iQ-DMX-STICK-DE3

Accessories - Control

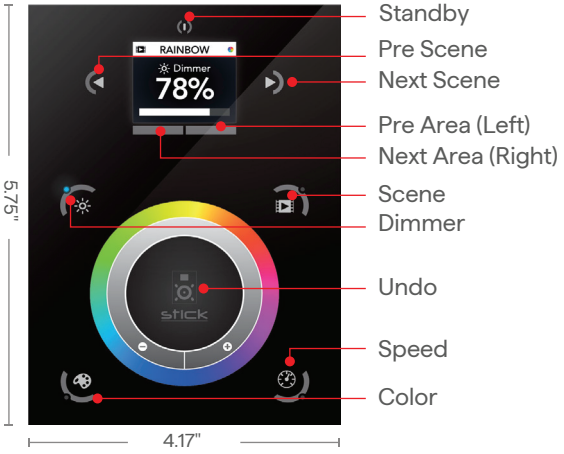
iQ-DMX-STICK-DE3 controller is a DMX based controller aimed at architectural lighting installations requiring an advanced level of programming options (color changing effects, specific colors Changing the speed, color and dimmer using the circular palette etc). The controller has been engineered to meet the needs of lighting designers, whilst providing a clean and user friendly panel. Featuring an on/off button, a color wheel, and a clock/calender with sunrise/ sunset triggering.

Use ESA2, ESA Pro or DMX Recorder Sunlite Suite software to control your lighting scenes on your PC or Mac Computer. Apps are also available for iOS and android devices. This robust controller is capable of storing up to 500 scenes in multi-rooms, 10 of which can be recalled on the actual controller itself. iQ-DMX-STICK-DE3 is an ideal solution for interior lighting, hotels and homes.

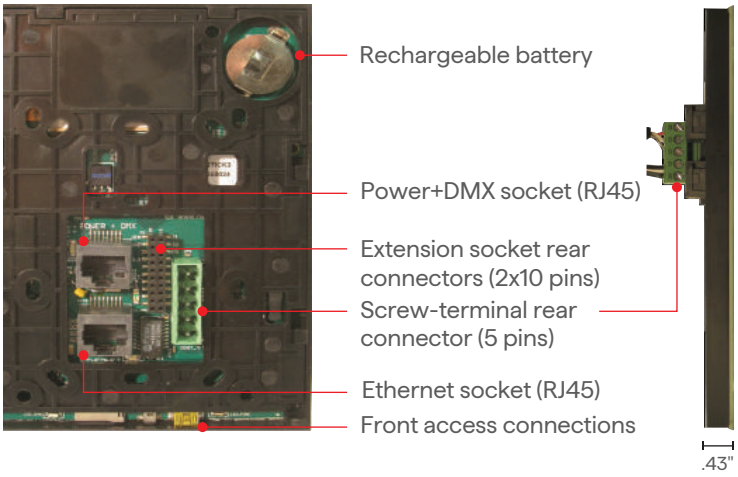
Features

- DMX512 Output
- Windows / Mac software to set dynamic colors / effects
- iPhone / iPad / Android remote and programming apps
- 1024 DMX channels. Control 340 RGB fixtures
- Multi-room control with 500 scenes, 10 zones
- 10 touch-sensitive buttons. No mechanical parts
- Touch-sensitive wheel allows for accurate color selection
- Offered with either a black (BK) or white (WH) glass design sits 0.43" from the wall
- USB, Ethernet, RS232, Clock, 8 dry connectivity ports for programming and control with a 5V Output Relay
- Live Control: Color, Dimmer and Speed
- 5-15VDC 0.6A Input
- 8 dry contact trigger ports
- Multi-zone microSD memory
- Operating Temperature: 14°F - 113°F
- Dimensions: 5.75" x 4.17" x 0.43"
- Weight: 0.54 lbs
- EC, EMC, ROHS, ETL Standards

Dimensions







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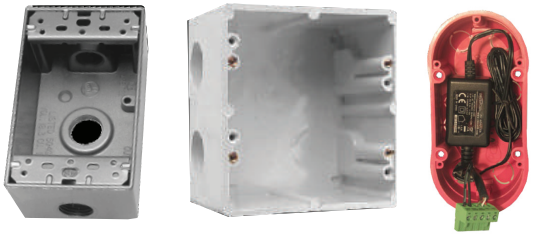
ACCESSORIES - iQ-DMX-STICK-DE3

Installation Instructions

1 MOUNT AN ELECTRICAL BOX INSIDE THE WALL

The controller can be installed in a standard electrical backbox. This box is usually 3.29" high and 2.36" wide. You can insert the AC/DC adapter inside or outside the backbox.

