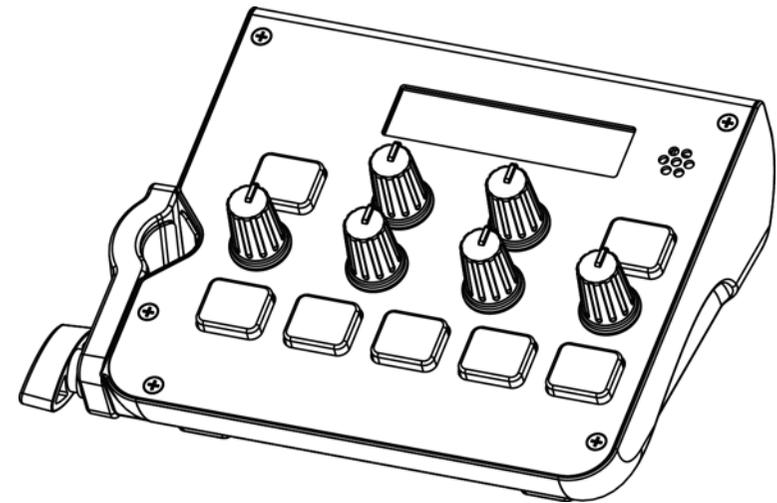


# USER MANUAL

## IntuCon-LC400H2 / LC400F2 DMX Preset Controller & Foot-operated Remote

For firmware 010-0668-00209 RevJ

**ENGLISH Page 2-20**



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Updated versions of this document may be available at  
**[WWW.MULTIFORM-LIGHTING.COM](http://WWW.MULTIFORM-LIGHTING.COM)**

## ■ Introduction

Dear customer,

congratulations on the purchase of a Multiform-branded item and the trust having been put in us with this decision. Multiform is one of the leading global manufacturers of professional lighting equipment and has decades of experience in design, production and quality assurance.

To meet your requirements, this unit has been designed and built to the highest standards, so that we can assure you that you have made a good and satisfying investment. To take full advantage of all possibilities and for your own safety and the safety of your environment, please read these operating instructions carefully before you start using the unit.

## ■ Description

The IntuCon-LC400H2 DMX controller and its accompanying LC400F2 foot remote control are a simple-to-operate, yet powerful and flexible DMX lighting control solution for non-moving, color-changing fixtures. The unique clamp mechanism allows placement of the LC400H2 on a microphone stand.

## ■ Security advice before use



Read the safety precautions in this chapter before installing, powering up, operating or servicing this device. Failure to do so may void the product warranty, and releases the manufacturer from all product liability.

The following symbols are used to identify important safety information in this manual:



### **DANGER!**

Safety hazard.  
Risk of injury or death.



### **WARNING!**

Hazardous voltage. Risk of severe or fatal electric shock.



### **WARNING!**

Fire hazard.



### **WARNING!**

Read manual before installation and operation.

## UK Declaration of Conformity

### The manufacturer

Adelto Industries, Unit 4 Britannia Business Park, Comet Way, Southend-on-Sea, Essex, SS2 6GE, United Kingdom

Declares at his sole responsibility that the equipment

**Multiform IntuCon-LC400H2**  
**Multiform IntuCon-LC400F2**

is in conformity with the following applicable standards:

UK SI 2016 No. 1101 The Electrical Equipment (Safety) Regulations 2016:

BS EN IEC 62368-1

UK SI 2016 No. 1091 Electromagnetic Compatibility Regulations 2016:

BS EN IEC 55035:2017

UK SI 2012 No. 3032 Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS2)

BS EN IEC 63000:2018

And is marked as follows:



Southend-on-Sea, 19<sup>th</sup> March 2021



Authorized Signature

## EC Declaration of Conformity

### The manufacturer

Adelto Industries, Unit 4 Britannia Business Park, Comet Way, Southend-on-Sea, Essex, SS2 6GE, United Kingdom

Declares at his sole responsibility that the equipment

**Multiform IntuCon-LC400H2**  
**Multiform IntuCon-LC400F2**

is in conformity with the following directives/standards/regulations:

