JAB Series Light

User Manual

AAdyn Technology.

Revision 1085.001
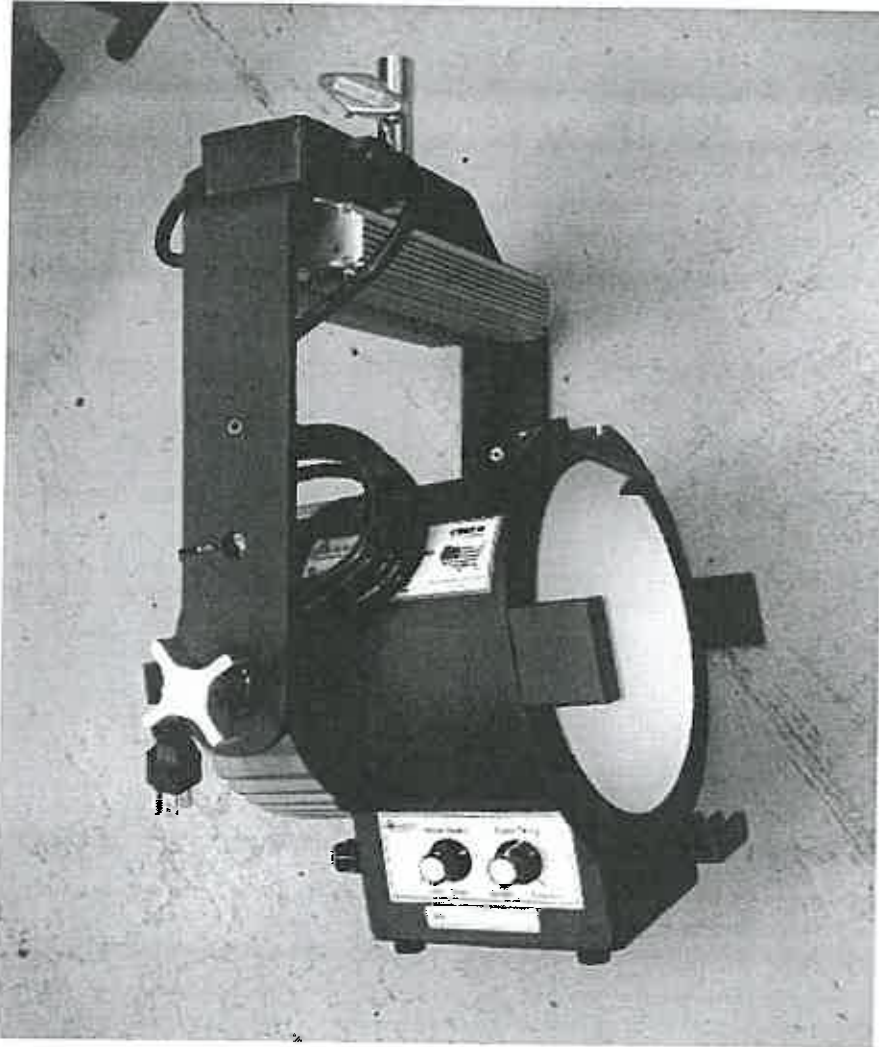
Table of Contents

Before You Begin

What is Included
- User's Manual
- One (1) ECO Jab Series light
- AC Power Input cable with plug
  - USA voltage (120Vac), three-prong plug standard
  - One (1) 120/240v Adapter
- Diffuser lens, three (3), 15°, 30° and 55°
- One (1) Yoke Pin with attaching hardware
- User Interface Module , UIM (Included, if purchased – Optional)

Unpacking Instructions

Immediately upon receipt of this light, carefully inspect the shipping packaging for any obvious signs of damage from mishandling or exposure to the elements. If any is noted, please provide this information to the shipper immediately so that the proper claims can be processed. Place packaging in upright position (with labeling and markings in readable orientation) and open the top end of the carton. Verify that all material shown above in the "What is included" section is present and in good condition. Remove the light and associated material from the carton and place the light on a stable surface or mounting configuration.

Symbol Definitions

Note: This symbol indicates important information that should be carefully considered and followed.

Note: This symbol indicates important safety information and warnings. Special attention should be paid to reading, understanding and heading these warnings. Failure to observe these warnings could result in damage to the fixture, third-party equipment or harm to the user. Keep Light Dry

Note: This symbol indicates important information concerning the operation or functions of this light.

