



ACD-40 QUICK START GUIDE

IP44 Architainment Downlight

Document #25-0521 Released 2025 May 21



Important Information

Product Safety Notices:

When using electrical equipment, basic safety precautions should always be followed including the following:

- 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2. Do not install the unit near highly inflammable liquids or materials.
- 3. Do not allow anything to rest on the unit
- 4. Do not install the unit near an open flame.
- 5. Do not install the unit in an unprotected outdoor location.
- 6. Refer service to qualified personnel.
- 7. Sufficient air accessing to the housing of the unit has to be ensured, there must not be any heat or anti-noise insulation).

SAVE THESE INSTRUCTIONS.

IMPORTANT: Unsuitable for Covering by heat Insulation Material.

WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

WARNING: A ceiling (structure) intended for installation of the unit(s) must safely hold at least 5 times the weight of the unit fastened on it

WARNING: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTAL-LATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION ANO OPERATION OF THE PRODUCT ANO THE HAZARDS INVOLVED.

CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT



Warranty Terms

The Manufacturer warrants the products manufactured and sold by the Manufacturer against defects in material and workmanship, during a period of 36 months starting from the date of purchase of the product, which shall be deemed to be the date of the invoice issued by the Manufacturer.

This warranty shall in any event be subject to the following conditions: The Customer shall have ensured that the products have been stored, fitted and used in accordance with any specifications, user instructions, maintenance manuals etc. Provided by the Manufacturer.

The Customer shall not have changed, removed or obscured any serial or identification numbers, labels, lettering or other markings which are on the products at the time of delivery thereof.

The warranty does not extend to any damage caused by any type of operation or use outside that for which the products are reasonably intended.

The Manufacturer assumes no warranty for normal wear and tear, material provided by the Customer, processing of the products made by the Customer, damage due to negligence, accident, improper storage, installation or operation or due to inadequate maintenance or use, or damage resulting from any modification or repair not approved beforehand by the Manufacturer in writing. The Manufacturer will not be liable where any non-authorized software or non-authorized spare or replacement parts are used. Any costs incurred by the Manufacturer for examining and removing such defects will be borne by the Customer upon demand. The Customer will always be responsible alone for the comple teness and correctness of any information provided it.

The Manufacturer's warranty provided herein is made only to the benefit of the Customer. The warranty may be asserted by the Customer only and not be any third party or other user of the products.

The Manufacturer's written permission must be obtained before returning any product. whereupon the Manufacturer will furnish shipping instructions. Any product returned without the permission will be held at the Customer's risk and is liable to non-acceptance.

If any product covered by this warranty is returned by the Customer within the applicable warranty period set above and upon examination by the Manufacturer, the latter determines to its satisfaction that such product was defective in material or workmanship at the time of delivery to the Customer. The Manufacturer will, at its option, repair or replace the product or the defective part thereof, or reimburse the Customer for the purchase price.

For purposes of clarity, repair or replace the product or the defective part thereof» does not include any re-installation costs or expenses. If the Manufacturer chooses to replace the product and is not able to do so because it has been discontinued or is not available, the Manufacturer may replace it with a comparable product.

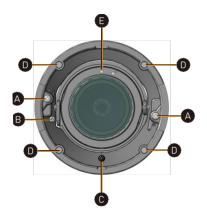


PRODUCT OVERVIEW



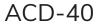
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Power and DMX Input Port (Terminal) Interchangeable LED unit body Tilt adjustment range 30 degree Mounting Clamps (quantity 2) Magnetic Trim Plate



View with trim plate removed

- A Two M4 cross head screws(silver)for mounting clamps.
 - One M3 cross head screw(silver) to lock the tilt.
- C One M3 cross head screw(silver) for safety cable to lock the trim plate.
- D Four magnets that secure the trim plate
- E Twist off to install replacement secondary optics





Before You Begin Installation

WARNING: The luminaire must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

WARNING: Make sure power to the junction box is completely disconnected. The lower ceiling (or another structure) intended for installation of the ACD-40 Recessed must safely hold at least 5 times weight of the ACD-40 Recessed placed on it.

WARNING: ACD-40 are NON-IC rated and therefore NOT suitable for installation in direct contact with combustible materials or thermal insulation. DO NOT INSTALL INSULATION WITHIN 76 mm OF ANYPART OF THE LUMINAIRE.

CAUTION: The luminaire should be positioned so that prolonged staring into the luminaire at a distance of 1.0 m is not expected.

