



# ADJ SDC24 24 Channel Basic DMX Controller User Manual

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**ADJ SDC24 24 Channel Basic DMX Controller**



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#### **Europe Energy Saving Notice**

Energy Saving Matters (EuP 2009/125/EC) Saving electric energy is a key to help protect the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

#### **DOCUMENT VERSION**



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version >	DMX Channel Mode	Notes
12/14/23	1.0	1.0	N/A	Initial Release

## GENERAL INFORMATION

### INTRODUCTION

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate this product. These instructions contain important safety and use information.

### UNPACKING

This device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect the device for damage and be sure all accessories necessary to operate the device have arrived intact. In the event, damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

### CUSTOMER SUPPORT

Contact ADJ Service for any product-related service and support needs. Also visit [forums.adj.com](https://forums.adj.com) with questions, comments or suggestions.

Parts: To purchase parts online visit:

- <http://parts.adj.com> (US)
- <http://www.adjparts.eu> (EU)

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**WARNING!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture!

**CAUTION!** There are no user-serviceable parts inside this unit. Do not attempt any repairs yourself, as doing so will void your manufacturer's warranty. Damages resulting from modifications to this device and/or the disregard of safety instructions and guidelines in this manual void the manufacturer's warranty claims and are not subject to any warranty claims and/or repairs. Do not discard the shipping cartoon in the trash. Please recycle when ever possible.

## LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## LIMITED WARRANTY PERIODS

- Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting

Stands etc. excluding LED and lamps)

- Laser Products = 1 Year (365 Days) Limited Warranty (excludes laser diodes which have 6 month limited warranty)
- L.E.D. Products = 2-year (730 days) Limited Warranty (excluding batteries which have a 180 day limited warranty) Note: 2 Year Warranty only applies to purchases within the United States.
- StarTec Series = 1 Year Limited Warranty (excluding batteries which have a 180 day limited warranty)
- ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty

## **WARRANTY REGISTRATION**

This device carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by con-tacting our customer support team on our customer support number. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

## **FEATURES**

- 8 individual channel faders and 1 master fader
- 24 DMX channels
- Compact, portable design
- 3-Pin and 5-Pin XLR output
- Battery Type: PP3 9V (not included)

## **INCLUDED ITEMS**

- 9V 1A Power Supply (x1)