Safety Notes

Introduction

Product Description

The ECO series light is a professional grade, LED based, fixture which provides exceptional light output and control. The light is capable of either tethered remote or DMX control and offers a full array of brightness settings as well as Strobe and Lightning functions.

Features

- UIM control
- DMX control (Compatible with Slow and Fast speeds)
  - Up to 500 selectable DMX addresses
  - Daisy-chain operation of up to 32 lights in one string
  - Controls Brightness, Fade, Strobe and Lightning modes

Setup

Quick Start

Remove the Aadyn light from its protective shipping packaging and place it in a safe and secure location for setup or use.

> **(i)** Prior to proceeding further, make sure that light is resting on a stable surface or is properly attached to a mounting location using the supplied yoke and yoke pin mounting system.

> **(i)** Make note of the location of the inputs and outputs along with the light controls found on the light's rear bulkhead.
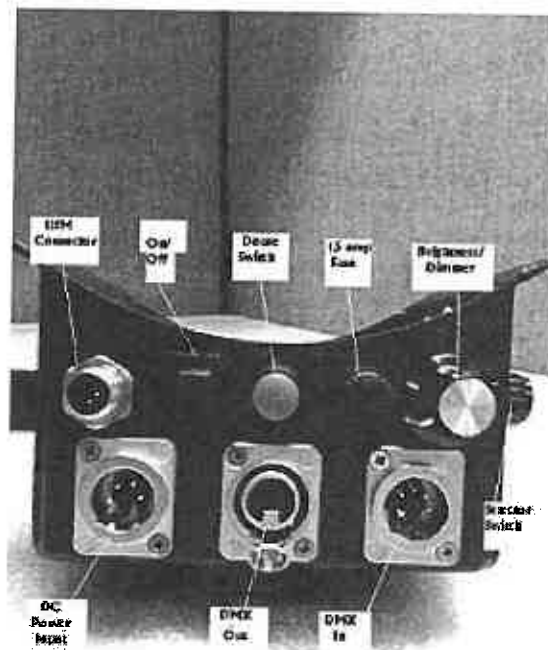
The AC power cable & DC power cable will be found tie wrapped & coiled up inside of the yoke attached to the power supply inside the shipping container.(if ordered with light package)

- Uncoil the AC and DC cord plugging the DC female end into the DC power input located on the back of the control box (pictured above)

- Plug the male end of the AC power cord into an appropriate AC power source.

- Turn on light by pressing the black power switch located in the upper left hand portion of the control box, shown above.

- Using the Selector switch located on the right side of the control box select the desired mode in which you wish to operate the light. UIM, Local or DMX, see section 1.1 if the unit purchased is a Variable light, the color temperature dial will be located on the same side of the box as the Mode Selector switch and the color can be adjusted as desired using the dial for warm light, cool light or a mix of light.

  - Upon power up, the light will turn on immediately to its full brightness unless a specific "Power On" Setting which has been previously programmed into the light. This "Power On" Setting will be covered later in these instructions.

  - If a UIM is ordered with the light package, it will be located in a separate box within the package the Jab light was shipped in. The length of the cable is 12'. Remove the UIM from the box, uncoil the UIM cable and attach the metal connector on the cable to the UIM connector located on the control box as pictured.

  - The display on the UIM will display the following Splash Screen message upon power up.

    > Aadyn Technology
    > Remote Interface

  - Using the Left/Right Arrow button, a desired brightness level can be selected. Other functions are also available and can be viewed using the UIM by pressing the Up/Down arrow to the desired menu function as detailed below in section 1.0, then pressing the (√) once a function has been selected. All of these functions are covered later in these instructions.

  - The **(X)** button on the UIM is a non-latching douse switch which, when pressed, will momentarily extinguish the light. Releasing the switch will allow the light to return to operation at its previous setting.

AC Power

ECO series lights operate on standard single phase AC power.

- Input voltage range: 100 – 277Vac
- Input frequency range: 50/60 Hz

> ⚠ **Warning!** Standard power cord supplied with ECO light is intended to connect with standard, single-phase 110-120 Vac, 60 Hz USA circuit. Other power cords for connection to other countries' single phase circuits are available as options. No other special adjustments or changes are required for operation at international voltages.