LVD Directive 2014/35/EU

EN62368-1

EMC Directive 2014/30/EU

EN55035:2017

ROHS2 Directive 2011/65/EU & 2015/863/EU

EN63000:2018

And is marked as follows:



Southend-on-Sea, 19<sup>th</sup> March 2021



Authorized Signature



### General advice:

1. Read this manual completely before using the product.
2. Keep this manual in your records for future reference.
3. Follow all instruction printed in this manual, otherwise warranty may be void.
4. Follow all printed security advice on the product itself. The lighting flash with arrowhead within an equilateral triangle makes you aware of non-insulated AC mains voltage inside the unit. The exclamation mark within an equilateral triangle makes you aware of important operating and maintenance instructions in the literature attached to this product.
5. Take care of enough distance between this product and sources of hum and noise like electric motors and transformers.
6. Carry this product with greatest care. Punches, big forces and heavy vibration may damage this product mechanically.
7. The manufacturer takes no responsibility for injury or damage caused by not following the safety precautions and instructions printed in this manual.



### Protection from electric shock:

1. Only connect this unit or its power supply to a mains socket outlet with protective earth connection, ground-fault (earth-fault) protection and overload protection.
2. Where the mains plug or an appliance coupler is used as a disconnect device, the disconnect device shall remain readily operable.
3. To pull the power supply out of the wall outlet, never pull the cable, but only the power supply itself.
4. Disconnect the unit from AC supply by pulling the power supply out of the wall outlet before any kind of cleaning on the product. Use smooth and dry cloth only for cleaning. Check all connection cables before reconnecting the unit.
5. Do not expose this unit or its power supply to any dripping or splashing liquids, and do not place objects filled with liquids, such as vases, on the unit or its power supply. Do not operate this unit near to open water or in high humidity.
6. Choose the position of the power supply and the connection cords according to the lowest risk of damage by foot steps or by squeezing it.
7. Do not open the unit or its power supply for service purpose, as there are no user-serviceable parts inside. Warranty will be void in any case of unauthorized service by the user or other not authorized persons.

**Protection from fire:**

1. Take care of not placing the unit or its power supply near sources of heat (e.g. powerful amplifiers, fog machines).
2. Take always care of sufficient air convection in the unit's and its power supply's environment to avoid overheating, especially when mounting in a closed environment. Make sure air convection slots are not blocked. Do not operate this unit in environmental temperatures exceeding 40 degrees Celsius.
3. Check the total maximum power of your AC wall outlet if you connect several units to one wall outlet and avoid any overloading.

**Protection from injury and damage:**

1. Never use any accessories or modifications not authorized by the manufacturer of this unit.
2. Choose a location for operation where the unit is protected from vibration and where a fixed position is provided.
3. Before plugging the power supply in the wall outlet, check whether the AC mains voltage and frequency is the same as this product is specified for. Whenever your power supply should not match the wall outlet, contact your dealer immediately.
4. If fluids have spilled into the unit or its power supply, or small parts have intruded the unit or its power supply, immediately switch off the unit and hand it over to the authorized service for a security check.
5. Disconnect the unit from AC supply by pulling the power supply out of the wall outlet during a thunder-storm in order to avoid any damage on the unit or its power supply due to AC voltage peaks.
6. In case of not correct function of this unit or damaged power supply or other damaged parts, pull immediately the power supply out of the wall outlet and hand the unit over to the authorized service for a security check.
7. To meet all aspects of functionality and security during maintenance work to be performed on this unit, all parts should be replaced by genuine spare parts. Consequently, take care of your dealer or maintenance company to be authorized by the manufacturer.

**■ Health advice**

This unit produces and absorbs electromagnetic radiation. The strength of radiation and the sensitivity for disturbing interference matches the CE and FCC requirements. A corresponding sign is printed on the backside of the unit. Any change or modification may affect the behavior of the unit concerning electromagnetic radiation, with the CE requirements eventually not to be met any more. The manufacturer takes no responsibility in this case.