## **SAFETY GUIDELINES**

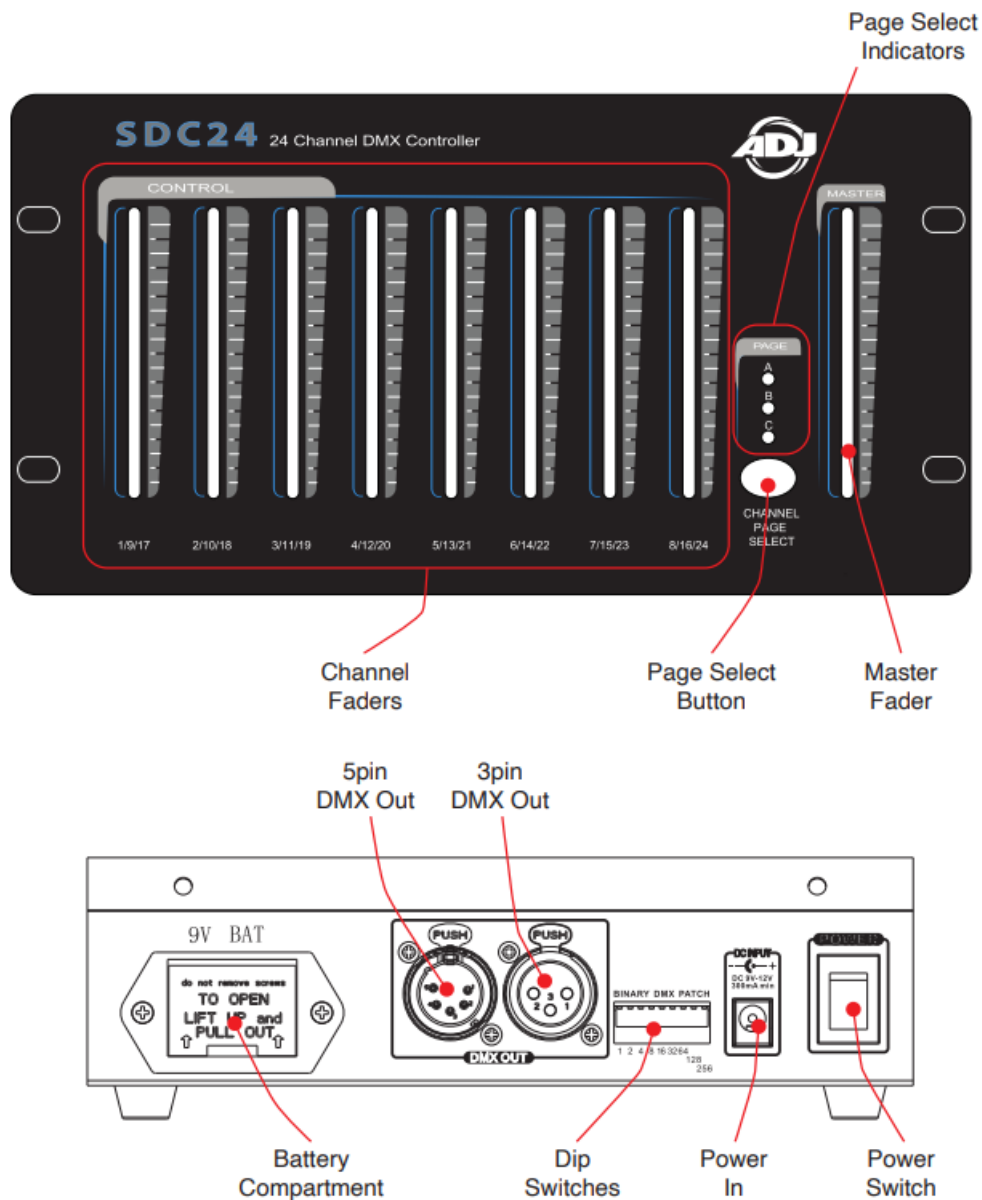
To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ Products, LLC is not responsible for injury and/or damages resulting from the misuse of this device due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should install this device and only the original rigging parts included with this device should be used for installation. Any modifications to the device and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



- PROTECTION CLASS 1 – FIXTURE MUST BE PROPERLY GROUNDED
- THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS DEVICE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.

- DO NOT PLUG THE DEVICE INTO A DIMMER PACK! NEVER OPEN THIS DEVICE WHILE IN USE! UNPLUG THE POWER BEFORE SERVICING DEVICE! MAXIMUM AMBIENT OPERATING TEMPERATURE IS 113°F (45°C). DO NOT OPERATE WHEN AMBIENT TEMPERATURE EXCEEDS THIS VALUE! KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!
- IF THE FIXTURE IS EXPOSED TO ENVIRONMENTAL TEMPERATURE CHANGES SUCH AS RELOCATION FROM AN OUTDOOR COLD TO AN INDOOR WARM ENVIRONMENT, DO NOT POWER THE FIXTURE ON IMMEDIATELY. INTERNAL CONDENSATION AS A RESULT OF ENVIRONMENTAL TEMPERATURE CHANGE CAN CAUSE INTERNAL FIXTURE DAMAGE. LEAVE THE FIXTURE POWERED OFF UNTIL IT HAS REACHED ROOM TEMPERATURE BEFORE POWERING ON.
- For your safety, please read and understand this manual in its entirety before attempting to install or operate this device.
- Save the packing carton for use in the unlikely event the device may have to be returned for service.
- Do not spill water or other liquids into or onto the device.
- Be sure that the local power outlet matches the required voltage for the device
- Do not remove the outer casing of the device for any reason. There are no user-serviceable parts inside.
- Disconnect the device's main power when left unused for long periods.
- Never connect this device to a dimmer pack
- Do not attempt to operate this device if it has been damaged in any way.
- Never operate this device with the cover removed.
- To reduce the risk of electrical shock or fire, do not expose this device to rain or moisture.
- Do not attempt to operate this device if the power cord has been frayed or broken.
- Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Never block the ventilation holes. Always be sure to mount this device in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- This unit is intended for indoor use only. Use of this product outdoors voids all warranties.
- Always mount this unit in a safe and stable matter.
- Please route your power cord out of the way of foot traffic. Power cords should be routed so they are not likely to be walked on, or pinched by items placed upon or against them.
- Maximum ambient operating temperature is 113°F (45°C). Do not operate this device when ambient temperature exceeds this value!
- Keep flammable materials away from this fixture!
- The device should be serviced by qualified service personnel when:
  - **A.** The power-supply cord or the plug has been damaged.
  - **B.** Objects have fallen on, or liquid has been spilled into, the device.
  - **C.** The device has been exposed to rain or water.
  - **D.** The appliance does not appear to operate normally or exhibits a marked change in performance.

