel Resolution

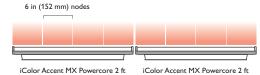
To allow a fine level of control, iColor Accent MX Powercore fixtures offer variable node size. A node is an individually controllable fixture segment of a certain length. iColor Accent MX Powercore nodes can be as large as the full length of the fixture or as small as 1.2 in (30 mm). A 4 ft (1.2 m) fixture, for instance, can act as one large node, or it can have as many as 40 nodes of 1.2 in (30 mm) each.

In architectural accenting and entertainment applications, you typically use larger node sizes for filling spaces or washing surfaces with a desired intensity of color-changing light. In video applications, the appropriate node size is determined by the maximum and minimum viewing distances and video resolution.

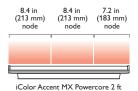
Refer to the iColor Accent MX Powercore Installation Instructions for specific warning and caution statements

Number of Nodes Per Fixture

Fixture Length	Nodes Per Fixture
2 ft (610 mm)	1 – 20
4 ft (1.2 m)	1 – 40



Node sizes that divide evenly into the total fixture length ensure consistency of presentation across fixtures. A consistent node size can be important for the proper display of video and other dynamic light show content.



Node sizes that do not divide evenly into the total fixture length leave an inconsistently sized node at the end of each fixture.

DMX or Ethernet Control?

iColor Accent MX Powercore fixtures can accept either DMX or Ethernet (KiNET) data input. Because of addressing limitations, DMX is appropriate for relatively simple installations, or for light shows in which multiple fixtures or fixture nodes operate in unison. Since a DMX universe consists of 512 addresses, the maximum number of individually addressable iColor Accent MX Powercore nodes in a DMX universe is 170 (170 \times 3 = 510). This limitation can determine the maximum number of fixtures per Data Enabler Pro in installations with dynamic color-changing light shows. For example, four 4 ft fixtures at the maximum number of nodes per fixture will exceed the entire range of unique DMX addresses in a universe, even though the Data Enabler Pro is capable of supporting up to 25 4 ft fixtures in a single run.

Because it is not subject to DMX addressing limitations, Ethernet is the preferred environment for intricate color-changing light shows and video displays calling for hundreds or thousands of nodes that must be controlled individually. In an Ethernet lighting network, each iColor Accent MX Powercore fixture effectively functions as its own universe, identified by the fixture's unique IP address.

A typical DMX installation uses a DMX controller such as iPlayer 3 or a third-party DMX controller. A typical Ethernet installation uses one or more Ethernet switches, and an Ethernet controller such as Light System Manager or Video System Manager Pro. You can connect a series of up to 25 iColor Accent MX Powercore fixtures to a single Data Enabler Pro.

Achieving Consistent Node Size

Consistent node size can be important for planning both video installations and dynamic light shows. Node sizes that divide evenly into a fixture's total length remain consistent across multiple fixtures installed end-to-end, regardless of fixture length.

Consistent Node Sizes

Node Size	Nodes Per 2 ft (610 mm) fixture	Nodes Per 4 ft (1.2 m) fixture
1.2 in (30 mm)	20	40
2.4 in (61 mm)	10	20
4.8 in (122 mm)	5	10
6 in (152 mm)	4	8
12 in (305 mm)	2	4
24 in (610 mm)	1	2

You can select node sizes other than those listed above, but they each create one shorter node at the end of each fixture. For example, assigning a node size of 8.4 in to a 2 ft (610 mm) fixture creates two nodes of 8.4 in (213 mm) and one node of 7.2 in (183 mm), because 8.4 + 8.4 + 7.2 = 24 in (213 + 213 + 183 = 610 mm, rounding up).

Additional Considerations for Video Displays

Along with the planning required for any iColor Accent MX Powercore installation, planning for video displays involves additional considerations such as pixel pitch, minimum and maximum viewing distances, sampling, and display resolution.

Determining Pixel Pitch and Viewing Distances for Video Displays

In a video display, each fixture node functions as a pixel in the display. Planning for low-resolution video displays involves designing a layout for your iColor Accent MX Powercore fixtures that determines the pixel sizes and places the pixels close enough together to accommodate video at acceptable minimum and maximum viewing distances.

