



Fresco Operation, Programming and Maintenance Manual

Project Name:
Project Location:
Acuity Agency:
Order #:
PO #:
Project ID:
Date:

Controls Tech Support:

1-800-535-2465 - option 1: nLight; option 2: SSI; option 3: Fresco; option 4: Synergy; option 5: LC&D/Bluebox; option 6 ROAM

To preschedule a call with tech support (providing a 4 hour business lead time) go to the following link: <http://www.acuitybrands.com/resources/schedule-support-request>

Additional Technical Literature:

<https://www.acuitybrands.com/products/controls/fresco>

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- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service should be performed by a qualified licensed electrician.
- Maintenance should be performed by qualified person(s) familiar with the products' construction and operation and any hazards involved. Regular maintenance programs are recommended.
- DO NOT INSTALL DAMAGED PRODUCT! This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, this matter should be referred to Acuity Brands Lighting, Inc.

- WARNING RISK OF ELECTRIC SHOCK**
- Disconnect or turn off power before installation or servicing.
 - Verify that supply voltage is correct by comparing it with the product information.
 - Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
 - All wiring connections should be capped with UL approved recognized wire connectors.
 - All unused connector openings must be capped

- WARNING RISK OF BURN OR FIRE**
- Do not exceed maximum wattage, ratings, or published operating conditions of product.
 - Do not overload.
 - Follow all manufacturer's warnings, recommendations and restrictions to ensure proper operation of product.

- WARNING RISK OF INJURY**
- Wear gloves and safety glasses at all times when installing, servicing or performing maintenance.

- CAUTION: RISK OF PRODUCT DAMAGE**
- Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment must be worn during all installation or servicing of the unit.
 - Do not touch individual electrical components as this can cause ESD and affect product performance.
 - Do not stretch or use cable sets that are too short or are of insufficient length.
 - Do not tamper with contacts.
 - Do not modify the product.
 - Do not change or alter internal wiring or installation circuitry.
 - Do not use product for anything other than its intended use.
 - If installing wiring systems: Materials and component parts of a manufacturing wiring system as described in Article 604 of the National Electric Code and Underwriters Laboratories Standard for Safety #183 MUST BE installed

Failure to follow any of these instructions could void product warranties. For a complete listing of product Terms and Conditions, please visit www.acuitybrands.com.

Fresco™ Touchscreen Quick-Start Guide

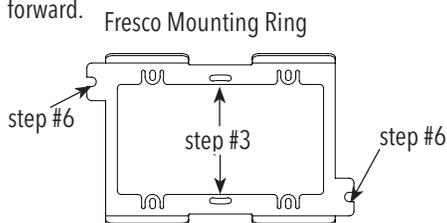
Overview

Fresco is a touchscreen lighting controller. Powered by 24 VDC, Fresco controls nLight® devices, DMX/RDM devices and networks with other Fresco components including touchscreens, wallstations and lighting management panels. Follow these simple steps to install and power the Fresco touchscreen. We are available to help via phone or on site. Contact us now: 800-535-2465

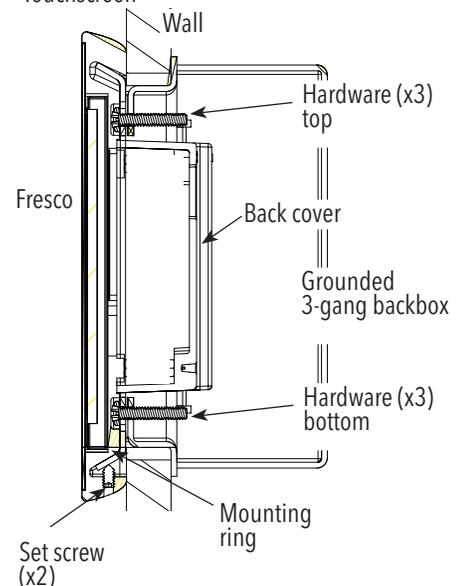


Mounting (Box Prep)

1. Install a grounded 3-gang backbox.
2. Align mounting ring (provided) with 3-gang backbox (not provided).
3. Level mounting ring.
4. Tighten the 2 captive screws on center mounting holes.
5. Optional: Use additional mounting screws if ring holes align with backbox holes (Note: if backbox is level holes will align. Only 2 screws are required for proper fastening).
6. Optional: If mounting ring is not flush to the surface of the wall, use 2 drywall screws (not provided) to secure the mounting ring to the finished wall and use mounting screws to pull the backbox forward.