## OVERVIEW



## INSTALLATION

- **FLAMMABLE MATERIAL WARNING** Keep device at least 8in. (0.2m) away from any flammable materials, decorations, pyrotechnics, etc.
- **ELECTRICAL CONNECTIONS** A qualified electrician should be used for all electrical connections and/or installations.
- **MINIMUM DISTANCE TO OBJECTS/SURFACES MUST BE 40 FEET (12 METERS)**

## DO NOT INSTALL THE DEVICE IF YOU ARE NOT QUALIFIED TO DO SO!

- Maximum ambient operating temperature is 113°F (45°C).
- Device should be installed away from walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.

## DMX SETUP

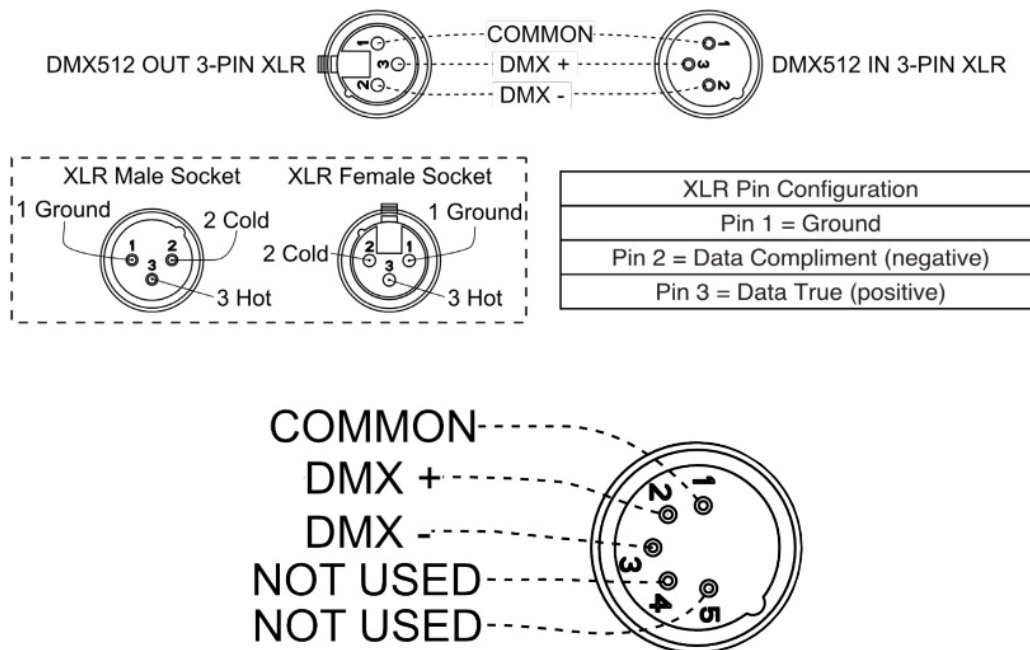
**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication

between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufacturers to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, try to use the shortest cable path possible when linking several DMX fixtures. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line: at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