Images on an LED video display appear to be sharper to the human eye as the distance to the display increases. Likewise, images appear less visible as the distance

decreases. The spacing between pixels, known as the *pixel pitch*, determines the minimum and maximum viewing distances for discernible video output.

Pixel pitch is measured center-to-center. In an iColor Accent MX Powercore fixture, where there may be no black space between pixels, you determine pixel pitch by measuring from the center of one node to the center of the next.

There are number of ways of adjusting pixel pitch using iColor Accent MX Powercore fixtures:

- You can separate pixels within a single fixture by configuring the video display so that every other fixture node is black.
- · You can separate pixels horizontally between fixtures by using jumper cables.
- You can separate pixels vertically between fixtures by spacing your fixture runs.

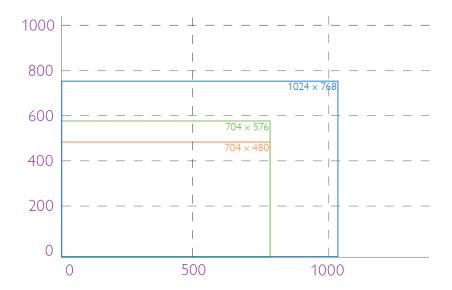
The following calculations and examples are general guidelines for determining minimum and maximum viewing distances, based on video displays using grids of evenly spaced pixels:

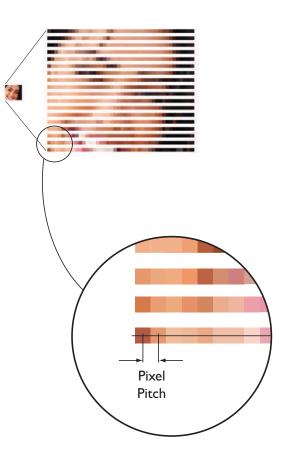
- To determine the minimum viewing distance, multiply the pixel pitch by 100 distance units. For example, if the pixel pitch is 50 mm, the minimum viewing distance is 5 m (16.4 ft).
- To determine the maximum viewing distance for discernible video, multiply the screen height by 20 distance units. For example, if the screen height is 20 m (65.6 ft), then the maximum viewing distance for recognizable video is 400 m (1312.3 ft).
- LED screens are visible beyond the maximum viewing distance for discernible video. To determine the maximum viewing distance that still creates visual impact, multiply the screen height by 50 units. For example, a screen 20 m (65.6 ft) high will continue to create visual impact at 1000 m (3280.8 ft).

Working with Video Display Resolutions

The resolution of an LED video display equals the total number of vertical and horizontal pixels — the greater the pixel count, the greater the resolution.

- The resolution of VSE digital video is 1024 x 768
- The resolution of PAL video is 704 x 576
- The resolution of NTSC video is 704 x 480

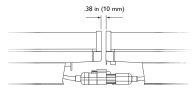




❖ VSE Pro, or Video System Engine Pro, is the hardware component of Video System Manager Pro, an integrated video controller from Philips Color Kinetics. Visit www.philipscolorkinetics.com/ls/controllers/vsmpro/ for complete information

So For designs where the acceptable level of discernible video may be more or less demanding, or for help with your specific installation, contact Philips Color Kinetics Applications Engineering Services for assistance

Minimum distance between fixtures



☼ Using jumper cables may decrease the number of fixtures you can connect in a run. For help calculating the number of fixtures your specific installation can support, download the Configuration Calculator from www.philipscolorkinetics.com/ support/install_tool/, or consult Philips Applications Engineering Services at support@colorkinetics.com. Reproducing a video signal with 1:1 pixel mapping on an LED display requires a substantial pixel count. For example, true NTSC video output requires 337,920 pixels, PAL output requires 405,504 pixels, and digital video output requires 786,432 pixels.

However, you can use a controller such as Philips Video System Manager Pro to reduce the required pixel count for any video format by sampling and distributing pixels from the source video to match your installation.