> ⚠ **Warning!** Never connect ECO series lights to anything other than a single-phase circuit. Connection to three-phase power can/will cause serious damage and/or bodily injury.
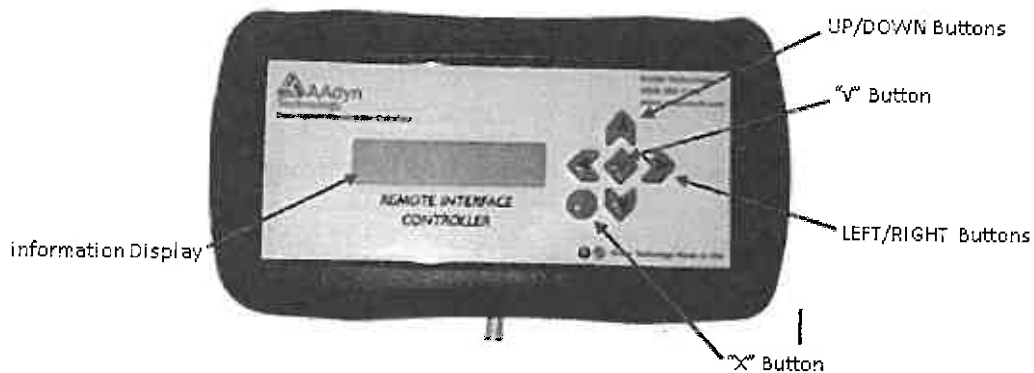
Control Selection

The light can be controlled via two means of interface as shown below:

UIM
DMX

Operation

UIM Operation

Functional Requirements

The Following sections provide all the functional details for the AAdyn User Interface Module (UIM)

1.0 UIM Functions

- The UIM will display a menu of parameters as listed below by scrolling up or down :
    - BRIGHTNESS ADJ (Adjustment)
    - FADE ADJ (Adjustment)
    - EFFECT SELECT
    - EFFECT FREQUENCY
    - RECALL SETTING
    - SAVE CUSTOM
    - POWER ON SETTING
    - RECALIBRATION PT (Point)
    - SOFTWARE VERSION
    - DMX BASE ADDRESS
    - LIGHT CONTROL
- Under each parameter, the UIM will display settings pertaining to the parameter for the user to select. The settings will be:

1.1 DMX BASE ADDRESS

- This parameter shall be meaningful only if the next parameter is set to "DMX".
- The address of the Aadyn lights can be set to any number between (001) and (512). Assigning unique numbers to multiple lights will allow each of the lights to be controlled (via DMX) independently of any other light. Assigning the same number to multiple lights will result in all of the lights with the same address operating in unison.

> **Please Note:** Although there are up to (500) unique addresses possible for assignment under DMX control, the maximum number of lights that can be connected together via the DMX In and Out connectors on the back of the Aadyn lights is **(32).**

1.2 LIGHT CONTROL

- Control of the Aadyn light can be performed from either the UIM or via DMX control. Default as shipped from the factory is UIM. In order to determine which source to select press the Left/Right arrows until the desired method of control (UIM or DMX) is shown. Pressing the "√" button will save this setting in the Aadyn light.

LIGHT CONTROL
←   UIM   →

| LIGHT CONTROL |
| :---: |
| ←   DMX   → |

> **Please Note:** When DMX Control is selected, complete control of all Aadyn light features and functions is accomplished through DMX rather than the UIM. In order to return control from DMX to the UIM, see note above for setting light control. For DMX control parameters, see section 3.0 below.
> The UIM controls described below will not function.

1.3 BRIGHTNESS ADJ: This setting allows for adjustment of the brightness of the light to be varied from a setting of completely off to a setting for full brightness. The associated screen is shown below:

- The values for this parameter vary from 0% to 100% and can be increased or decreased by one pressing the left or right buttons or by holding down the left or right buttons, fast scrolled by five.
- Please note that each setting value represents a brightness level where 0% is completely off and 100% is the maximum brightness of the light.