Section of a Properly Installed Fresco Touchscreen



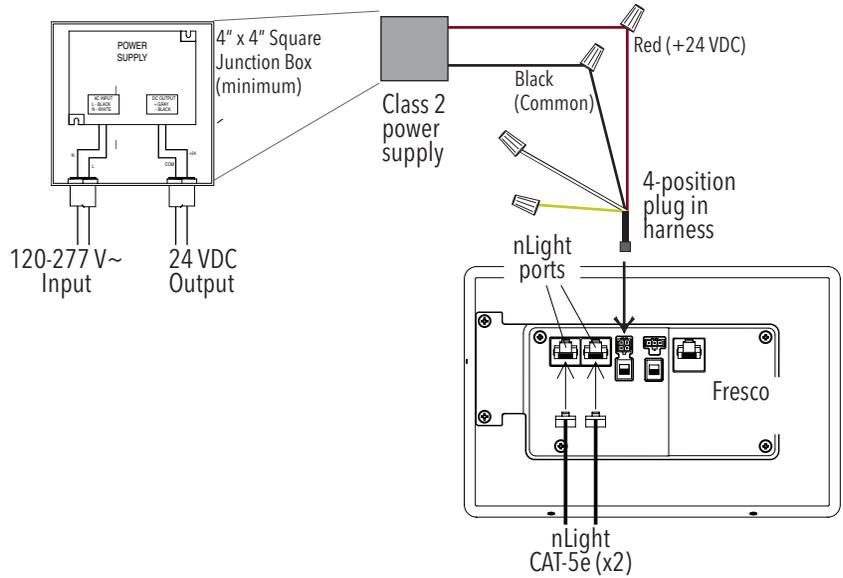
Securing the Station

1. Hang Fresco from the top flanges of the mounting ring once all wiring is completed.
2. Lift slightly and push Fresco flush to wall.
3. Tighten 2 set screws on the bottom of the Fresco using 1/16" hex wrench (provided).

Power Supply

A Class 2 power supply is provided with Fresco.

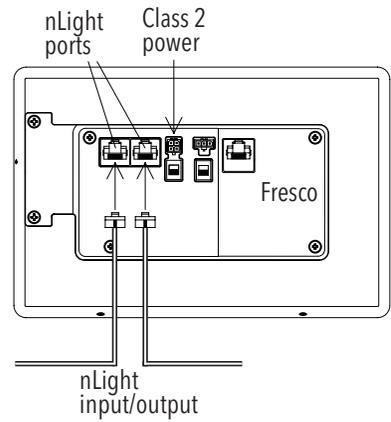
1. Install power supply in grounded metal box.
2. Route Class 2 conductors to Fresco backbox.
3. Connect Class 2 power to Fresco's 4-wire connector:
 - Red: +24 VDC
 - Black: Common



Connecting nLight® Devices

- 2 nLight ports support daisy chaining. Fresco may be located in any position on the nLight link for proper operation.
- Fresco provides 40mA per output to power connected nLight devices.
- Follow nLight design rules to determine if additional power supplies are required.

Note: Fresco supports a maximum of 128 nLight devices.



Connecting DMX/RDM Devices

- Use provided 3-position harness.
- Color & signals:
 - Black: Common
 - White with black stripe: DMX Data+
 - Yellow with black stripe: DMX Data -
- Connect DMX shield to ground at one point in the DMX network; preferably on the grounded backbox of the Fresco touchscreen.
- DMX network connects Fresco stations to lighting management panels (LMP)/

NOTES

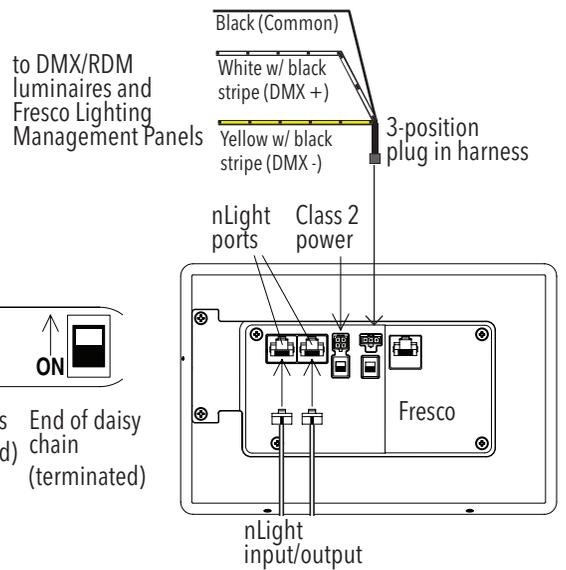
- Follow DMX/RDM wiring standards, use RS-485 compatible cable or Category cable (CAT-5/-5e/-6).
- DMX/RDM must be terminated at the start & end and daisy chained.

