



Configuring Prizm+ Enhanced Ethernet for use with Collins Venue Systems

Overview

This guide details the steps to power on and configure the Prizm Aircraft Lighting system for integration with the Collins Venue cabin management system using a wired network connection. The process assumes that aircraft wiring for the Prizm system is complete and that a tail-specific Venue System Definition Document (SDD) with channel and location identifiers is available.

Initial Setup

1. Prepare for Power-On

- If multiple controllers are present, power on only one controller at a time for configuration.
- The default IP address for all Prizm controllers is 172.20.10.42. If more than one controller is installed, then the additional controllers must be assigned unique IP addresses.
(Refer to the Venue SDD "Connectivity" section for expected IP address settings.)

2. Access the Admin Interface

- Option 1: Direct Network Access
 - Connect your laptop to the cabin Wi-Fi router.
 - If necessary, configure the wireless adapter on the maintenance PC with a static IP address starting with 172.20.10, for example, 172.20.10.100.
 - Navigate to `http://172.20.10.42/admin` in a web browser.
- Option 2: Temporary Wireless Access
 - Attach an RP-SMA antenna to the Prizm controller.
 - Leave the J1 connector unplugged to enable the wireless adapter.
 - Connect to the "LED Lighting" Wi-Fi network and navigate to `http://192.168.42.1/admin`.

3. Login

- Username: PRIZM
- Password: Lighting



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Prizm LED Lighting Admin System Setup

The **Prizm LED Lighting System** can be configured by clicking on tabs below. Each tab contains instructions and settings that can be configured to best suit your application. Once all settings have been made, click the **Save ALL Settings** button.

Tooltips are provide throughout this *Admin System Setup* utility to assist in the configuration process. Tooltips can be enabled and disabled using the *Enable Automatic Tooltips* switch.

Enable Automatic Tooltips: ☐ On

Load Example Configuration

Load Empty Configuration

Undo Configuration Changes

Backup Configuration

Restore Configuration

Save ALL Settings and Reinitialize

System Settings

Features

- Prizm+ Enhanced Ethernet Control
- NVIS Compatibility Mode
- Legacy SVS Support

Unlock Additional Features

Configuration Identification

Project Nu... Project Number

PWM Limitation

Maximum PWM Brightness:

100

Input Settings

Network Configuration

Wired (eth0):

IP Address

Gateway

Subnet Mask

Active Address(es): 172.20.10.42

Wireless (wlan0):

IP Address

Active Address(es): 192.168.42.1

Output Settings

Multiple Unit Configuration

IP Address(es): +

Wireless Client Mode

SSID:

App Settings

Bright/Dim Behavior

Increments: 10

Default On Brightness: 1

Conditional Behaviors

Bright-to-Off: 10

Bright-to-On: 9

Dim-to-Off: 1

Dim-to-On: OFF

Advanced Settings

This system has been up 28 min
CPU temperature: 102°F

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eth0: 172.20.10.42
wlan0: 192.168.42.1

Figure 1: Admin System Setup Utility Interface

Configuration Steps

4. Clear Default Settings

- In the Admin System Setup interface, click **Load Empty Configuration** to remove default settings.

5. Enable Enhanced Ethernet Control

- Verify the "Prizm+ Enhanced Ethernet Control" feature is unlocked:
 - Unlocked:** Green circle with a check mark.
 - Locked:** Red circle with a padlock.
- If locked, click **Unlock Additional Features** and request an unlock code from Prizm Aircraft Products using the request code displayed. Enter the provided code to enable the feature.



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Unlock Additional Features

Feature unlock codes can be obtained from *Prizm Aircraft Products*. Unlock codes are issued in response to specific request codes. Please verify that the unlock code being entered is intended for the request code displayed below.

Request Code:

2507-D318-EC1D-ECCA Copy to Clipboard

Unlock Code:

DAF6-2C42-26B2-3B34 Submit Unlock Code

Cancel

Figure 2: Feature Unlock

6. Set IP Address

- Reference the SDD for the IP address assignments, typically the following scheme is used:
 - Controller 1: 172.20.10.42
 - Controller 2: 172.20.10.43, etc.
- Set the gateway to 172.20.10.1 and the subnet mask to 255.255.255.0.
- For multi-controller setups, add the IP addresses of other controllers (excluding the current one) under the **Multiple Unit Configuration** section.