- Ambient operating temperature 0°C-40°C, 5%-95% non-condensing humidity.
- Ceiling material thickness 0.5-20 mm.
- Suitable for damp locations.
- IP44 rated.
- Suitable for use in air handling (plenum) spaces.
- Choose an installation location with sufficient air circulation to prevent overheating.
- To prevent overheating, TAS-HL114 luminaires require 0.31m minimum spacing for the following:
- center-to-center of adjacent luminaires
- center of luminaire to side building member

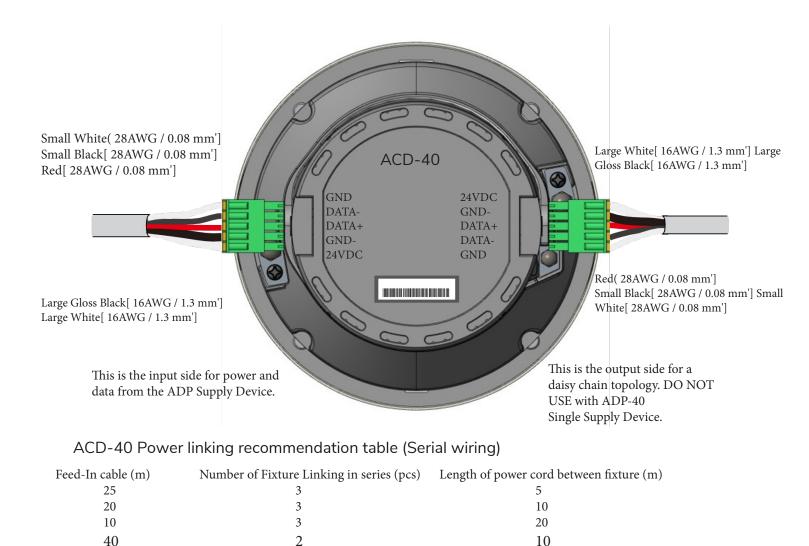


Wiring the Luminieres

ACD-40 standard series (50W) use phoenix 5 pin terminal connector for 24VDC power/DMX-512A control signal inputs and Thru.

ACD-40 series fixtures link as daisy chain method between 2 fixtures on a segment. (detail distance of cable on next pages).

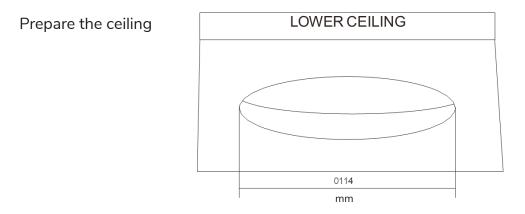
ACD-40 series requires a 24VDC-60/300/400W power supply unit for a line of 1 to 8 units (max) installation. The last fixture in the line should have a 120 OHM DMX terminating resistor connected between the DMX+ and and DMX- (pins 2 and 3) When daisy-chaining fixtures, do not exceed 60 Meters (180') on the total distance of ONE segment. An RDM splitter can be used to link and split with several segments on a system.





Installation

NOTE: Installation must follow all national, state and local codes for electrical equipment



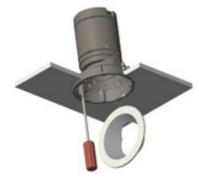
Cut a 114mm diameter hole in the ceieling to accomodate the luminaire's mounting clamps

Note: ACD-40 mounting clamps can accomodate a ceiling thickness of 0.5-20mm.

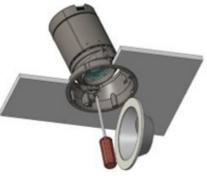
Ensure that there is sufficient cable extending down through the ceiling openeing so that the luminaire can be inspected and serviced when needed. Altman Lighting recommends at least 50 CM (20")of cable loop.

Installing a Luminaire

Tools required: #2 Philips head Screwdriver



Turn the screwdriver to lock the mounting clamps



Turn the screwdriver to adjust the tilt



Note: Use a maximum torque setting of 2.0 Nm when tightening the screws to avoid damaging the locking clamp, mounting clamps, and mounting surface.

- 1. Remove the magnetic trim plate from the base of the luminaire to expose the mounting clamp screws and the locking screw.
- 2. If necessary, install the secondary optic into the lens accessory holder.

Note: Setting the approximate tilt and rotation positions before you install the luminaire minimizes the need for large adjustments after the luminaire is installed, which helps prevent the cables from wisting or wrapping around the luminaire.

3. Connect a power and data in cable from the power data box or Altman ADP-300 box to the" POWER IN" port on the luminaire.