NOTE: We recommend against installing against a metal wall or surface as this can cause issues with the touch buttons.



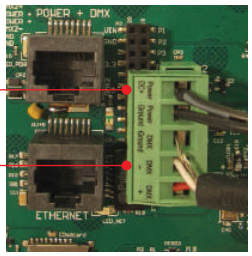
2 CONNECT THE WIRES

POWER: Connect a 5-15V 0.6A AC/DC supply. Be sure to not invert the + and the ground.

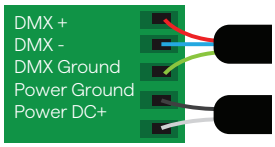
DMX: Connect the DMX cable to the lighting receivers (LEDs, Dimmers, Fixtures) (for XLR: 1 = ground, 2 = DMX-, 3 = DMX+) There are 2 ways to connect the power and DMX:

NOTE:

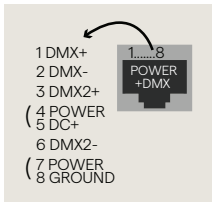
- Check Pin Configurations. Applying Power To The DMX Input Will Damage The Controller.
- Make Sure The Controller Is Mounted Flat Without Obstructions From Behind As This Can Push Apart The Glass.



Connector Block



RJ45



3 MOUNT THE INTERFACE ON THE WALL

- Mount the back side of the interface on the wall with 2 or more screws
- Plug the connectors :

- DMX and power (connector block)
- Ethernet cable

The front panel is mounted by clipping the 2 tabs along the top edge to the back plate and then sliding down. 1 screw should be attached underneath to hold the controller in place.

NOTE: power should not be turned on until the controller is securely in place.

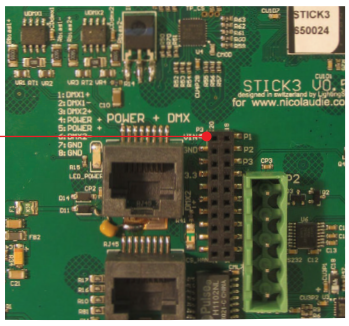


OTHER CONNECTIONS

Compatible header connectors:
WURTH ELEKTRONIK ref: 61301021121
MOLEX ref: 10-89-7202
TE Connectivity ref: 1-87227-0
FCI ref: 77313-101-20LF
HARWIN ref: M20-9981046
SAMTEC ref: TSW-110-xx-T-D
FARNELL ref: 1841232
RS ref: 763-6754 673-7534 251-8165
MOUSER ref: 538-10-89-7202
DIGIKEY ref: WM26820-ND

EXTENSION socket

VIN	20	19	PORT1
GND	18	17	PORT2
IR_RX	16	15	PORT3
3.3V	14	13	PORT4
Relay	12	11	PORT5
DMX2+	10	9	PORT6
DMX2-	8	7	PORT7
DMX1+	6	5	PORT8
DMX1-	4	3	RS232 RX
GND_DMX	2	1	RS232 TX



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Specification subject to change. Rev-09-04-25

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Installation Instructions

Setting up the Controller

Programming the Controller

The controller can be programmed from a PC, Mac, iOS (Apple) or Android device using the software listed below . Refer to the corresponding software manual for more information. Firmware and settings can be updated using Hardware Manager (installed with PC/Mac programming software) or with Hardware Tools (Android / iOS).

Windows / Mac Programming Software

ESA Pro 2 Software (Windows/Mac) - Multi-zone
nicolaudie.com/esapro2.htm

ESA2 Software (Windows/Mac) - Single Zone
nicolaudie.com/esa2.htm

Hardware Manager (Windows/Mac) - Firmware, clock
https://eu-tools.n-g.co/Release/HardwareManager.dmg
https://eu-tools.n-g.co/Release/HardwareManagerBeta.exe

Remote Control via Wifi Network

Free apps are provided to allow remote control over a local area network when running in stand alone mode. Connect the controller to a Wifi network. The apps will find compatible devices on the network using multicast / broadcast messages. Use Hardware Manager to configure the network settings for your controller.