### ■ Operating conditions

Switch on: The unit always returns to the last mode before it was switched off; in DMX modes however DMX values are cleared if power is switched off.

### ■ Maintenance

This unit does not need regular maintenance.

### ■ Technical data IntuCon-LC400H2 & LC400F2

Protocol.....	DMX-512 USITT
Connection.....	3-pin XLR female socket; pin 1 shield, pin 2 (-), pin 3 (+)
Main Unit Dimensions.....	L158mm xW125mm xH60mm
Main Unit Weight.....	0.5 kg
Footswitch Dimensions.....	L380mm x W82mm x H53mm
Footswitch Weight.....	0.9 kg
Power.....	Auto-Ranging Power supply 9VDC, 1000mA (Center Pin Positive)
IP Rating.....	.20 (indoor)
Maximum Ambient Temperature.....	40°C

This product meets both the EMC Directive 2014/30/EU and the Low Voltage Directive 2014/35/EU.

Ask your dealer or visit [www.multiform-lighting.com](http://www.multiform-lighting.com) for more information.

### ■ Functional advice

This unit is immune to the presence of electromagnetic disturbances – both conducted and radiated - up to a certain level. Under peak conditions, the unit is classified to show a “class C” performance criteria and may encounter temporary degradation or loss of function which may need manual help to recover. In such case, disconnect the AC power from the unit and reconnect it again to recover.

### ■ Environmental advice



This unit is built to conform to the ROHS standards and the WEEE directive 2012/19/EC of the European Parliament and of the Council of the European Union. Under these regulations, the product shall not be discarded into regular garbage at the end of its life, but shall be returned to authorized recycling stations.

### ■ Unpacking

Please check that the box contains the following items:

Main parts:	1 pc. IntuCon-LC400H2 main controller unit
	1 pc. Power supply adaptor
	1 pc. IntuCon-LC400F2 foot remote controller
	1 pc. TRS connection cable
	1 pc. User manual

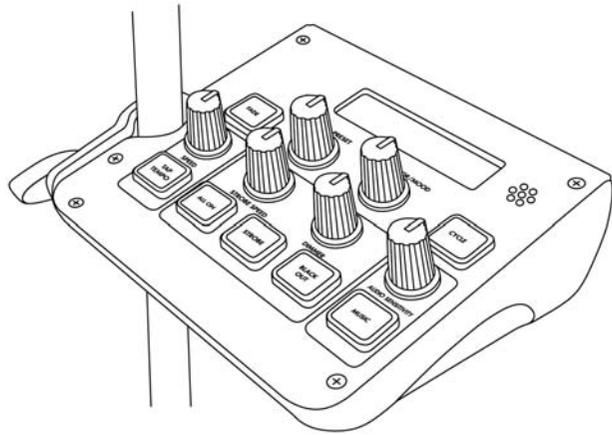
If any part is missing, please contact your dealer immediately for replacement.

### ■ Getting started: choosing a location



**Risk of fire:** The IntuCon-LC400H2 controller and its power supply have been designed to work in dry indoor environments at environmental temperatures up to 40 degrees Celsius. Do not operate the unit in warmer environment of environments exceeding 80% relative humidity.

**Placement/Mounting:** The IntuCon-LC400H2 can be securely placed on any even surface by means of its rubber feet, or mounted to a microphone stand for easy access during any performance. For microphone stand mounting, make sure that the mic stand or mounting structure is sturdy and can support the weight of the IntuCon-LC400H2. Mount the controller securely by tightening the mounting clamp over the mic stand as shown in the following illustration. Ensure that the clamp is fully tightened on the mic stand to avoid slipping during use, and make sure that cables are neatly organized and that no cables are tugging on the unit's input/output jacks. If required, the brightness of the backlight controls can be adjusted through the settings menu to suit your performance space. See “Settings Menu” below.