DMX/RDM pin out with XLR

XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4, 5	No connection

DMX/RDM pin out with CAT-5/-5e/-6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3,4,5,6,8	various	No connection
7	white/brown	Common



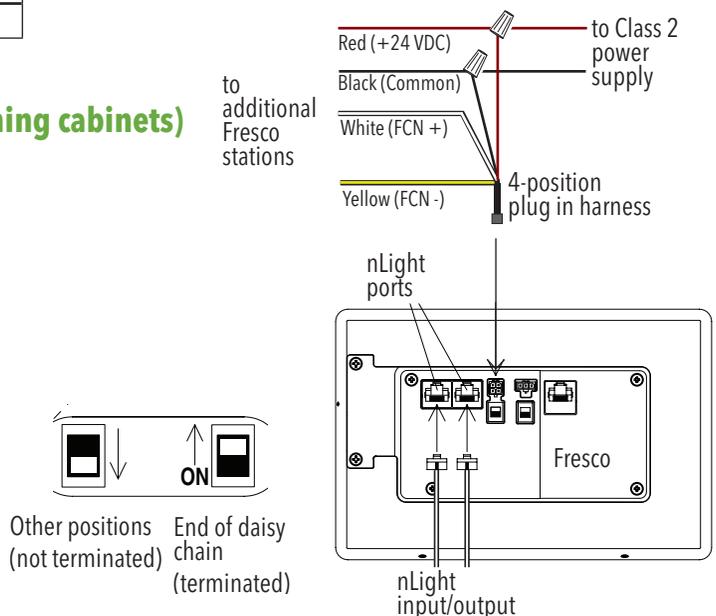
Other positions (not terminated) End of daisy chain (terminated)

Connecting Additional Frescos & LMP Devices (dimming cabinets)

- Use provided 4-position harness.
- Color & signals:
 - Red: +24 VDC
 - Black: Common
 - White: FCN Data+
 - Yellow: FCN Data -

NOTES

- FCN must be daisy chained.
- FCN must be terminated at the start & end of the daisy chain.



Other positions (not terminated) End of daisy chain (terminated)

AcuityControls.

Fresco™

express yourself through light



User Guide

Based on FW 103.18

Lights On

Overview

“Lights On” is what you will see when the room is off and when pressed will activate the first lighting scene.

1. This screen is displayed when the room lighting is OFF, and the screen IR proximity sensor has been activated
2. If the LIGHTS ON screen is not pressed, it will dim and then go dark after a set period of time. This timeout can be adjusted within the MENU>SCREEN setup



3. The FRESCO logo page will display when the screen goes into time out.
4. The LIGHTS OUT and/or the FRESCO logo screen settings can be set to “not display” if desired. This change is made within the MENU>SCREEN setup



Home Screen

Overview

Turn room lighting on/off, activate scenes, master raise/lower lighting level, access to lighting zones, menu access for system setup, and current date/time

1. Controller name is unique and modified within MENU settings
2. Scrollable scene bar displays up to 6 programmable scenes per page. Up to 36 scenes can be created per fresco station
3. Master control room on/off state, raise/lower current scene, and access additional lighting zones (MORE)
4. MENU accesses system setup
5. Date/Time displayed and setup within MENU

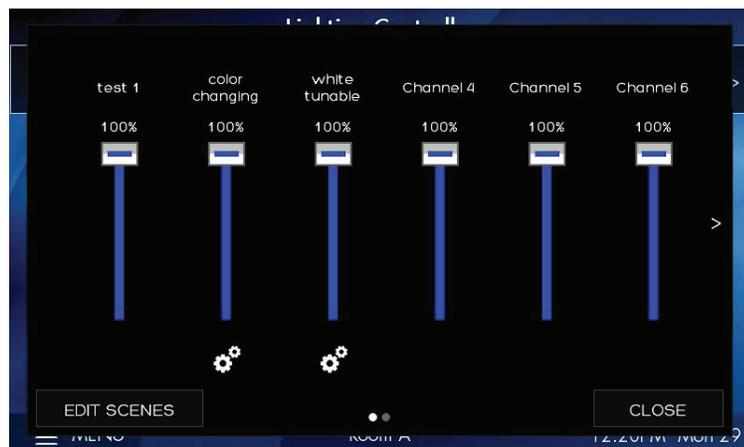


Lighting Channels

Overview

Control up to 36 individual zones of lighting using the sliders or rocker switch. Adjustments such as intensity, color and color temperature are also controllable here

1. Channels control individual areas of lighting. These can control zones or multiple zones (Groups) of lighting. Groups can be created within the system menu setup. The channel names can be personalized within the system setup settings
2. The icon (Attribute Control) below the channel intensity slider indicates additional control of DMX lighting such as color and color temperature
3. EDIT SCENES accesses scene setup and configuration. Once created scenes are displayed/accessed from the home screen