Arcolis Remote - A simple interface provides the easiest way to control your device (iOS / Android)

Arcolis Remote Pro Create a customized remote controller with buttons, faders and color control (iOS / Android)

Color Temperature Mixing

In addition to mixing RGB using the color pallet, it is also possible to mix up to 3 custom colors. This is useful for mixing color temperature. To set this up, choose the correct profile for your lighting fixture when programming the controller. Profiles for common channel configurations can be found in the 'Generic' folder:

RGBW for Red, Green, Blue, White
RGBA for Red, Green, Blue, Amber
RGBY for Red, Green, Blue, Yellow
WWCW for Warm White, Cold White

Once your show has been written to the controller, tap the color mode button and use the circular palette to change the color. If your lighting fixture has more than 3 color channels, tap the color mode button a second time to mix the additional colors.

Settings Menu

To access the settings menu, hold the standby button for 3 seconds.

- Use the arrow buttons or palette to scrol through the menus
- Use the area buttons to navigate forwards and backwards
- The 'undo' button can also be used to navigate forwards



Mode (M) : Manages the on/off button and the 4 modes (dimmer, speed, color, scene)
Arrows (A) : Allows you to adjust which modes can be controlled by the arrows
Pallet (P) : Allows you to adjust which modes can be controlled by the palette wheel
Scene (S) : Scene management
First Start (F) : Default settings when the unit is first powered up
Trigger (T) : Manages the controllers external triggering properties
Ethernet (E) : Enables the Ethernet socket on the controller
Date/Time (D) : Manages the date and time stored inside the controller
Graphics (G) : Screen management
DMX Output (X) : Manage the timings of the DMX output messages and the page priorities (advanced function!)
Sensitive (S) : Manage the touch sensitivity settings
Language (L) : change the language of the text which appears on the screen
About : check the firmware release date and version number and assign a name for the controller

Service

Serviceable parts include:

- Memory card - used to store the scenes
- Battery - used to store the clock/calendar
- DMX Chips - used to drive the DMX (see p2.)

***To replace the Li-Ion rechargeable battery on the DE3 :**

1. You need a rechargeable 3.6v LIR 2032 replacement battery
2. Remove the back panel by pulling down and sliding it out.
3. Using a paper clip push the battery from the bottom so it slides out of its cage.
4. Slide the replacement battery in from the top, making sure the positive side is facing up.
5. Replace the back panel by pushing it up into place.

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Internal Menu

MODE (M) : Manages the on/off button and the 4 modes (dimmer, speed, color, scene)
- M OFF enable : enables/disables the use of the on/off button so that the controller is permanently on
- M Dimm. enable : when enabled, scenes can be made brighter or darker
- M Color. enable : when enabled, the color of a scene can be changed
- M Speed. enable : when enabled, dynamic scenes can be made faster and slower
- M Scene. enable : when enabled, the scene can be changed
- M Auto mode : when enabled, the controller will revert to the default mode after it has been left for a specified period of time
- M Auto time : the amount of time the controller will wait before reverting to the default mode
- M Default : the default mode which the controller will revert to after a certain amount of time
- M Dimmer 100% : when enabled, the dimmer mode will adjust between 0% and 100% without saturating to white between 100% and 200%
- M Lock Control : Once this is enabled, you can hold the dimmer button for 5 seconds to enable/disable lock mode. It's automatically activated after 120 seconds. When lock is activated, you'll see a red border around the screen

Arrows (A) : Allows you to adjust which modes can be controlled by the arrows
- A Dimmer enable : allows for the Dimmer mode to be controlled by the arrows
- A Color enable : allows for the Color mode to be controlled by the arrows
- A Speed enable : allows for the Speed mode to be controlled by the arrows
- A Scene enable : allows for the Scene mode to be controlled by the arrows
- A Default : the mode to jump to when the arrows are pressed, if the arrows are not enabled on the selected mode

Pallet (P) : Allows you to adjust which modes can be controlled by the palette wheel
- P Dimmer enable : allows for the Dimmer mode to be controlled by the palette wheel
- P Color enable : allows for the Color mode to be controlled by the palette wheel
- P Speed enable : allows for the Speed mode to be controlled by the palette wheel
- P Scene enable : allows for the Scene mode to be controlled by the palette wheel
- P Default : the mode to jump to when the palette is pressed, if the palette is not enabled on the selected mode