■ Getting started: making AC supply connections

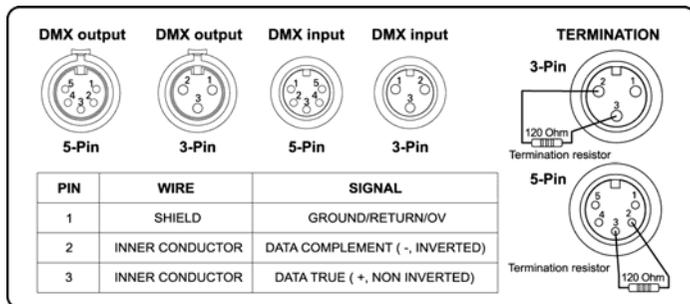


**Risk of fire / Safety risk**

The IntuCon-LC400H2 requires an AC power source with sufficient power carriage and correct grounding to ensure safe operation. The AC power source must be equipped with a circuit breaker and earth leakage detector. Make sure to only use compliant AC supply lines.

■ Getting started: making DMX control connections

Connect the IntuCon-LC400H2 to suitable DMX lighting fixtures, and interconnect several such fixtures by means of their DMX In/Outputs as required. The last unit shall be equipped with a 120 Ohm termination resistor equipped DMX-plug as shown in below drawing. Please make sure that all used DMX cables comply to below standard:



4	Crawl R	14	Mirror	24	Cross Fade
5	Flow L	15	Fill	25	Snake
6	Flow R	16	Flash	26	Scan
7	Cascade L	17	Splash	27	Skip
8	Cascade R	18	Ping Pong	28	Sweep
9	Marquee L	19	Flare	29	Beatkeeper
				30	Glimmer

Color Options

The IntuCon-LC400H2 contains 14 unique color macros that define each Mood, which are specified below by their RGB values as DMX parameters (DMX 0...255):

Preset	Colour	R	G	B
1	Red	255	0	0
2	Green	0	255	0
3	Blue	0	0	255
4	Yellow	255	255	0
5	Pink	255	0	255
6	Turquoise	0	255	255
7	Lime	127	255	0
8	Orange	255	127	0
9	Marine	0	127	255
10	Lavender	127	0	255
11	Candy	255	0	127
12	Leaf	190	255	127
13	Purple	190	127	255
14	White	255	255	255

Moods

The IntuCon-LC400H2 contains 20 unique color palettes that are defined as Moods. The currently selected Mood decides what colors will be displayed during the current Preset. Moods #1–15 are standard moods that are randomly chosen when in Cycle Mode. Moods #15–20 are seasonal moods that will not be included in Cycle Mode. See the “Show Mode” section on page 13 for usage instructions. Additionally, there are 25 static color combinations that are selectable for use in All On and Strobe Modes. See the “All On Mode” and “Strobe Mode” sections for usage instructions.

- Turn the <PRESET> Encoder knob until your desired strobe effect (Strobe 1, Strobe 2, Strobe 3) is flashing on the bottom line of the LCD display.
- Press/Click the <PRESET> Encoder knob to confirm your selection.

There are 25 color presets for Strobe Mode that are also shared by All On Mode. In order to change the color or color combination:

- Turn the <MOOD> Encoder knob until your desired color is flashing on the top line of the LCD display.
- Press/Click the <MOOD> Encoder knob to confirm your selection.

Additional controls in Strobe Mode:

- Adjust the speed of the strobe effect by turning the <STROBE SPEED> knob. This knob is designated only for the strobe effect, and can be preemptively adjusted even when Strobe Mode is deactivated.
- Adjust the overall brightness of the lights by turning the <DIMMER> Knob.

Blackout

Blackout overrides any previously selected settings. Press the <BLACKOUT> button to activate. When activated, the red backlight will be illuminated, and all lights will be instantly turned off (0%). While Blackout is active, your most recent settings will remain on the LCD Display. The currently active mode is still adjustable while lights are off, and any new settings selected will become visible once Blackout is deactivated. Pressing the <BLACKOUT> button again will deactivate Blackout, and lights will display your currently selected setting.