- If you are daisy-chaining luminaires, be careful to connect the cables to the correct" POWER IN" and "POWER THRU" ports. (The cable from the "POWER THRU" port on one luminaire connects to the "POWER IN" port of the next luminaire.)

- 4. Insert the luminaire through the hole in the ceiling. If necessary, rotate the luminaire so that the tilt and rotation of the luminaire are oriented appropriately.
- 5. Tighten the silver screw on each mounting clamp on the luminaire. As you tighten each screw, the mounting clamp rotates out to grip the ceiling. Be careful not to over tighten the screws.
- 6. Attach the magnetic trim plate to the base of the luminaire. The trim plate should be centered on the base of the luminaire and should connect firmly to the four magnets.

CAUTION: It is very important that the trim plate is firmly attached to the luminaire with all four magnets engaged, and confirm the safety cable are connected so that the trim plate does not detach from the luminaire.





Power Up Procedure

Setting a DMX Address via RDM

ACD-40 Luminaires are full featured Remote Device Management (RDM) compliant. All DMX and Luminaire settings are programmed via a RDM ANSI EI.20 complaint device. As many of the RDM devices and software work differently please consult the RDM programmer manufacturer for specific operational instructions.

Note: The entire DMX infrastructure must be RDM compliant in order to achieve system wide RDM functionality.

Setting a DMX Address via DMXCAT

The City Theatrical DMXCAT is used to set the DMX address of ACD-40 Luminaires using DMX/ RDM. RDM (Remote Device Management) is an enhancement to DMX512 which allows status information and parameters (such as the DMX address) to be communicated over the DMX LAN.

Note: If you do not have a DMXCAT, an RDM compliant console/ device that is capable of addressing, can also be used to set the DMX address.

To set the DMX address using DMXCAT:

- 1. Connect and Power On DMXCAT to the fixture(s) to be addressed using standard OMX cabling.
- 2. Open the DMXCAT App on your Smart Phone
- 3. In the DMXCAT App open the RDM Controller App
- 4. The DMXCAT will show you all of the Fixtures it can see in the DMX Run
- 5. Select the Device/ Unit you want to change the DMX address to.
- 6. Once you select the Device/ Unit the Quick Settings will pop open and you change the Label. DMX Personality and DMX Address
- 7. Once you have made all of the changes to the fixtures you will unplug and turn off the DMXCAT.

Note: For more information on the DMXCAT visit City Theatrical Web site. DMXCAT Website

Note: Incorrect installation of recessed luminaires may cause output to turn on and off periodically due to built-in protection against overheating. Leave the lamp on for several hours to check for overheating caused by improper installation. A luminaire's driver can overheat even if the lamp is off.



DMX Personality Settings

DMX Channel		RGB		ССТ	CFX (Color FX)	Extended	Direct (Default)
1	Intensity	Intensity	Intensity	Intensity	Intensity	Intensity High Byte	Red
2	Red	Red	Hue, High Byte	CCT 1800- 10000K	Color Filters	Intensity Low Byte	Green
3	Green	Green	Hue, Low	CCT Cat.	Motional Colors (Level >3 enable	Red High Byte	Blue
4	Blue	Blue	Saturation	Tint	Fade in/out time (0-5 mins)	Red Low Byte	White
5	White				Hold Time (0 sec - 6 hours)	Green High Byte	
6						Green Low Byte	
7						Blue High Byte	
8						Blue Low Byte	
9						White High Byte	
10						White Low Byte	

RDM Settings

ACD-40 fixtures have the ability to have some settings changed via RDM (Remote Device Management). The following settings can be changed via RDM:

Get Allowed	Set Allowed	RDM Parameter IDs	TYPE	LENGTH	UNIT	PREFIX	MIN	MAX	DEFAULT	Description	Description2
X	Х	8A0CH	U8	1	NONE	NONE	0	1	0	When no DMX 0-Off/1-LastHold	0=Off 1=Last Hold
Х	Х	8A44H	U8	1	NONE	NONE	0	1	0	ON/OFF	0=Off 1=ON
×	Х	8A5BH	U8	1	NONE	NONE	0	1	0	PowerOnLevel 0- Off/1-25%4- 100%	0=Off, 1=25% 2=50%, 3=75% 4=100%
Х	Х	8A5CH	U8	1	NONE	NONE	0	5	1	PowerOnPreset 0-5	0=2700k, 1= 3200k, 2-4500k 3=5600k,4= 6500k, 5=Color
X	Х	8A9EH	U8	1	NONE	NONE	0	1	0	OutputSet 0-MaxOutput 1-Sustain	0=MaxOutput 1=Sustain
		See Time Setting Parameters on P12									



Important Information

Product Safety Notices



When using electrical equipment, basic safety precautions should always be followed including the following:

- 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2. Do not mount near gas or electric heaters.
- 3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- 4. Operate only in approved environments. Do not operate outside unless product is designed to do so.
- 5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 6. Do not use this equipment for other than intended use.
- 7. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.