For example, if you retain the horizontal resolution of a digital video source (1024 lines wide), but sample every tenth line of pixels vertically (76 lines high instead of 768 lines), you can retain the correct aspect ratio while exponentially reducing the pixel count. From a distance, even with only 76 lines of vertical output, the human eye can still discern video images because the horizontal resolution is dense.

An installation using 1024 x 76 nodes would have a pixel count of 77,824 yet still display high-quality digital video output. This method is especially effective when creating an installation that covers a building which, by necessity, already has spacing between lines of video due to windows and other architectural features.

You can reduce pixel count either horizontally or vertically by using jumper cables to add space between iColor Accent MX Powercore fixtures. As in the above example, you would sample and distribute pixels from the source video to match the pixel size and spacing of your installation.

Create a Lighting Design Plan and Layout Grid

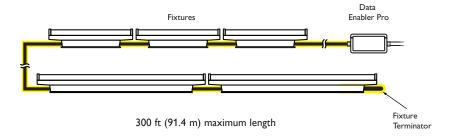
Even for relatively simple installations, it's good practice to create a lighting design plan that identifies your fixtures, records their IP addresses and node sizes, and identifies their locations and the locations of other required hardware. For complex installations displaying light shows with dynamic effects, and especially for Ethernet-based video displays, a detailed lighting design plan is essential.

A lighting design plan is typically an architectural diagram or other diagram that shows the physical layout of the installation, including the appropriate positioning and spacing of all required fixtures, power sources, controllers, and cables. Some professional video content companies specialize in creating video designs and supporting lighting design plans.

Keep the following considerations in mind when creating a lighting design plan and layout grid:

- 1. Determine the appropriate location of each Data Enabler Pro in relation to the fixtures, and of the fixtures in relation to each other.
 - You connect the first fixture in a series to a Data Enabler Pro with a 50 ft (15.2 m) Leader Cable. Refer to the Data Enabler Pro Installation Instructions or Product Guide for guidelines on configuring and positioning the Data Enabler Pro in relation to the controller or Ethernet switch.
- iColor Accent MX Powercore fixtures are installed in series. The in-line connectors allow end-to-end fixture connections for the best visual effects.
 When connected end-to-end, fixtures can be installed as close as .38 in (10 mm) apart. When you need to separate fixtures by more than this amount, use the 1 ft (305 mm). 2 ft (610 mm), 5 ft (1.5 m), or 10 ft (3 m) jumper cables.

 Each run of fixtures can include a maximum of 25 fixtures. Total run length, including fixtures, Leader Cable, and Jumper Cables, must not exceed 300 ft (91.4 m).



- 4. Connectors are gender-specific. Since the Leader Cable has a female connector, all lights in a run must be installed with their male connectors facing toward the Data Enabler Pro.
- 5. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, power supplies, fixtures, and leader and jumper cables.

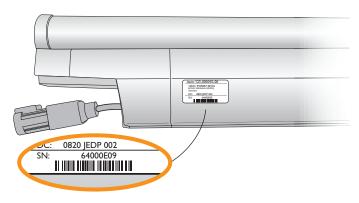
Start the Installation

- Install all Data Enabler Pro devices, including any interfaces with controllers.
 One Leader Cable is required to connect each run or series of fixtures to a Data Enabler Pro. Data Enabler Pro sends power and control signals to the fixtures over the Leader Cable.
- 2. Verify that all additional supporting equipment (switches, controllers) is in place.
- 3. If your installation calls for Jumper Cables to add space between fixtures, make sure they are available.
- 4. Ensure that all additional parts (#10 mounting screws suitable for the mounting surface, clamps, truss, terminators) and tools (screwdrivers, pincers or pliers) are available.

For complete instructions on how to wire the Data Enabler Pro, refer to the Data Enabler Pro Installation Guide or Product Guide. For sample wiring diagrams, visit www.philipscolorkinetics.com/support/wiring/ls_prod.html.