Scene (S) : Scene management
- S 0(off) enable : displays an empty off scene before scene 0 in each area
- S Pause enable : allows a scene to be paused if the scene mode button is held for 1 second
- S Stop enable : allows a scene to be stopped if the scene mode button is held for 4 seconds
- S Fade config : manages fading between scenes
  - From Show : the fade time set inside the show file will be used
  - Force : the automatic fade time set in the menu will override all fade times in the show file
  - Force Max : the controller will look at the show file fade time and the menu fade time and use the greatest
  - Force Min : the controller will look at the show file fade time and the menu fade time and use the smallest
  - Never : the controller will never fade between scenes
- S Fade time : the time of the automatic fade between scenes
- S Setting Mode : determines how dimmer/speed/color overrides are saved
  - SaveAlways : the dimmer/speed/color overrides all scenes until the reset button has been pressed
  - NeverSave : the dimmer/speed/color is never saved
  - AutoReset : the dimmer/speed/color is saved on the current scene
- S Trigger : sets the scene triggering mode. Time Delay and Scene Butt allow for scenes to be scrolled through without playing
  - Auto : the scene will be triggered as soon as it's selected
  - Time Delay : a short delay is added before a scene is triggered
  - Scene Butt. : the selected scene will not play until the scene button is pressed

First Start (F) : Default settings when the unit is first started
- F Scene Nr. : specify a default startup scene. 'Scene Star' mode must be enabled in the Scene Mode options (below)
- F Start Scene Mode : manages the startup mode for scene selection
  - Scene Star : activates a specific scene at startup. The scene number is set in the F Scene Nr. option (above)
  - Recovery : activates the previous calendar/time triggered scene. Useful for recovering from power interruptions
  - Off: activates the off scene
- F Display Time : when enabled, the time will be displayed on the screen at startup
- F Display Firm : when enabled, the firmware version will be displayed on the screen at startup
- F Start Trigger : when enabled, in combination with Recovery mode, a calendar triggered scene will start from where it was last playing,

Trigger (T) : Manages the controllers external triggering properties
- T Time enable : enables the clock triggering
- T Ports enable : enables the 8 dry contact ports
- Binary Mode : enables ability to trigger 256 scenes using binary combinations of contact ports
- Port Replay : when enabled, retriggering the same port will restart the same scene at the beginning
- T RS232 enable : enables scene triggering by RS232
- T IR enable : enables the infra red port (disabled by default to prevent interference)
- T UDP enable : allows the controller to send and receive UDP messages required for network control
- T Blackout port : enables the blackout relay output which is triggered when the standby button is touched

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ACCESSORIES - iQ-DMX-STICK-DE3

Installation Instructions

Ethernet (E) : Manages the controller's network settings

Ethernet : enables the Ethernet socket on the controller
LAN :enables network discovery
WAN & Remote : enables direct IP connections from WAN and remote locations (i.e. the internet)
TCP Wan Port : define port to connect to controller (default is 2431)
Remote Pwd : define password to connect remote control apps
Software Pwd : define password to connect programming and configuration software
Dynamic IP Addr : enables dynamic IP addressing (DHCP) which allows the controller to obtain an IP address from a router
Sync Blackout: when this open is enabled, all other controllers on the network will go into standby when the standby button is pressed
Enable NTP : enables Network Time Protocol. The controller will synchornise the clock with the internet if a connection is available
Dynamic IP Add : If enable, the controller will look for a DHCP server to receive network settings
Sync Blackout : sychronises blackout mode across all controllers on a network
Enable NTP : enables time sychronisation over the internet
NTP Server : the IP address of the server to synchronize the clock. The default is 005.135.141.108
DHCP Status: shows whether DHCP has assigned a valid IP address. DHCP success or fail displayed
Device's IP Add : the controller's static IP address that it will use if it does not receive an IP address via DHCP
Lease : the lease time for a IP address given by DHCP
Mask: the subnet mask of the controller if not set to DHCP. Generally this is 255.255.255.0
Default Gateway : the IP address of the router if not set to DHCP
MAC Address : a unique ID used to identify the controller on the network

Date/Time (D) : Manages the date and time stored inside the controller

Date : the controllers date
Time :the controllers clock time
G Bright normal : the % brightness when the controller is not sleeping G Bright sleep: the % brightness when the controller is sleeping
G Bright LED : the % brightness of the mode and reset LEDs

Graphics (G) : Screen management

G Image enable : allows for images to be shown for each scene if they have been assigned in the programming software
G Image full : when enabled, the image will be displayed in full screen and the scene and area will not be visible
G Image time : the time it takes before the image is displayed in full screen
G Sleep enable : when enabled, the screen brightness will dim after a certain amount of time
G Sleep time : the amount of time to wait before sleeping
G Bright normal : the brightness of the screen's backlight
G Bright sleep : the brightness of the screen's backlight whilst the controller is sleeping
G Bright LED : the brightness of the scene, undo and standby LED's

DMX Output (X) : Manage the timings of the DMX output messages and the page priorities (advanced function!)