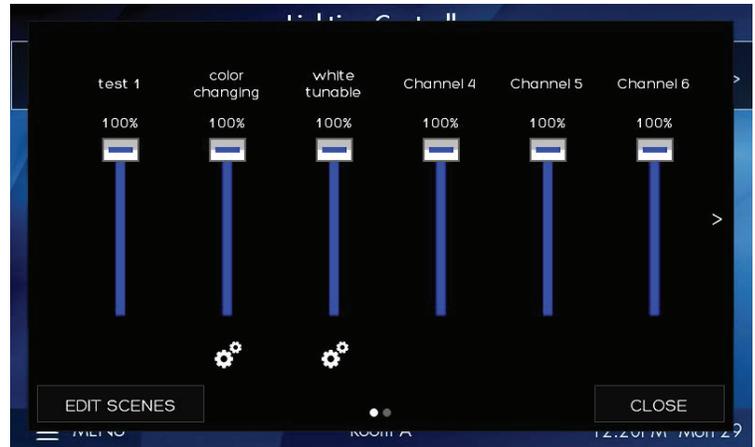


Scene Creation

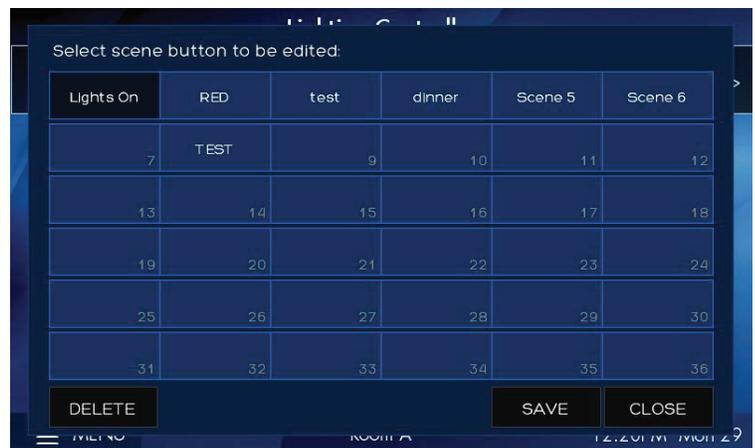
Overview

Each fresco station supports up to 36 lighting scenes. Scenes can be made up of multiple lighting channels,

1. Adjust individual channel intensity levels
2. If available adjust color and/or color temperature setting using by pressing the attribute icon
3. After making adjustments press EDIT SCENES



1. Assign new look to one of 36 new scenes or overwrite existing scene

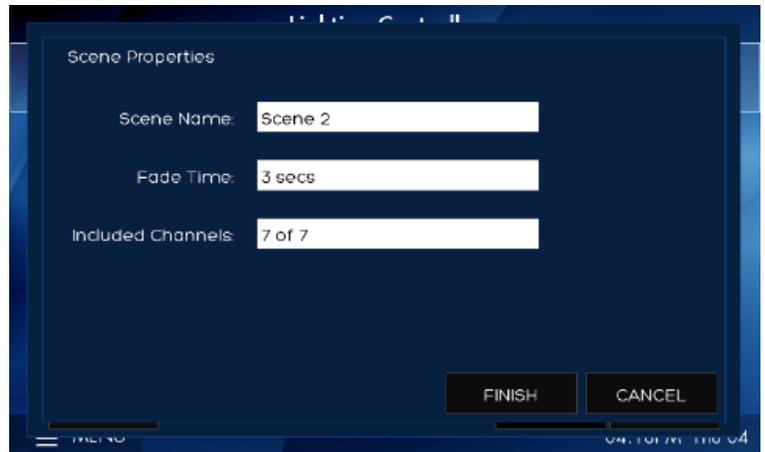


Scene Creation (continued)

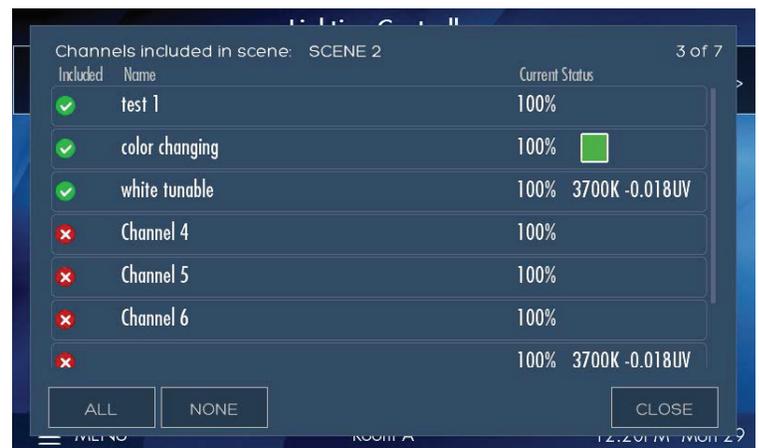
Overview

Each fresco station supports up to 36 lighting scenes. Scenes can be made up of multiple lighting channels,

1. Create a new SCENE NAME
2. Set the transition time of the scene with FADE TIME
3. INCLUDED CHANNELS allows specific lighting channels to be included/excluded within the scene



1. Choose which lighting channels will be included within the new scene
2. When finished press CLOSE



Home Screen Menu

Overview

Menu provides access to system settings. Setup user profiles and access control, system configuration, and hardware setup

1. USERS establishes the profiles used for secured system access
2. SCHEDULING is currently not implemented in this firmware version
3. SETUP accesses system configuration settings
4. DIAGNOSTIC displays system technical data
5. LOG IN to access system controls as setup within USERS



Menu > Users

Overview

User profiles can be setup to establish secured access to system controls

1. LOG IN to access system control and setup
2. If any buttons within the MENU are "greyed out" it indicates limited system access