Unpack and Prepare Fixtures

- 1. Carefully inspect the box containing iColor Accent MX Powercore and the contents for any damage that may have occurred in transit.
- Each iColor Accent MX Powercore fixture has an onboard Ethernet switch and comes pre-programmed with a unique IP address. As you unpack the fixtures, record the IP addresses in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.



Included in the box

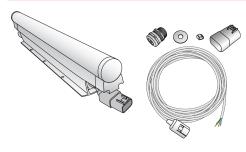
iColor Accent MX Powercore fixture

Strain relief fitting

Washer

Ear clamp

Installation Instructions

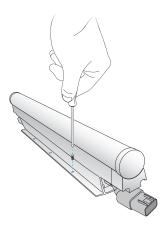


- 3. Assign each fixture to a position in the lighting design plan.
- 4. To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each light fixture's housing.

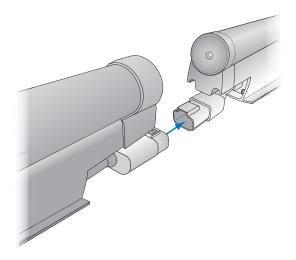
Mount and Connect Fixtures

Make sure the power is OFF before mounting and connecting iColor Accent MX Powercore fixtures.

1. Position the first fixture in a series and attach it with #10 mounting screws suitable for the mounting surface. Ensure that the male connector is in a position to receive data and power from the Leader Cable.



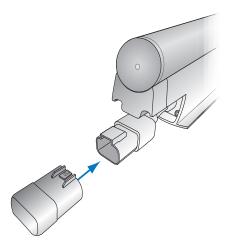
2. Position the next fixture in the series, matching the male connector end to the female connector of the previously mounted fixture. The flexible connector cables allow for up to 180° turns.



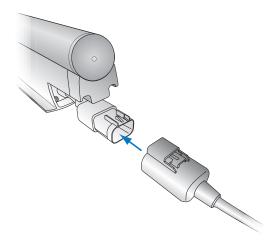
3. Continue mounting the fixtures, making power / data connections as you go, until all lights in the series are mounted.

Product Guide

4. Insert the provided fixture terminator into the last fixture in the series.

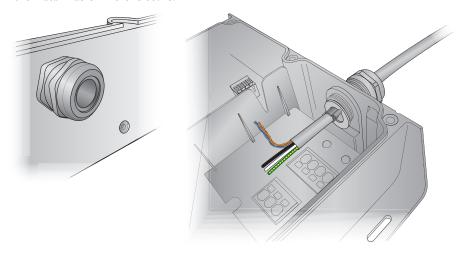


5. Connect the Leader Cable to the first fixture in the series.

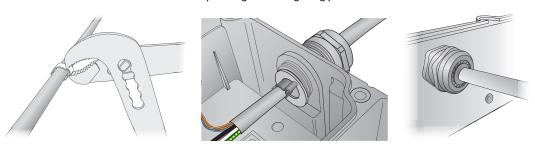


6. Make Data Enabler Pro connections:

- Remove the Data Enabler Pro cover.
- Attach a strain relief fitting to the Data Enabler Pro. Apply RTV silicone
 between fitting and enclosure, and insert the Leader Cable through strain relief
 fitting, washer, and ear clamp. Route the Leader Cable to its final destination in
 the Data Enabler Pro enclosure.

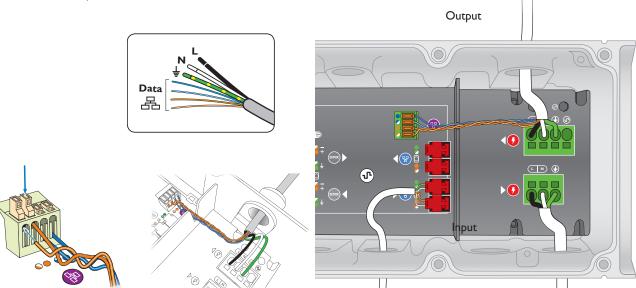


• Position the ear clamp near the opening. Crimp both ears of the ear clamp uniformly around the Leader Cable with pincers or pliers. Tighten the strain relief nut, compressing the fitting snugly around the Leader Cable.