Warnings

WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code[®] and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code[®] and local regulations. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

WARNING: This Lighting Fixture IS NOT for residential installation or use.

WARNING: The structure where fixture(s) is to be mounted must be capable of supporting the weight of the fixture and its accessories. This fixture is for temporary, portable mounting only.

WARNING: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE.

CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR. CONSULTER UN ÉLECTRICIEN QUALIFIÉ POUR VOUS ASSURER QUE LES CONDUCTEURS DE LA DÉRIVATION SONT ADÉQUATS.



Troubleshooting

The chart below provides possible causes and remedies for various error messages and/or symptoms. If this chart is unable to address your issue, please contact your authorized dealer or Altman customer service for assistance.



Any service and maintenance (including troubleshooting), other than described herein should be performed by an Authorized Altman Lighting Dealer or Service Center.

DESCRIPTION	ISSUE	POSSIBLE CAUSE/REMEDY			
No light output	Fixture will not produce or output light and connected to power. Unit responds to RDM	DMX Modeconsole is set at 0% intensity Set intensity level above 0% or adjust to a higher intensity. One of the user defined colors may be active but nothing is re- corded.			
Low light output	Fixture produces low light output and connected to power.	Check unit for calibration on or off at menu Operating temperature is at upper range of temperature range. If the power limit settings are set.			
No power at Iuminaire	Luminaire does not power up.	Circuit not energizedverify circuit breaker is turned on. Not plugged inensure A/C cable is connected to power source. Power cable wired incorrectlyverify power cable and connector are wired correctly. See <u>"Connecting Power" on page 11</u> for more information.			
No DMX Data Control	Fixture will not respond to DMX commands.	Not detecting DMX data Unit is not set to proper DMX address - check RDM Settings <u>"Set DMX Address via RDM" on page 36</u> for more information. Disconnect and reconnect DMX input cable. Check all DMX connections (at control source and luminaire). DMX data cable not wired correctly or has a broken conductor check DMX data cable for proper wiring. See <u>"Connecting to the DMX512 Network" on page 12</u> for more information.			
Fixtures not matching color	Fixture are given the same DMX command, but colors do not match.	Turn off color calibration. Note, units will not match if some are set to calibration on and some to calibration off. See <u>"Calibration</u> (Color Calibration) on Page 36 with RDM Settings			
Fixtures are dimming at different rates	Fixture are given the same DMX command, but dim- ming rates are different.	Make sure all units are set to the same dimming curve. See <u>"Dim-ming Curves" on page 36</u> with RDM Settings Make sure all units have the same tungsten simulation setting.			

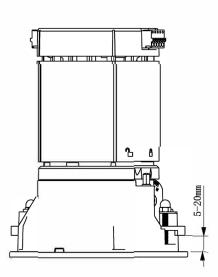
RDM Appendix for Run Time

Get/Allowed=On, Set/Allowed=Off, RDM Para ID=8AB5h, Type= U16, Length=2, Unit=None, Prefix=None, Min=0, Max=65535, Default=X, Des=Fixture Hours

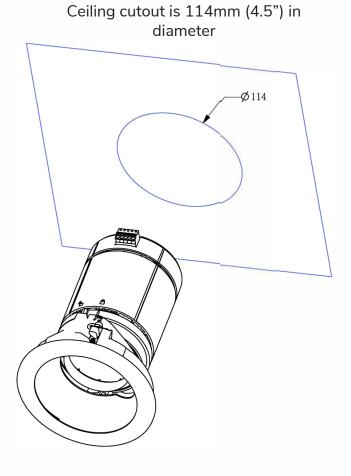
Get/Allowed=On, Set/Allowed=Off, RDM Para ID=8AC3h, Type= U16, Length=2, Unit=None, Prefix=None, Min=0, Max=65535, Default=X, Des=LED On Hours



Installation Dimensions



Ceiling thickness must be 5-20mm for locking clips



Contractor Notes:





303-500-7072 www.altmanlighting.com sales@altmanlighting.com