1. Default administrator username is ACUITY and password is 1234
2. Once logged in as administrator return to MENU>USERS to setup user profiles



Menu > Users (continued)

Overview

User profiles can be setup to establish secured access to system controls

1. 3 system access profiles are capable for setup
 - A. Administrator- Full system access to control and Configuration. Allows system profiles to be created
 - B. Configure- Full system access to control and configuration
 - C. Operate- Access to lighting controls only. No ability to create/modify scenes or access system configuration. Login is required to access fresco station
2. ADD additional profiles for system access
3. REMOVE a user from the system
4. EDIT an existing profile



Menu > Scheduling and Diagnostic

Overview

Scheduling stores system timeclock control and scheduled lighting events. Diagnostic accesses system technical data that is used for troubleshooting system performance

1. Setting up SCHEDULING from the station is not currently supported. All schedules must be imported using the Fresco Studio PC tool
2. DIAGNOSTIC is only needed for reference when needing to troubleshoot system performance



Menu > Setup

Overview

Setup accesses system configuration

1. SETUP allows access to system configuration for:
 - A. System firmware
 - B. Screen adjustments
 - C. Network IP settings
 - D. Lighting channels
 - E. nLight devices
 - F. DMX fixtures
 - G. Lighting groups



Setup > About

Overview

System information including device serial number, operating firmware, network settings, and system reset

1. Fresco firmware version
2. Station serial number
3. Network/IP settings
4. nLight firmware version
5. SET TIME sets date and time for station
6. RESET is for system reboot which does not erase any stored system data

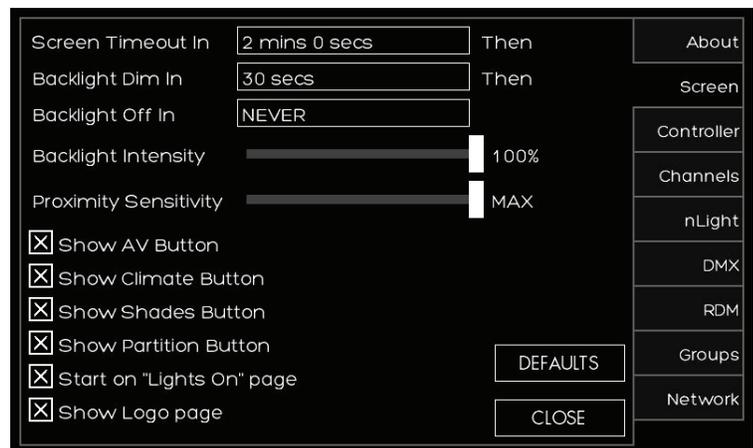


Setup > Screen

Overview

Modify screen settings and display behavior

1. The screen behavior can be set to react in 3 steps when the room is active. These settings can be set to a timeframe (hours, minutes, seconds, or never)
 - A. First the SCREEN TIMEOUT IN will send the display to a logo screen
 - B. Next the BACKLIGHT DIM IN will dim the logo screen
 - C. Finally the screen will go dark with BACKLIGHT OFF IN
2. BACKLIGHT INTENSITY adjust the overall intensity of the screen during normal use
3. PROXIMITY SENSITIVITY adjust the sensitivity of the station IR sensor that awakes the station when the screen is dark
4. SHOW buttons display control buttons on the home screen for 3rd party system control. These are not currently supported
5. START ON "LIGHTS ON" PAGE will make this page the primary screen for turning lights on in the space
6. SHOW LOGO PAGE will display if the screen is setup to timeout. DEFAULTS sets all screen behavior settings to factory defaults

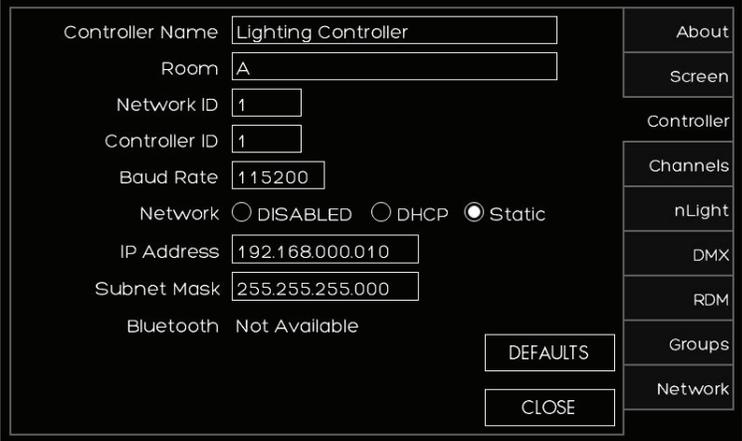


Setup > Controller

Overview

Setup station and network settings

1. CONTROLLER NAME gives the station a unique name. Press the text box to access keyboard
2. ROOM defines the single space that accommodates the connected devices. Up to 8 individual rooms can be setup to be stand alone and also joined (room linking)
3. NETWORK ID is the local area Fresco network. This value should not be changed
4. CONTROLLER ID
5. BAUD RATE is the data transfer rate. This should not be changed
6. NETWORK settings are used when accessing the station from an IP network
7. IP ADDRESS/SUBNET MASK values can be modified based on IP network configuration
8. DEFAULTS sends all network settings back to factory default



The screenshot displays the Controller Setup interface. The main area contains the following fields and options:

- Controller Name: Lighting Controller
- Room: A
- Network ID: 1
- Controller ID: 1
- Baud Rate: 115200
- Network: DISABLED DHCP Static
- IP Address: 192.168.000.010
- Subnet Mask: 255.255.255.000
- Bluetooth: Not Available

At the bottom right of the main area are two buttons: DEFAULTS and CLOSE.