1.4 FADE ADJ: This setting controls how fast changes in the brightness level are responded to by the light. The associated screen is shown below:

```
┌─────────────────┐
│   FADE ADJ      │
│  ←  000  →      │
└─────────────────┘
```
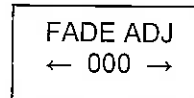
- Values from 0% to 100% that can be increased or decreased by one by pressing the left or right buttons or a fast scroll by five by holding down the left or right buttons.
- For example, a FADE ADJ value of 0% represents the fastest response to brightness level changes and a value of 100% represents the slowest response to brightness level changes.

1.5 EFFECT SELECT: This setting controls the selection of special effects stored within the Aadyn light. Among these effects are Strobe and various Lightning settings. The possible settings are listed below and are described in more detail further in the document.
- The software presents the user with thirteen individual choices for the EFFECT SELECT parameter. These choices are accessed by pressing the left or right arrows. Please note that continuing to press either the left or right arrow repeatedly, it is possible to loop through the entire list of EFFECT SELECT parameters again.
  - NONE (OFF) – Turns off any current effect
  - STROBE

```
┌─────────────────────┐
│   EFFECT SELECT     │
│  ←  STROBE  →       │
└─────────────────────┘
```

  - LIGHTNING1 SGL,
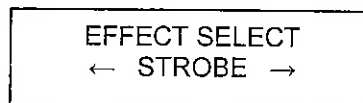
```
┌─────────────────────────┐
│    EFFECT SELECT        │
│  ← LIGHTNING1 SGL →     │
└─────────────────────────┘
```

  - LIGHTNING1 RPT,
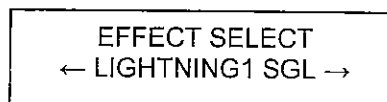
```
┌─────────────────────────┐
│    EFFECT SELECT        │
│  ← LIGHTNING1 RPT →     │
└─────────────────────────┘
```
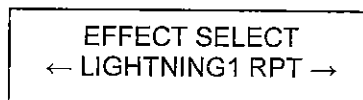
- LIGHTNING2 SGL,
- LIGHTNING2 RPT,
- LIGHTNING3 SGL,
- LIGHTNING3 RPT,
- LIGHTNING4 SGL,
- LIGHTNING4 RPT,
- LIGHTNING5 SGL,
- LIGHTNING5 RPT,
- LIGHTNING CYCL
- The choice shall change by one each time a right or left arrow button is pressed.

- STROBE will make the LEDs emit pulses of light at a user designated frequency and brightness. The brightness of the STROBE can be adjusted using the BRIGHTNESS ADJUST as described earlier in this document. The frequency of the STROBE can be adjusted by changing the value on the EFFECT FREQUENCY screen. The values on this screen range from 0% to 100%.The pulse of the strobe can be increased by adjusting the value of the Effect Frequency to a lower value (toward 0%) or slowed down by selecting a higher value (toward 100%).
- LIGHTNING# SGL (where # is 1 to 5 as shown above) makes the LEDs emit pulses of varied length and brightness based on internal parameters to simulate 5 unique and different lightning pulse patterns. SGL indicates that this sequence shall be shown only once each time the (√) button is pressed. The brightness and length components of lightning can be adjusted using the BRIGHTNESS ADJ and EFFECT FREQUENCY as described in this document.
- LIGHTNING# RPT (where # is 1 to 5 as shown above) operates in the same manner as LIGHTNING# SGL, except that the Lightning scenario selected will continue to repeat itself with a 2 second pause between cycles. To exit this function, once activated, it is necessary to select another lightning setting or to select "NONE". As described above, the brightness and length components of lightning can be adjusted using the BRIGHTNESS ADJ and EFFECT FREQUENCY.
- LIGHTNING CYCLE is a means of displaying all five unique lightning patterns in a sequential manner with a 2 second pause between each one. Once activated, it will continue to scroll through patterns 1 through 5 and repeat until halted as described in the previous paragraph.

1.6 EFFECT FREQUENCY
- The power on default of the EFFECT FREQUENCY parameter shall be 75%. This is a mid-range value that works well with the effects stored on the Aadyn lights. This setting is used primarily to adjust the timing of the STROBE and LIGHNING effects. This value can be changed by the user to any setting from (0%) to (100%) and the resultant change to the effect is as described above..