X MBB : Mark Before Break- the time to wait between sending each 512 channel DMX message (or 'packet')
X Break : Break- the time to wait just before sending a new packet, resetting the DMX line
X MAB : Mark After Break- the message which tells your receiver to begin reading data
X MBS : Mark Between Slots- the delay time between sending each DMX channels data within the DMX packet
Univ-1/Univ-2 : each timing can be set differently depending on the universe number
X Alphab Mode : if the same scene is triggered in the global area and a second area, the area with the highest letter will take priority
X LTP Mode : If the same scene is triggered in the global area and a second area, the latest scene triggered takes priority

Sensitive (S) : Manage the touch sensitivity settings

S USB Init : reset the touch sensitivity when the USB is connected and disconnected
S Auto Time : the time to wait before automatically resetting the touch sensitivity
S High Sense : when enabled, the sensitivity will be increased
S See Values : see each touch sensitive button number and palette value

Language (L) : change the language of the text which appears on the screen

About : check the firmware release date and version number and assign a name for the controller

Reset : Reset all settings to the factory default

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Troubleshooting

Touch buttons not responding

If the STICK is not responding to touch input, this could be because the touch sensitive buttons have recalibrated incorrectly. In this state it is common for the display to be stuck on RGB values. This is not a hardware fault and can be resolved.

The back of the Stick-DE3 is not electrically shielded because it is designed to be mounted against a wall. If electronic interference happens through movement, touching of your hands and/or cables at the back, this can cause the symptoms described above.

To avoid this problem:

- Only power the Stick-DE3 on once it is securely mounted and is not able to move. Ensure the cables are also not able to move.
- We do not recommend mounting on a metal surface as this is known to cause interference with the touch buttons. In some cases, connecting earth to the metal surface and to the Stick-DE3 GND can solve this. In many cases, the Stick-DE3 will need to be mounted against a non-metallic surface.
- Mount using a deep back box with enough space for the cables. Try to avoid the cables touching the back of the PCB.
- Mount on a completely flat surface. This will prevent bending.

All LEDs on the controller are flickering

There has been no showfile detected on the SD memory card.

- Try formatting the SD card in the computer
- Try re-writing the show file
- Try replacing the SD memory card

The lights are not responding

- Check the DMX +, - and GND are connected correctly
- Check that the driver or lighting fixture is in DMX mode
- Be sure that the DMX address has been set correctly
- Check there are no more than 32 devices in the chain
- Check that the DMX LED is flickering to the right of the SD card
- Connect with the computer and open Hardware Manager (found in the software directory). Open the DMX Input/Output tab and move the faders. If your fixtures respond here, it is possibly a problem with the show file

All LEDs on the controller are flickering except the standby LED

There is no SD card detected.

- Check the SD card is properly connected
- Check the SD card is 32Gb or less in size
- Try formatting the SD card to FAT16 or FAT32 in the computer
- Try re-writing the show file
- Try replacing the SD memory card

4 Mode LEDs on the controller are flickering

The controller is in bootloader mode. This is a special 'startup mode' which is run before the main firmware loads.

- Check that there is nothing metallic touching the back of the controller
- Try re-writing the firmware with the latest hardware manager
- Try formatting or replacing the SD card

Displayed error messages

You may see one of the following messages on the LCD display

INIT SD	If this message is frozen, it means the controller is having a problem initialising the SD card
NO SD CARD	No SD card detected
DATA ERROR	The controller can read the SD card, however, it can not understand the data on it
EMPTY SD	The SD card is empty
CAPSENS	Problem with the touch sensitivity chip detected. • Remove USB cable from controller • Update firmware to 1.09 or later • If above does not solve it, contact support
ERROR xx	• Try rewriting your show • Contact support with error number
RTC QUARTZ	Contact support

The controller is not detected by the computer

- Be sure that the latest software version is installed
- Connect by USB and open the Hardware Manager (found in the software directory). If it is detected here, try to update the firmware

Cannot write show

- Use HardwareManager to write an Empty Show
- Format your SD card to FAT format without Quick option

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