The right sidebar contains a vertical list of menu items: About, Screen, Controller, Channels, nLight, DMX, RDM, Groups, and Network.

Setup > Channels

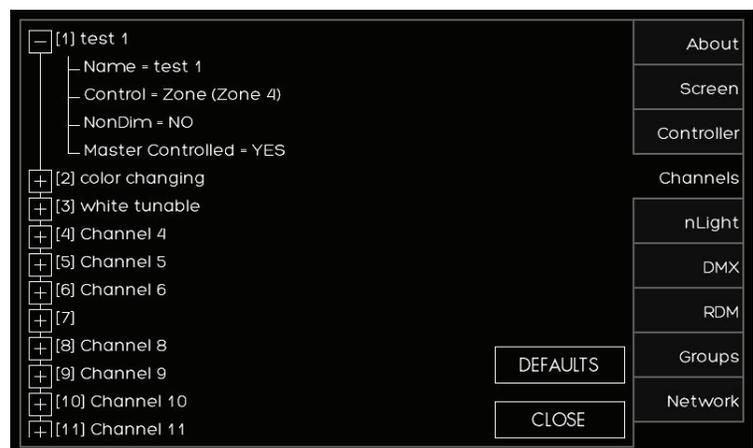
Overview

Lighting channels are used to control the behavior of lighting devices. A lighting channel corresponds to the control slider. Up to 36 lighting channels can be assigned to a single fresco station

1. Create a new lighting channel by pressing (+) next to the channel location



1. Create a name for the channel that will appear above the channel slider
2. Determine the type of CONTROL to be ZONE, GROUP, or NONE
 1. A ZONE can be a single or multiple fixture controlled together
 2. GROUP is more than one ZONE of lighting controlled together
 3. NONE disables the channel slider.



Setup > Channels (continued)

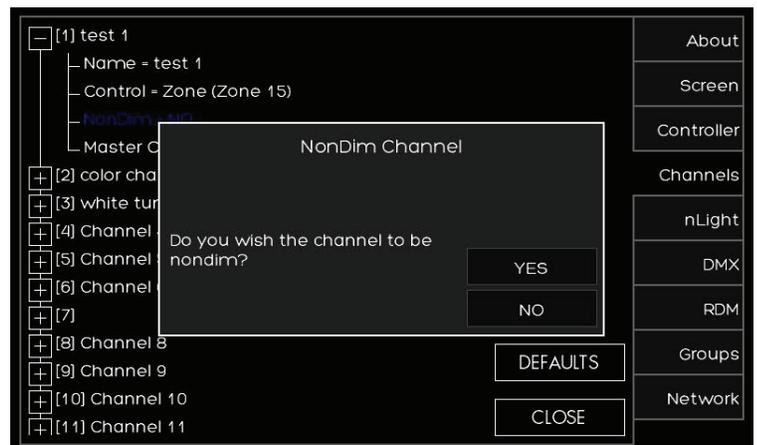
Overview

Lighting channels are used to control the behavior of lighting devices. A lighting channel corresponds to the control slider. Up to 36 lighting channels can be assigned and displayed on a single fresco station

1. Choose the ZONE that the channel will control. Choose an existing zone or add a new zone
2. There are 100 available zones available on each fresco station, but you can only have a maximum of 36 channel sliders. This is intended for additional devices that need to be controlled by the system without controlling them manually from the station



1. Choose if you want the CHANNEL to be NONDIM. FALSE will provide the 0-100 intensity slider. TRUE will provide an ON/OFF toggle
2. MASTER CONTROL allows the home page raise/lower buttons to control the channel.