The figure shows two side-by-side configuration panels for Network and Multiple Unit settings.

Left Panel:

- Network Configuration:**
 - Wired (eth0):**
 - IP Address: 172.20.10.42
 - Subnet Mask: 172.20.10.1
 - Gateway: 255.255.255.0
 - Active Address(es): 172.20.10.42
 - Wireless (wlan0):**
 - IP Address: (empty)
 - Active Address(es): 192.168.42.1
- Multiple Unit Configuration:**
 - IP Address(es): 172.20.10.43
 - Wireless Client Mode: ☐ Off
 - SSID: (empty)

Right Panel:

- Network Configuration:**
 - Wired (eth0):**
 - IP Address: 172.20.10.43
 - Subnet Mask: 172.20.10.1
 - Gateway: 255.255.255.0
 - Active Address(es): 172.20.10.42
 - Wireless (wlan0):**
 - IP Address: (empty)
 - Active Address(es): 192.168.42.1
- Multiple Unit Configuration:**
 - IP Address(es): 172.20.10.42
 - Wireless Client Mode: ☐ Off
 - SSID: (empty)

Figure 3: Network Configuration Settings shown for Two Controllers in a Multiple Unit Configuration

7. Save Settings

- Click **Save ALL Settings and Reinitialize** to commit changes.

Venue Integration

8. Assign Venue Designators

- Navigate to **Output Settings > Location Settings** and open the Location Settings interface in a new window.
- Click **Load Empty Configuration** to clear prior configurations.



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- In the Venue SDD, locate the Prizm Appendix that provides the mapping between output channels and Venue IDs.
- Use the SDD to create location cards for each lighting channel:
 - Add cards using the + button.
 - Drag channels to corresponding cards, enter names, and select Venue ID designators from the dropdown menu.
 - The location name field can be set to anything and is for your reference only. The only critical configuration values are the channel numbers and Venue IDs.
 - If any designators are missing from the dropdown menus, verify that the Venue system is fully initialized, and then refresh the Location Settings page. Any tail-specific designators will be added to the dropdown menus once they have been seen by the Prizm controller at least once.
- Save the configuration and return to the Admin Setup interface.

Location Settings

Locations Configuration: Location Cards can be dragged between Containers, and individual Channels can be dragged between Location Cards. Location Cards that are not used can be placed in the Unused Locations Container, and Channels that are not used can be placed on the Unused Channels Card. The text field at the top of each Location Card allows a name to be entered that will show up within the app interface for that Location. (Short, concise names work best.) The buttons at the bottom of each Location Card allow for including that location in the VIP, cup holder, floor, or startup pseudo-groups. The slider represents the location-specific PWM limit.

Undo Configuration Changes
 Load Empty Configuration
 Load Example Configuration

Cancel, discard changes, and return to Admin Setup.
 Save locations configuration data, close window, and return to Admin Setup

• **Note:** Channels 1-4 are white during system boot based on the state of the boot lighting strap pins on the J1 connector. These channels have been marked with an asterisk (*) below.
 • **Note:** The locations designated as startup lighting are white after system boot. All others are turned off.

GROUP 1 **GROUP 2** **GROUP 3** **GROUP 4** **Unused Locations**

LOCATION 1 Entry Floor **CH1*** **LOCATION 2** Fwd Lav Effect **CH2*** forwardlavatory.Wash
 VIP cup floor startup 100

LOCATION 3 Galley Effect **LOCATION 4** Galley Work

Location Name
 Channel Number
 Venue ID Designator

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Figure 4: Location Settings Interface

9. Finalize Setup

- Power down the controller.
- If using the Prizm controller's integrated wireless network, remove the antenna and reconnect the J1 connector.
- Repeat steps for additional controllers, ensuring each is configured before powering on all controllers simultaneously.

10. Functional Testing

- Perform a functional test to verify lighting control.