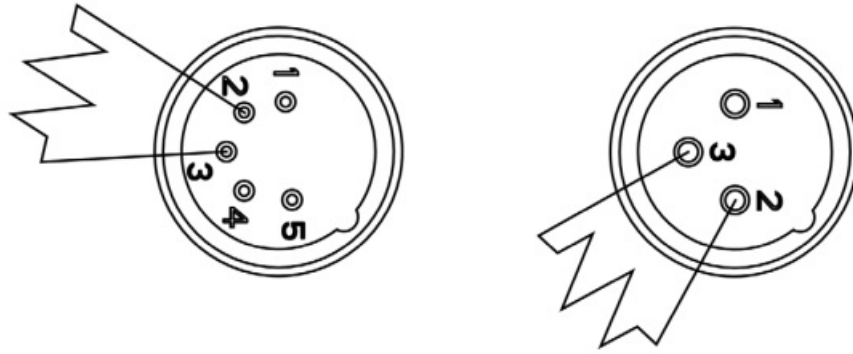
**Data Cable (DMX Cable) Requirements (For DMX Operation):** This unit can be controlled via DMX-512 protocol. The DMX address is set on the rear panel of the unit. Your unit and your DMX controller require either a standard 3-pin or 5-pin XLR connector for data input and data output. We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male XLR connector at one end and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.

**Notice:** Be sure to follow the illustration below when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.



**Special Note:** Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will reduce the risk of erratic behavior.





A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

### DMX ADDRESSING

The DMX address for this device is set using the DMX dip switches on the side of the device, located next to the DMX ports. A series of 9 switches represent values of 1, 2, 4, 8, 16, 32, 64, 128, and 256, and each switch can be set to an on or off position. The DMX address is the sum of the values of the switches that have been set to the on position. For example, to set the device to a DMX address of 35, flip switches 1, 2, and 32 to the on position, while leaving the rest of the switches in the off position. ( $1 + 2 + 32 = 35$ )

### OPERATION

Once the SDC24 has been connected to your fixture(s) with either DMX data cables or wireless RDM, these fixture(s) can easily be operated using the controls on the SDC24.

- **MASTER FADER** – Use to adjust the output for all channels (1-24) together.
- **CHANNEL FADERS (1 – 24)** – Use to adjust the output of a single channel. Each fader is assigned 3 channels to control, and the Page Select Button and Indicators are used to determine which of the 3 assigned channel pages is currently active for each fader.
- **PAGE SELECT BUTTON** – Use to select which set of channels is currently active for the Channel Faders. Press the button to cycle through the pages. The currently selected page is indicated by the three Page Select Indicators (A, B, and C). The pages correspond to the following channels:
  - A. Channels 1 – 8
  - B. Channels 9 – 16
  - C. Channels 17 – 24

### CLEANING AND MAINTENANCE

Due to fog residue, smoke, and dust, cleaning of the external surfaces must be carried out periodically.

- Use normal surface cleaner and a soft cloth to periodically wipe down the outside casing.
- Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the device operates (i.e. smoke, fog residue, dust, dew).

**BATTERY CHANGE:** To change the battery on this device, locate the battery panel on the back of the unit, beside the DMX ports. Use a Philips screwdriver to remove the two screws on the panel, then remove the panel and

remove the dead battery. Replace with a new 9V battery, then re-install the battery panel and secure in place with the two screws.

## ORDERING INFORMATION

- **SKU (US)**
  - SDC024
- **SKU (EU)**
  - 1322000065
- **ITEM**
  - ADJ SDC24

## SPECIFICATIONS

### Features

- 8 individual channel faders and 1 master fader
- 24 DMX channels
- Compact, portable design
- 3-Pin and 5-Pin XLR output
- Battery Type: PP3 9V (not included)

### Control / Connection

- DIP Switches To Set Starting DMX Channel
- 3pin & 5pin DMX Outputs
- On/Off Switch
- Channel Page button with Indicator LED's
- DC9V-12V Power Supply Input
- 9V Battery slot

### Size / Weight

- **Length:** 4.7" (120mm)
- **Width:** 9.1" (230mm)
- **Height:** 2.2" (56.66mm)
- **Weight:** 1.86 lbs. (0.84kg)