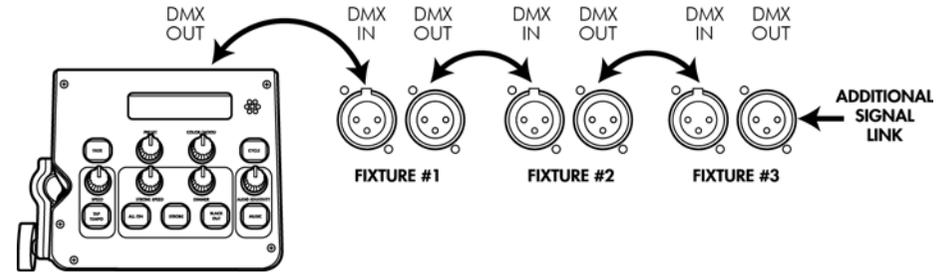
■ **Preset & Color charts**

Presets

The IntuCon-LC400H2 contains 31 pre-programmed lighting chases, defined as Presets. These presets can be chosen manually in Show Mode, or will be randomly chosen when in Cycle Mode. See the “Show Mode” section. Details of available Presets as follows:

#	NAME	#	NAME	#	NAME
0	Color Fade	10	Marquee R	20	Bang
1	Spectrum L	11	Wave	21	Siren
2	Spectrum R	12	Immerse	22	Switch
3	Crawl L	13	Quicksand	23	Cross

Units shall be daisy-chained as illustrated below:



■ **Getting started: DMX addressing**

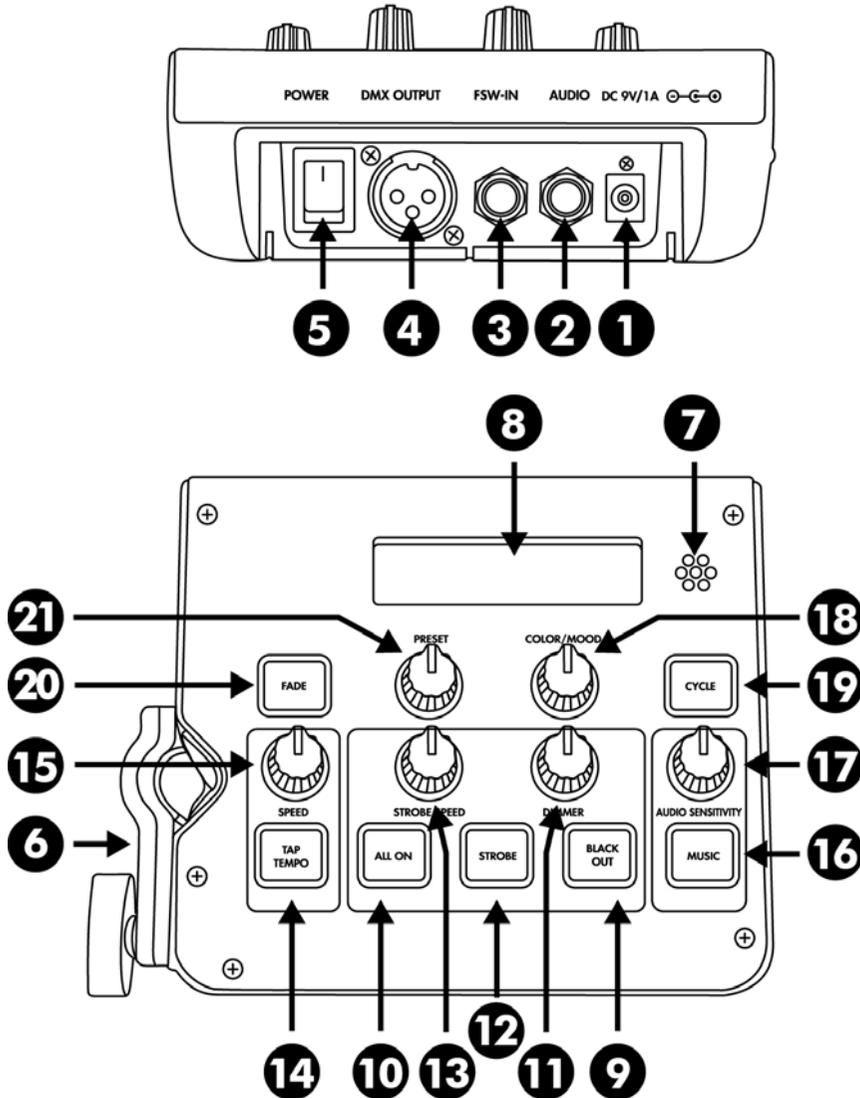
The IntuCon-LC400H2 can control up to 4 separate lighting banks, and will always occupy 7 channels of DMX lighting per lighting bank, starting on channel 1. There is no exception to this rule, regardless of DMX footprint or channel scheme. As such, each lighting bank must be set to pre-determined DMX addresses as follows:

Lighting Bank	DMX Starting Address
Bank 1	1
Bank 2	8
Bank 3	15
Bank 4	22

The connected fixture’s DMX operating mode must be set to a suitable channel scheme for best results. Best results are achieved by choosing a DMX operating mode for the fixture in which all of the fixture’s LED colors are addressed to a dedicated DMX channel, and no DMX channels are used for any layered functions such as master dimmer, etc. This is called a “direct” or “raw” mode. If the fixture does not offer a direct/raw mode for all of its colors, it may offer an emulated mode for control through less channels. Do NOT choose any DMX operating mode where DMX channels are assigned to control master dimmer levels, strobe speeds, or chase patterns. This will deliver unpredictable or unwanted results.

■ Operation

All user controls are located on the rear and top panel of the unit:



Cycle Mode

Cycle Mode works in conjunction with Show Mode. Press the <CYCLE> button to activate this mode. When activated, the green backlight will be illuminated, and preset chases/moods will change in a random order. The "Cycle Opt" setting in the settings menu determines whether Cycle Mode affects only the preset, only the mood, or both the preset and mood. These presets and/or moods will change after a pre-determined amount of sequence completions, adjustable from the "Cycle Rate" setting, also in the settings menu.

Music Mode

Music Mode works in conjunction with Show Mode. Press the <MUSIC> button to activate this mode. When activated, the blue backlight will be illuminated, and preset chases will automatically follow the beat of the music. By default, audio will be received through the built-in microphone, but can be overridden by plugging an audio source directly into the back of the unit, using a TRS cable. Audio Sensitivity can be adjusted to ensure that chases move to the intended beat. To do this, turn the <Audio Sensitivity> knob up or down to alter the level of the audio signal being received by the microphone or TRS input

All On Mode

All On Mode overrides any previously selected settings. Press the <ALL ON> button to activate this mode. When activated, the yellow backlight will be illuminated, and all lights will be set to a single color or color combination. Deactivating this mode by pressing <ALL ON> again will return the unit to your most recently selected setting. There are 25 color presets for All On Mode that are also shared by Strobe Mode. In order to change the color or color combination:

- Turn the <MOOD> Encoder knob until your desired color is flashing on the top line of the LCD display.
- Press/Click the <Mood> Encoder knob to confirm your selection.

Additional controls in All On Mode:

- Adjust the overall brightness of the lights by turning the <DIMMER> Knob.

Strobe Mode

Strobe Mode overrides any previously selected settings. Press the <STROBE> button to activate this mode. When activated, the yellow backlight will be illuminated, and all lights will be set to a single color or color combination while producing a strobe effect. Deactivating this mode by pressing <STROBE> again will return the unit to your most recently selected setting. There are 3 different strobe presets available to choose from. In order to change the strobe sequence:

FUNCTION	INSTRUCTIONS
Preset Up (Forward)	Scrolls forward/back one program in the Presets options (0-30). Pressing this button will also scroll forward/back one Mood while All On is active, and one Strobe pattern while Strobe Mode is active. Using the foot controller Preset buttons automatically confirms the selection when pressed.
Preset Down (Back)	
All On	Press this button to activate or deactivate All On Mode.
Strobe	Press this button to activate or deactivate Strobe Mode.
Blackout	Press this button to activate or deactivate Blackout.