Setup > nLight®

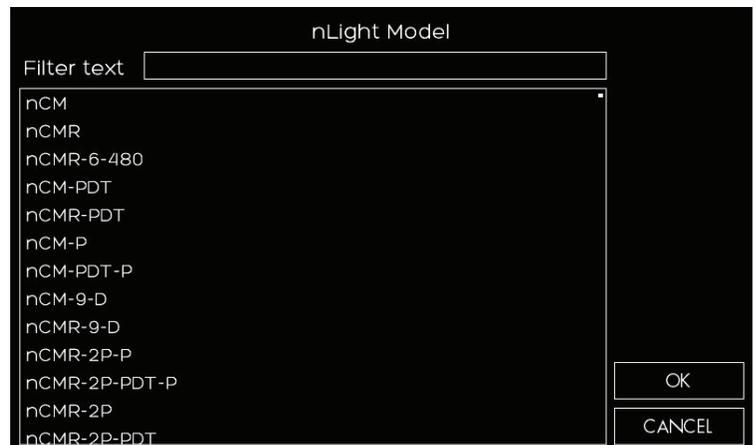
Overview

Add up to 128 supported nLight devices to each fresco station for control

1. If you have nLight devices already connected to the station they will appear here
2. If you need to manually add devices press **<Tap to add nLight>** devices



1. After pressing **<Tap to add nLight>** a list of supported nLight devices will display
2. Select the device that you want to add



Setup > nLight® (continued)

Overview

Add up to 128 supported nLight devices to each fresco station for control

1. If the nLight device was auto identified or you manually entered it you now need to set it up*
2. Press the (+) next to the device to expand the device settings
3. You can change the NAME of the device
4. SERIAL should be populated already. If it is not press UNASSIGNED and choose it from the list of available serial numbers that match the device



*TIP for UNKNOWN devices

If the station auto discovers an nLight device and appears as UNKNOWN, REMOVE the device and manually enter the device

Setup > nLight® (continued)

Overview

Add up to 128 supported nLight devices to each fresco station for control

1. Depending on the device it now needs to be configured for control. Press the (+) to setup the control for the device
2. Sensors/Wall Stations/Power Packs/Embedded Fixtures Devices
 1. Change the NAME of the nLight device if desired
 2. Choose the type of CONTROL it will affect (Group/Zone/Scene/Channel/None)
 3. MODE for sensors only will change the setting to (Auto On/Manual Off or Manual On/Auto Off)
4. TIMEOUT will adjust device timeout setting
5. OUTPUT sets what the relay/dimmer will control
6. Change the NAME of the device output if desired
7. Choose what ZONE it will control
8. THRESHOLD changes when the relay will get switched on. This will not matter when you assign this to a non-dim channel. You are best to leave this field unchanged
9. LOW SET/HIGH SET are adjustable trim settings for dimming wall stations/power packs/embedded fixture devices



Setup > DMX

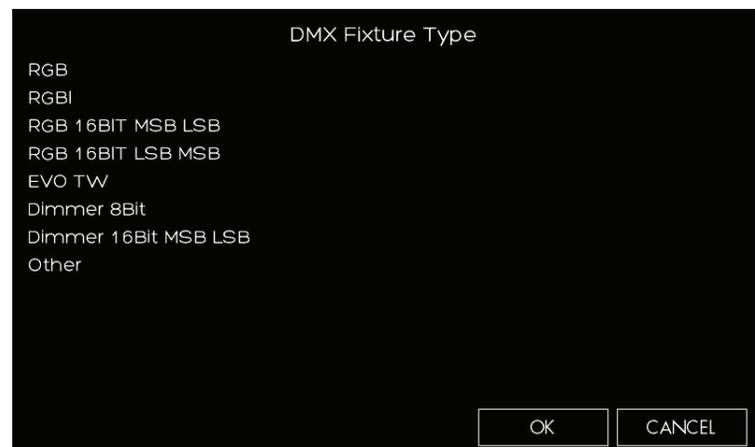
Overview

One universe (512 channels) of DMX allows control of DMX/RDM fixtures

1. If you have RDM capable DMX devices already connected to the station they will appear here
2. If you need to manually add DMX devices press **<Tap to add DMX>** devices



1. After pressing **<Tap to add DMX>** choose the DMX fixture type that best matches the profile required
2. Choose the DMX start address
3. Next select the ZONE that it will be assigned to
4. If you know the exact fixture ID listed within the Horizon DMX fixture library (provided upon request) choose OTHER and enter the fixture ID and enter the DMX start address and zone output for assignment



Setup > DMX (continued)

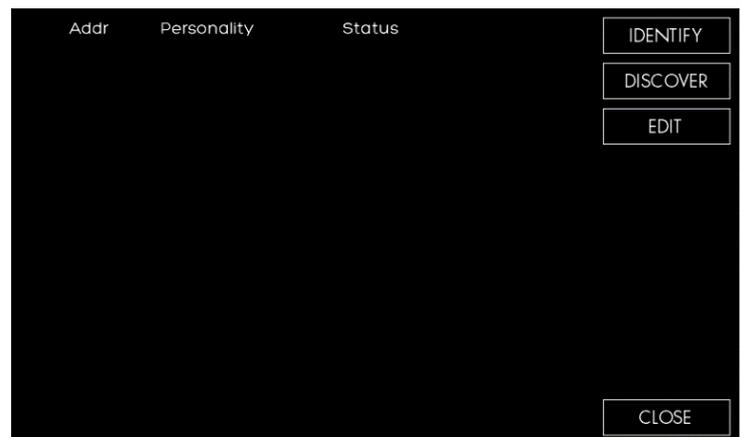
Overview

One universe (512 channels) of DMX for control of DMX/RDM fixtures

1. If the DMX fixture was auto identified or you manually entered it you now need to set it up
2. Press the (+) next to the device to expand the device settings
3. Verify the ZONE assignment and correct start ADDRESS is correct.
4. RDM responding fixtures can be setup by pressing RDM DEVICE