1.7 SAVE CUSTOM
- The UIM shows twelve (12) custom user choices which can be saved individually in the Aadyn lights. These custom settings can be specific brightness levels of the light or they can be particular effect settings for STROBE or LIGHTNING.
- In order to set a CUSTOM SETTING, the user first adjusts the light to the particular operation desired. Then, using the UP/DOWN buttons on the UIM, the information display is scrolled to the SAVE CUSTOM screen as shown.

```
SAVE CUSTOM
← CUSTOM 1 →
```

Using the Left/Right arrows, the user can select the particular CUSTOM setting they wish to save. Once this is selected the CUSTOM setting can be saved by pressing the "√" button. Once pressed, the following screen will be displayed.

```
SAVE CUSTOM
CUSTOM 1 SAVED
```

- Please note that all settings are saved in the Aadyn lights and are not dependent of the UIM being attached for operation.

1.8 RECALL SETTING
- The UIM can be used to recall any Custom setting saved in the Aadyn lights by the particular number (1 through 12) that was previously stored by the user. Additionally, there are three (3) PRESETS that can also be quickly recalled as well.
  - PRESET 1: 100% of Full Brightness
  - PRESET 2: 45% of Full Brightness
  - PRESET 3: 25% of Full Brightness

1.9 POWER ON SETTING
- By default, each Aadyn light goes to 100% full brightness when the power switch is turned on. If there is some other brightness level or effect that the user wishes the light to power on with, this setting allows for making this change.
- In the POWER ON screen, the settings can be selected from any of the PRESETS or CUSTOM settings described above. The settings can also be set to power on with the LAST USED settings. This setting stores all of the parameters as currently set on the Aadyn light into the light's memory for recall when the light is turned on again.

1.10 RECALIBRATION PT
- The programming in the Aadyn lights monitors the usage of the lights and the LEDs taking into account operating temperatures, light levels, type of effect selected and duration to create an indication of when the light should be recalibrated. This is done to insure the best and highest level of performance along with maintaining consistency of the light output over the life of the light. This display on the UIM gives the user an indication of the operating time remaining until recalibration is recommended.

1.11 SOFTWARE VERSION
- The version of software installed in the Aadyn lights is displayed on the UIM for user reference. The nomenclature used is "Major Version. Minor Version. Build", for example Version 1.0.3

2.0 Douse Switch
- The UIM has a momentary, non-latching douse switch shown as ("X"), which immediately extinguishes the light and will remain extinguished until the douse switch has been released.
- There is also a red switch located on the back of the Aadyn light. This douse switch responds in the same manner as the douse switch on the UIM.

General Information

> **Please Note:** The UIM is an interface that allows the user to control the functions of the Aadyn lights. All actual software control and settings are maintained within the Aadyn ECO light itself. Changes and control of these settings are managed either through the UIM or through a DMX interface.

- When changing values within a particular screen on the UIM, the rate of change in the scrolling values will increase the longer the button is held down. This is for convenience to the user and to facilitate quicker large changes.

- If the UIM is removed after startup, the software within the Aadyn light will maintain the current settings. If the UIM is reattached later, the splash screen (Aadyn Technology) will be displayed. When the user presses an arrow button, it will return to the menu screen. .

DMX Operation

3.0 DMX Controller Interface

- The Aadyn light software accepts input from the DMX512 controller that transmit user requested values of DMX update speeds up to 44Hz for BRIGHTNESS, FADE, EFFECT, EFFECT FREQUENCY and EFFECT ACTIVATION.
- The DMX output to the light is mapped as follows: Channels 1, 2,3, 4, 5 and 6 are used to control the functions of the Aadyn lights.

Control		Value	Function
Channel 1	Brightness	000 to 255	Allows user to determine the light value, (000) is off and (255) is full bright
Channel 2	Color Temperature	000 to 255	For Variable temperature light only (000) = Tungsten, (255) = Daylight
Channel 3	Fade	000 to 255	Allows user to vary the response time to changes in brightness (000) quickest, (255) slowest
Channel 4	Effect Select	000 to 255	Allows user to select the effect according to the following values 0 - No effect selected 1 - 40 Lightning 1 selected 41 - 80 Lightning 2 selected 81 - 120 Lightning 3 selected 121 - 160 Lightning 4 selected 161 - 200 Lightning 5 selected 201 - 255 Strobe selected
Channel 5	Effect Frequency	000 to 255	Allows user to determine the length of the pulse of the effect selected. The lower the value the faster the pulse of the effect.
Channel 6	Effect Activation	000 to 255	Allows the activation of the selected effect according to the following values. 0 - Effect deactivated 1 - 255 Effect activated