■ Modes of Operation

Show Mode

Show Mode is the default mode of operation, where presets and moods may be selected, and tempo functions are adjustable. There are 31 preset chases (#0–30) and 20 unique moods to choose from, using the Preset and Mood encoders. For a detailed listing of presets and color options, see the color options and mood guide sheet included in the box. “Cycle Mode” and “Music Mode” may both work in conjunction with Show Mode for a fully automated experience.

To select a Preset/Lighting Chase:

- Turn the <PRESET> Encoder knob until your desired preset is flashing on the bottom line of the LCD display.
- Press/Click the <PRESET> Encoder knob to confirm your selection.

To select a Mood/Color Palette:

- Turn the <MOOD> Encoder knob until your desired preset is flashing on the top line of the LCD display.
- Press/Click the <MOOD> Encoder knob to confirm your selection.

Additional controls in Show Mode:

- Adjust the overall brightness of the lights by turning the <DIMMER> Knob.
- Switch between fading or switching color transitions by pressing the <FADE> button.
- Manually adjust the speed of lighting chases by turning the <SPEED> knob, or tapping the <TAP TEMPO> button at the desired BPM. The current BPM will always be shown in the upper right-hand corner of the LCD Display while in Show Mode.

■ User interface overview:

FUNCTION	CONTROL	DESCRIPTION
<b>Settings Menu</b> (Hold Cycle + Power On)	Combination	Hold down the Cycle button while powering on the unit to access the Settings Menu. Here, you can adjust several global settings as outlined in the “Settings Menu” section on page 11.
<b>Factory Reset</b> (Hold: All On + Strobe + Blackout + Power On)	Combination	Hold down the All On, Strobe and Blackout buttons while powering on the unit to initiate factory reset and revert to factory settings.
<b>Preset</b>	Encoder/ PushSwitch <b>(21)</b>	Turn the knob to select a preset in the currently selected menu, and press/click the knob to confirm your selection. This knob works to select options in the Setting Menu, Show Mode, and Strobe Mode.
<b>Mood</b>	Encoder/ PushSwitch <b>(18)</b>	Turn the knob to select a color preset in the currently selected menu, and press/click the knob to confirm your selection. This knob works to select color presets in Show Mode, All On Mode, and Strobe Mode.
<b>Fade</b>	Button <b>(20)</b>	Press this button to change between switching or fading transitions. When the green backlight is illuminated, colors will fade into the next step of each sequence. When the backlight is off, colors will quickly switch from one step to the next.
<b>Cycle</b>	Button <b>(19)</b>	Press this button to activate or deactivate Cycle Mode. Cycle Mode randomly cycles through all available Presets and Moods, allowing the show to run itself. The rate at which programs cycle can be adjusted in the Settings Menu, and real-time controls are still functional while Cycle Mode is active. Cycle Mode is active when the green backlight is illuminated. See “Cycle Mode” on page 13 for more details.
<b>Tap Tempo</b>	Button <b>(14)</b>	Tap this button at the desired BPM to automatically set the tempo of your lighting chases. The blue backlight will always display the current BPM (except when in “Music Mode”) by blinking at the tempo designated by the tempo button or speed knob. The current tempo can be overridden by tapping in a new tempo, adjusting the speed knob, or activating “Music Mode”.
<b>Speed</b>	Knob <b>(15)</b>	Turn this knob to manually adjust the current tempo, displayed in the top-right corner of the LCD Display in Show Mode. The manually selected tempo can be overridden by activating Music Mode, or using the Tap Tempo button.
<b>All On</b>	Button <b>(10)</b>	Press this button to activate All On Mode. This mode sets all lights to one static color, or color combination. There are 25 color combinations to choose from, selectable using the Mood encoder while in All On Mode. All On Mode is active when the yellow backlight is illuminated. See “All On Mode” on page 13 for more details.