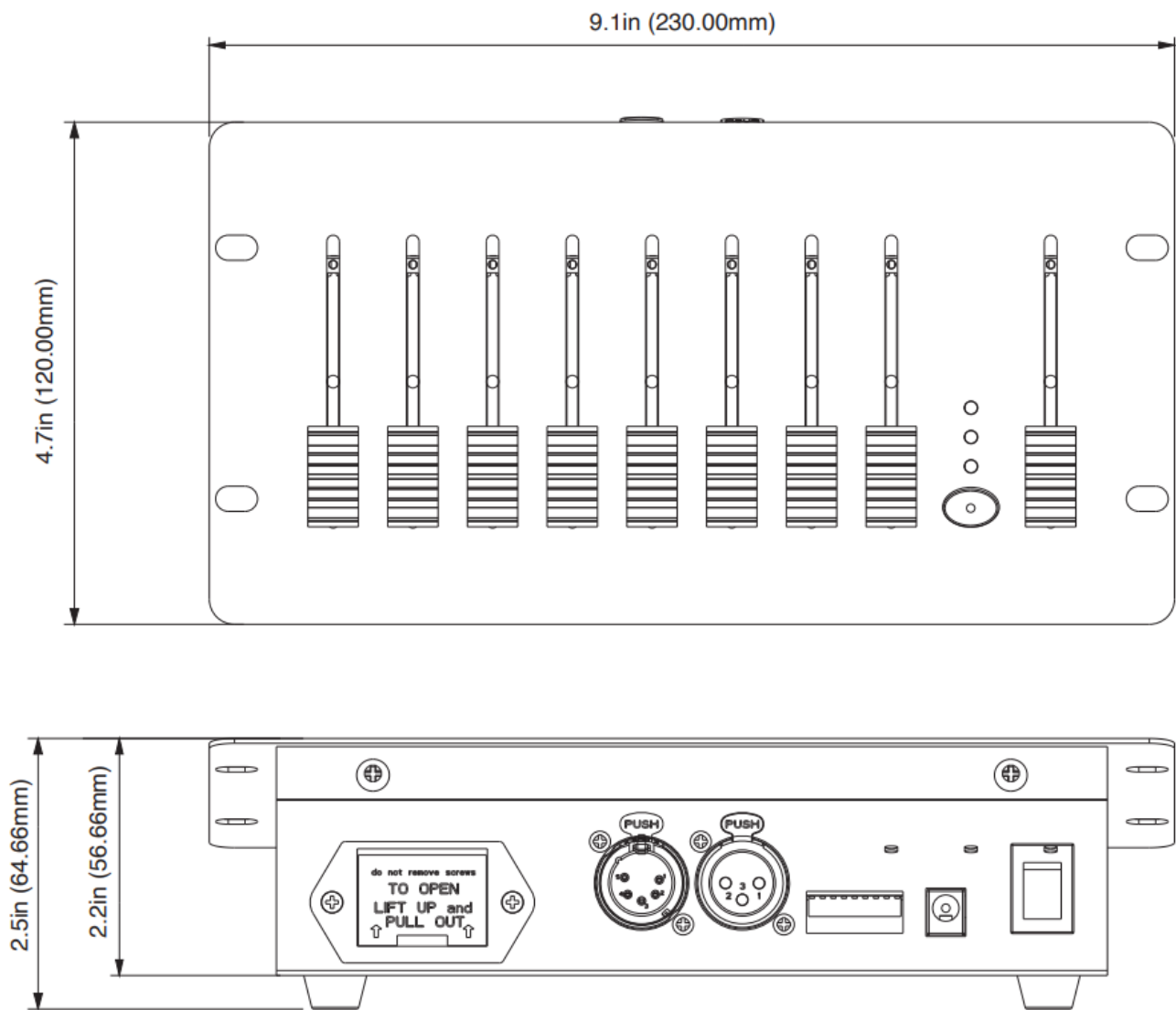
### Electrical

- DC9V-12V 300mA min or 9V Battery (Not Included)
- Power Consumption: DC9V 40mA 0.36W, DC12V 40mA 0.48W

### Approvals / Ratings

- CE Approved
- RoHS Compliant
- IP20







## DIMENSIONAL DRAWINGS



## Documents / Resources

  <p>SDC24 User Manual</p>	<p><a href="#">ADJ SDC24 24 Channel Basic DMX Controller</a> [pdf] User Manual</p> <p>SDC24 24 Channel Basic DMX Controller, SDC24, 24 Channel Basic DMX Controller, Basic D MX Controller, DMX Controller, Controller</p>
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## References

-  [Topics | ADJ Forums](#)
-  [ADJ Product Parts - Lighting Online Parts Store](#)
-  [Home](#)
-  [ADJ Supply Europe](#)
-  [ADJ Partsshop - Service is our passion!](#)
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