Refer to the Data Enabler Pro Product Guide for comprehensive installation and configuration instructions. You can view or download the guide from www.philipscolorkinetics.com/ls/pds/dataenablerpro

 Inside the Data Enabler Pro housing, connect the Leader Cable's data wires to the 4-wire IDC terminal block, and the line, neutral, and ground wires to the fixture cable 4-wire terminal block.



Address and Configure the Fixtures

Make sure the power is ON before addressing and configuring fixtures.

iColor Accent MX Powercore fixtures have variable node sizes, ranging from 1.2 in (30 mm) to the entire length of the fixture. Each node uses three consecutive DMX addresses, one for the red LED channel, one for the green channel, and one for the blue channel. A single iColor Accent MX Powercore fixture, therefore, uses from 3 to 120 DMX addresses, depending on configuration.

iColor Accent MX Powercore nodes are addressed using *light numbers*. A light number corresponds to three sequential DMX addresses. Light number 1 corresponds to DMX addresses 1, 2, and, 3; light number 2 corresponds to DMX addresses 4, 5, and 6; light number 3 corresponds to DMX addresses 7, 8, and 9; and so on. Since a DMX universe consists of 512 DMX addresses, there are 170 light numbers per universe (170 \times 3 = 510, with two DMX addresses left over).

iColor Accent MX Powercore fixture nodes are automatically assigned light numbers consecutively, beginning with the fixture's starting light number. For instance, if you set a 2 ft fixture to have 20 1.2 in nodes and light number 22, the fixture is

automatically assigned 60 DMX addresses, 64 - 123 (light numbers 22 - 41). If you set a 4 ft fixture to have one 4 ft node and starting light number 134, the fixture is automatically assigned three DMX addresses, 400 - 402.

iColor Accent MX Powercore fixtures are factory-configured with a starting light number of 1 and the largest node size — that is, each fixture is configured to use DMX addresses 1, 2, and 3 and to display one solid color at a time. For light show designs that display the same color simultaneously on all fixture nodes, no addressing is necessary. For designs that show different colors on different nodes simultaneously, you must assign a unique set of DMX addresses to each fixture node.

Because it eliminates the addressing limitations of DMX, Ethernet is preferred for lighting installations that display intricate effects requiring hundreds or thousands of individually addressable nodes. In Ethernet networks, each fixture is identified by a unique IP address and effectively functions as its own DMX universe. As long all iColor Accent MX Powercore IP addresses are unique within an installation, the set of DMX addresses assigned to a given fixture is unique within the installation.

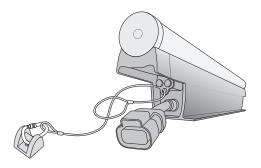
- · In DMX installations, you can set fixture node size (pixel resolution) and starting light number using QuickPlay Pro with a computer connected directly to a Data Enabler Pro device using a standard Ethernet cable or Ethernet crossover cable.
- · In Ethernet installations, you can address and configure fixtures using QuickPlay Pro with a computer connected to an Ethernet switch in your lighting network. QuickPlay Pro automatically discovers all iColor Accent MX Powercore fixtures for quick configuration. Alternatively, you can discover and address fixtures using an Ethernet controller such as Light System Manager or Video System Manager Pro.

For complete details on addressing and configuring iColor Accent MX Powercore fixtures, refer to the Addressing and Configuration Guide.

Attach Safety Cable (Optional)

When dictated by local or state code or advised by a structural engineer, attach a safety cable to the iColor Accent MX Powercore fixture housing and tether it to a secure anchor point.

- 1. Thread a safety cable through the fixture housing as shown.
- 2. Attach the safety cable to the mounting surface using a method that follows the code or engineer's requirements.



You can download QuickPlay Pro from www.philipscolorkinetics.com/support/ addressing/

Safety cable minimum requirements

Material	304 or 316 Stainless Steel
Size	1/8 in (3.2 mm) nominal diameter. Minimum break load must be greater than 2,100 lb (953 kg).



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