<b>Strobe</b>	Button (12)	Press this button to activate Strobe Mode. There are 3 different strobe settings to choose from, selectable using the Preset encoder while in Strobe Mode. Strobe speed can also be adjusted in real-time by using the Strobe Speed knob. Strobe Mode is active when the yellow backlight is illuminated. See "Strobe Mode" on page 14 for more details.
<b>Strobe Speed</b>	Knob (13)	Turn this knob to adjust the strobe rate. Effects will only be visible while in Strobe Mode.
<b>Blackout</b>	Button (9)	Press this button to instantly turn all lights off. Blackout is active when the red backlight is illuminated. See "Blackout" on page 14 for more details.
<b>Dimmer</b>	Knob (11)	Turn this knob to adjust the brightness of your lights. This knob is functional in all modes.
<b>Music</b>	Button (16)	Press this button to activate Music Mode, enabling sound-active operation via built-in microphone or TRS audio input. Music Mode is active when the blue backlight is illuminated. See "Music Mode" on page 13 for more details.
<b>Audio Sensitivity</b>	Knob (17)	Turn this knob to adjust the sensitivity of your audio input source while in Music Mode. See "Music Mode" on page 13 for more details.

■ **Settings Menu**

The setting menu allows to adjust several global settings including DMX Footprint, Backlight controls, and Cycle Rate. To access the settings menu, hold down the <CYCLE> button while powering on the controller. Once inside the Settings Menu:

1. Turn the <PRESET> Encoder knob to scroll through the menu functions.
2. Turn the <MOOD> Encoder knob to find your desired setting
3. Press/Click the <MOOD> Encoder knob to confirm your selection.

For detailed functions within the settings menu, see the table below.

MENU	SELECTION	INSTRUCTIONS
Footprint	RGB RGBA RGBW RGBAW RGBWA	Select the DMX profile of the IntuCon-LC400H2. This setting ensures that the IntuCon-LC400H2 will map correctly to nearly any type of DMX fixture. Refer to the user manual for your lighting fixtures to determine which DMX profile they use (RGB, RGBA, and RGBW are most common), and set this accordingly. If you are using multiple lights with different DMX personalities, set the Footprint to RGB for most accurate performance with multiple lighting types.
Backlight	Enabled	Enables dimmed backlights behind controls when settings are inactive. This allows the user to see the full control panel in low-visibility settings.
	Disabled	Disables backlights behind controls when settings are inactive.

Cycle Rate	1 - 8	Determines the frequency of program changes when in Cycle Mode. The cycle rate is based on full sequence completions of the currently selected program. For example, if a cycle rate of 4 is chosen, each program will complete it's full sequence 4 times before switching to the next program. Here, the user may choose between 1-8 sequence completions per program change in Cycle Mode.
Cycle Opt	Pset&Mood	Enables random switching of both presets and moods while Cycle Mode is active.
	Pset Only	Enables random switching of only presets while Cycle Mode is active. The mood will remain the same, unless manually altered.
	Mood Only	Enables random switching of only moods while Cycle Mode is active. The preset will remain the same, unless manually altered.
BO Fade	Enabled	Enables faded blackout. This will cause all lights to fade to black when the Blackout button is pressed.
	Disabled	Disables faded blackout. This will cause all lights to instantly turn off when the Blackout button is pressed.
Exit		Select this menu option to exit the menu and return to your most recently selected setting.

■ **Footswitch Operation**

The IntuCon-LC400H2 comes with an included IntuCon-LC400F2 footswitch for hands-free operation. Each button on the footswitch corresponds to a control on the controller, and any settings implemented via the footswitch will be reflected on the front panel of controller. To connect the footswitch, plug the included TRS cable into the 1/4" input jack on the back of the unit. Plug the other end of the TRS cable into the 1/4" FSW-IN jack on the back of the controller. Unlike the Preset Knob on the controller top panel, the Preset Up and Down buttons on the footswitch will instantly change to the next program without confirming the selection. For detailed functions, please see the table below.

