

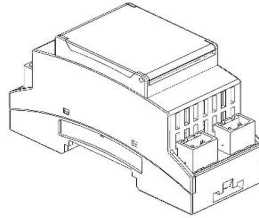
# ILC-200bw™ Intelligent Lighting Controller

## CS-Bus™ LED Controller for .001% flicker-free dimming and Network Operation

*Mono LED Lighting controller*

*Networkable System Enables up to 65,025 CS-Bus Controllers to be Networked (thousand of miles of LEDs)*

*Gamma-corrected low-end dimming*



*Licensed Technology  
from Philips Electronics*

*Small Form Factor Device can be  
Integrated Easily*

*Sophisticated Programmable  
Software*

### Product Description

#### Background

The Intelligent Lighting Controller (ILC-200bw™) is an ingenious state-of-the art networkable controller for bi-white (dual color) Converging Systems FLLA™ luminaires. Unlike traditional LED lighting controllers which simply activate and in some cases dim LED elements to 20% or similar levels **with** flicker, the ILC-200bw™ allows supported LED elements to be dimmed to .001% reliably without flicker and specific dimming levels to be saved and recalled from memory without expensive accessories or complex user interfaces. For accurate low-end dimming, an embedded photometric processor (previously used to generate color printer output within laser printers), permits an expanded low-end dimming range to be achieved (gamma correction) and any dimming level to be easily selected with the simple press of a button and without traditional flicker present with most other systems.

#### Operation

One or more ILC-200bw™ controllers (max 65,025) can be networked to control nearly an unlimited number of LED lighting arrays. A family of Decora®-style keypads are available to select colors as well as function as simple "exit" control devices. Automation systems and 3rd party lighting panels can operate ILC-200 networks up to 4000 feet away (an unlimited distance using the internet).

#### Easy Setup and Configuration

The controller's incredibly small size enables the unit to be positioned seamlessly within a soffit, equipment rack, J-Box or control panel. A built-in microprocessor allows easy system programming while the unique CS-Bus™ discovery technology allows one or more keypads to be quickly interfaced to control lighting functions and scenes. Nearly all popular building and home automation systems have developed customized device drivers which enable simple to sophisticated control of scenes and functions. In addition, a family of CS-Bus™ interface adapters are available which enable ILC-200bw™ LED lighting controllers to be connected to nearly any type system using bi-directional IP or serial connectivity!

#### Applications

The system is designed to operate either as a standalone device or within an integrated system controlling rigid or flexible strips of LEDs (mono color or full color). Typical applications include backlighting projection screens, soffit lighting, navigational/accessibility lighting, decorative ambient, focal point, and object of interest illumination. Bi-directional feedback enables automation systems to indicate any actual lighting states selected (on touchscreens and iPads®). The ILC-200m™ allows you to be the designer for LED lighting.

### Features

- CS-Bus™ Control Accessory
- Built-in gamma-corrected color computer selects any color hue quickly
- Compatible with nearly any type of interface (dry contact, STI, 0-10v dimmable ballast controllers, serial and Internet Protocol)
- .001% low-end dimming without flicker (can be reliably used in environments with 3D projection/TV systems)
- Enhance functionality of popular automation systems
- Low-Voltage system does not require a professional electrician for installation
- Can be triggered by compatible motor controllers (useful on projection screens and window covering products)
- Can interconnect to controllers and control panels up to 4000 feet away
- Wide range of network control options available

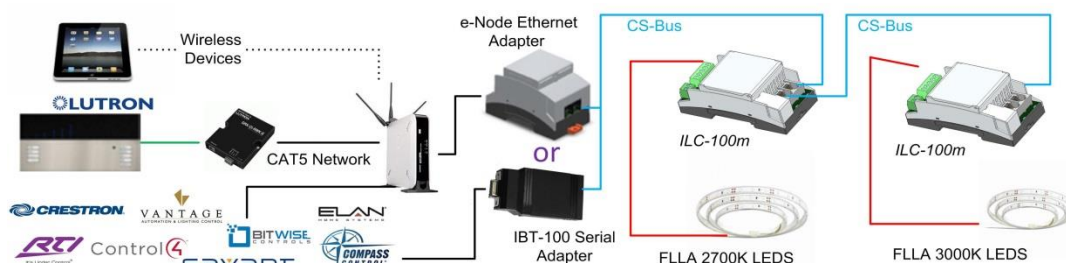
## Specifications

Feature	Detail
LED Control	Supports rigid or flexible CSI FLLA LED strips requiring 12V DC to 28V DC current
Communication	CS-Bus (3-wire bus). On-board powered RJ-25 connector (for powering keypads) and one RJ-25 connector for additional CS-Bus™ connections
Current Sensing	Built-in current sensing circuitry automatically shuts off system in case of faults or shorts
Addressability	-Individual addressability for up to 65,025 Controllers -Zone Limits—254 Controllers per zone -System Limits—16.3m Controllers using bridge (e-Node) interconnects
Failsafe I/O	Unique circuitry permits failsafe operation for all units on the CS-Bus even if one unit fails or shuts down
Hardware Compatibility	A built-in connector allows keypads to be easily integrated using Category II wiring
Software Compatibility	-VPAD (virtual keypad) PC application -Any third-party serial communication utility -Lighting panels from Lutron & Vantage -Automation systems from Crestron, Control 4, Elan Home Systems, Leviton/Bitwise, RTI, Savant and others
IR Control	On-board CS-Bus™ connector enables low-cost CS-Bus keypads with IR receiver to be connected for IR operation
RS-232-C Control	Optional IBT-100™ serial adapter plugs anywhere onto CS-Bus™ network up to 4000 feet from ILC-400™ Controller

Feature	Detail
Ethernet Control	Optional e-Node™ adapter plugs anywhere onto CS-Bus™ network and permits web-page control through smart phones and control by virtually all 3 <sup>rd</sup> party automation and lighting systems
Power Requirements	Power supply should be selected depending upon voltage of LED elements selected. Controller requires minimum 5V DC@40 ma. Maximum voltage 28V DC. Maximum current input 6.67 amps
Load Rating	Maximum current output 4.17 amps. For 24v DC LED devices, typically 20' for standard density LEDs can be supported.
Size	3.53" (89.66mm) x 1.40" (35.56mm) x 2.39" (60.71mm) (not including extendable Din lugs)
Enclosure	Low-profile DIM-rail mounting enclosure with available mounting tabs for non-DIN rail installations
Weight	2.0 oz. (91 gm)
LED Compatibility	Single Color Converging Systems FLLA LEDs (choice of various color temperatures): 12V DC to 28V DC (3 wire)
Compliance	UL Listed (UL File 2108). CSA (C22.2#9.0), RoHS, PCB UL-94VO certified, Rated to work with UL rated Category 2 power supplies,
Manufacturing	Made in the USA

## Overview

### Wiring



### Application

The ILC- x00 family of LED controllers and associated LED luminaires of single color, full color and adjustable color temperature are ideal for a variety of applications. They are widely used in a variety of application areas where **precise color settings, 3rd-party lighting and automation control, networkable functionality, expandability** and **bi-directional feedback** are demanded. Your application may be easily adapted from our core technology. Contact us for more information.

- Backlighting Projection Screens
- Soffit and Alcove Lighting
- Navigational/Exit Lighting
- Object of Interest Illumination
- Motor Automation
- Cabinet Lighting
- Marine/Boat applications
- Energy savings applications
- Heat sensitive application
- Enhanced functionality for Lighting Panels
- Space saving requirement
- Stair and Stumble-proof Applications