Technical Information

General Maintenance and Care

This light is intended for indoor use only. When not in use, the light should be stored in a generally dry and dust free area. General maintenance and care consists of making sure that the light always has good ventilation and that nothing is obstructing free air flow through and around the light. Do not use chemicals to clean light. Any cleaning of the light, especially the LED optics should be with a damp, not wet, soft cloth that is non-abrasive.

Limited Warranty

Aadyn Technology, LLC guarantees all ECO and Jab series lights for a period of three (3) years or 60,000 hours of use, whichever comes first. This warranty extends only to the original purchaser. A purchase receipt or invoice, product registration card on file or other proof of date of purchase will be required before warranty service is rendered.

Should a defect occur during the warranty period contact your local dealer or go to the Aadyn website: www.aadyntech.com for directions

Aadyn Technology, LLC or an Aadyn Technology, LLC Authorized Repair Facility, will at its option, repair or replace the defective product. All replaced parts and products become the property of Aadyn Technology, LLC. Repaired or replacement parts and products are guaranteed for the remainder of the original warranty period. You will be charged for materials and labor or replacement of the product after the expiration of the warranty period.

There are no express warranties except as listed above. AADY TECHNOLOGY, LLC IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESUTLING FROM THE USE OF THE UNIT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE WARRNATY PERIOD LISTED ABOVE

This warranty only covers defects that occur during normal use. It does not extend to (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instruction, improper installation or maintenance, alteration, lighting or other incidence of incorrect or excessive voltage or current; (b) any repairs other than those provided by Aadyn Technology, LLC or an Aadyn Technology, LLC Authorized Repair Facility; (c) consumables, such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; (f) costs of product removal, installation, set-up service adjustment or reinstallation.

The Customer's obligations during the warranty period under this warranty are to notify Aadyn Technology, LLC within ten (10) days of any suspected defect and to return the goods prepaid to Aadyn Technology, LLC's factory or authorized service center.

THIS WARRANTY IS CONTINGENT ON THE CUSTOMER'S FULL AND TIMELY COMPLIANCE WITH: TERMS OF PAYMENT SET FORTH IN THE "TEMRS AND CONDITIONS;"

This written warranty is intended as a complete and exclusive statement of the terms thereof. Prior dealings or trade usage shall not be relevant to modify, explain or vary this warranty. Acceptance of, or acquiescing in, a course of performance under this warranty shall not modify the meaning of this warranty even though either part has knowledge of the performance and a chance to object.

United States, Latin American, and Canadian Dealers: Aadyn Manufactured products forwarded outside of the United States, Latin America and/or Canada will only be covered under this warranty if the international warranty provision is included with this statement. Please contact Aadyn Technology, LLC to inquire about the international warranty provision.

Contact Us

55° Diffuser	@5 Feet	@10 Feet	@15 Feet
Lux	5,919	1,469	680
Foot candles	550	136	63

Diffuser	Beam Angle	Field Angle
0°	15.2°	29.0°
15°	20.8°	38.6°
30°	34.3°	61.2°
55°	50.0°	88.5°

Diffuser	Lumens	Candelas
0°	10,356	182,388
15°	9,746	93,737
30°	10,915	36,883
55°	9,336	14,162
At 90° angle to incident surface		

Power		
Input Voltage	100-277v AC	Battery (30 v DC)
Input Freq	50/60 Hz	
Input Current	1.77 Amp @120V	212 Watts @ full
Connection	US NEMA 5-15	Others Available

Specifications	
Control	Local, UIM, DMX
Wireless	No
RDM	No
Source	LED, 5600°K
Life Expectancy	60,000 Hours
Cooling	Passive
Mounting	Baby Pin
Certifications	Designed to meet all applicable UL, CSA and CE requirements including UL1573, UL8750, C22.2 #166 and #250.13

Dimensions		
Length	339.0 mm	13.3 in
Width	326.5 mm	12.9 in
Height	554.9 mm	21.8 in
Weight	8.9 kg	19.5 lbs