1. DISCOVER will force a DMX signal to search for all RDM discoverable fixtures
2. After the search has completed a list of fixtures will display in this list
3. IDENTIFY will locate the fixture (flash to find)
4. EDIT will allow the personality of the fixture to be changed if available

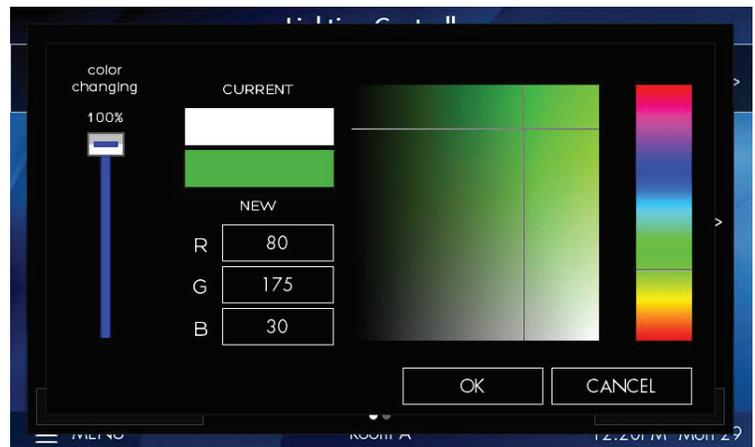


DMX RGB CONTROL

Overview

Control color intensity, hue, and saturation for DMX controlled RGB fixtures

1. Raise or lower overall intensity for the lighting zone
2. RGB values are displayed as colors change. Input specific values by pressing any of the RGB value fields
3. Change overall color (hue) by pressing anywhere in the color field
4. Change color saturation by touching anywhere in the large color box

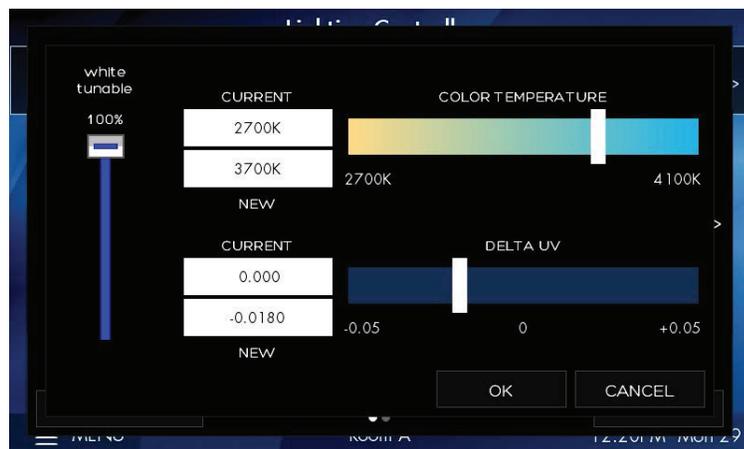


DMX Tunable White Control

Overview

Control intensity, color temperature and hue for DMX controlled tunable white fixtures

1. Raise or lower overall intensity for the lighting zone
2. Adjust color temperature by sliding the handle (range is specific to fixture)
3. Adjust hue for added effect (only applicable to supported fixtures)



Setup > Groups

Overview

Multiple lighting zones can be linked together in groups for joint control

1. Press (+) to expand the group settings
2. Change the group NAME to make it easier to manage by pressing NAME=GROUP #
3. Press (+) to expand the ZONES that need to be added to the group



1. Select the zones that need to be added to the group. This are existing zones, or a new zone can be setup



Setup > Groups (continued)

Overview

Multiple lighting zones can be linked together in groups for joint control

1. Create a new group by pressing **<Tap to add Group>**



1. Set a new group ID, start at 1 to keep it simple and easy to manage
2. You can create up to 100 groups of lighting



Setup > Network

Overview

Network allows the setup and configuration for future fresco system devices

1. There is no current product supported for this system feature at this time



AcuityControls[®]

Fresco[™]

www.acuitycontrols.com
800.535.2465

ADDITIONAL FRESCO RESOURCES

(hyperlinks provided below)

Specialty Guides

[Fresco nLight Processor and Device Update](#)
[Fresco / iPad Bluetooth Pairing](#)
[Fresco Studio Scheduler User Guide](#)
[Fresco Studio Input Masking](#)
[Fresco Function Deep Dive](#)
[Fresco and nLight Compatibility Information](#)

Software Configuration/Device Software

[Fresco Studio](#)
[EasyL Studio](#)
[DXT System Manager/Pathscape \(Windows\)](#)
[DXT System Manager/Pathscape \(Mac\)](#)
[Fresco Show WM](#)
[Fresco Show DTP](#)