

DOCUMENT REVISION HISTORY

REV	DEPT.	BY	DATE	DESCRIPTION
P.1	ENGINEERING			PRELIMINARY RELEASE
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR	Lawrence Chu	4/6/06	
NC	ENGINEERING			Add Weight Data Production Release
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR	Lawrence Chu	4/13/06	
	ENGINEERING			
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR			
	ENGINEERING			
	Q.A.			
	PRODUCTION			
	CUSTOMER			
	ORIGINATOR			

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PART NUMBER **AL01A-01-01**

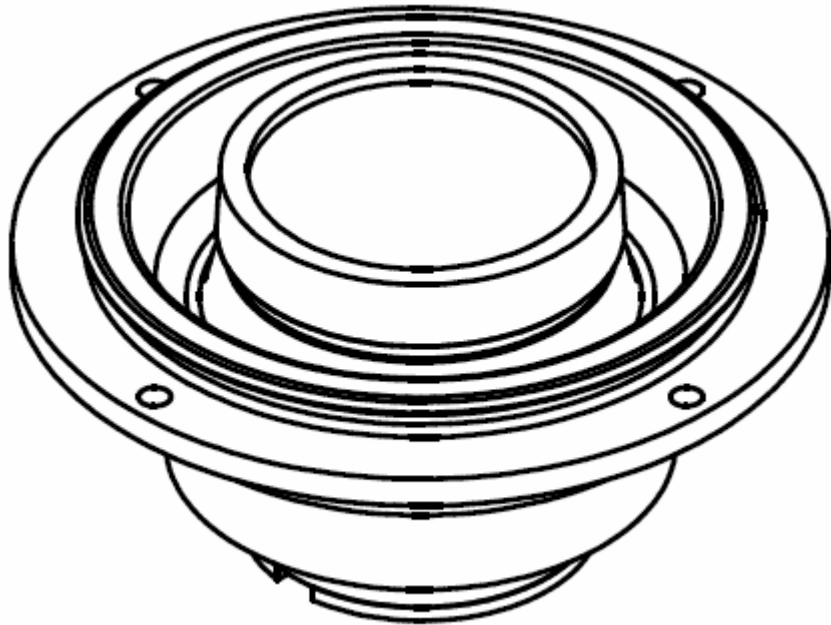
PART NAME **ADJUSTABLE READING LIGHT**

DOCUMENT NUMBER **SPEC AL01A-01-01**

ADJUSTABLE READING LIGHT **AL01A-01-01**

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See TOP Assembly Drawing **ALx** for dimension details

Features and Functions:

- Full Aluminum structures and high reliabilities precision machining.
- Elegant in Styles and Looks.
- Enhanced Brightness multi -White LEDs Lighting Elements.
- High Color Rendering Index and Solid-state Reliability.
- Precision Optics and Color Temperature to achieve most desirable reading comfort.
- Interchangeable Front Loadable Light Element Capsule to minimize MTBM and ease upgrade.
- Superior efficiency on Power to Lights conversion to minimize energy consumption as well as fuel cost.
- Hi-Reliabilities, Soft-Start Solid-State Light Drivers as equipped.
- Continuously Dimming Controls via multi-Function Key's Sequence.
- Versatile Micro Miniature Onboard RISC Processor offered full feature controls without penalize in weight and size advantage.
- Universal CMS Panel's Interface (UPI) Option allows painless upgrading from the existing system with enhanced operation and functionalities.
- Emergency Lighting Override port available on most models.
- Synchronization control allows Multiple Light Assemblies wired as a single controllable group.
- Custom Plating Option provides perfect matched of current interiors designs.

Ordering Part Numbers:

- AL01A-01-01-x** Adjustable Reading Light
- 5960LM-01** Replacement Light Module for AL01A-01-01
- x** Custom Plating Code. Please contact DPI for details.

Specifications General:

Operating Voltage:	17 - 32 VDC, 28 VDC Typical
Operating Current:	0.3 Amps Typical, 0.4 Amps Max
Operating Temperature:	-10 to +55 °C
System Interface:	General Cabin Lightings
Lighting Media:	Enhanced Brightness White.
Lighting Elements:	3
Total Lighting Power:	3.5 Watts @ Full Bright
Color Temperature:	5500 °K
Luminance:	75 Lumens Typical @ 2 Feet
Emergency Lighting:	Override ON Full Bright
Panel Key Interface:	1x, ON-OFF Momentary to Panel Common (+) 2x, ON-OFF, BRT-DIM Momentary to Ground (-)
Multi-Function Key Sequence:	Yes
Dimming Controls:	Yes
Panel LED Port:	2x, Active Ground, Current Limited Single LED Load
Annunciator Output:	1x, Active Ground @ 1 Amps Max.
Synchronization:	1 Wire Link, 32 Max. Light's Group with Synchronous Controls.
Synchronization Protocol:	Proprietary, Full Functions.
Power-Up Option:	OFF (Default) ON (Jumper Option)
Connector Termination:	6 inch Pig-tail with Connector
System Connector:	see Connector Pin-Out for Details
Cable Length:	30 ft Max. All I/Os.
Outline Dimension:	2.36" (DIA) x 1.68" (Deep) for Reference Only See Top Assembly Drawing for details
Weight:	0.3 lb

AL01A-01-01 System Connector Pin Out:

High Density D-Sub, 15 Pin Plug (Male) AMP P/N 748364-1 w/ AMP P/N 748333-4 Male Pin					
PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
1	POWER INPUT RETURN (GND)	6	KEY INPUT ON-OFF (+)	11	PANEL COMMON (+12V)
2	NORMAL POWER INPUT +28VDC	7	LED OUTPUT #2	12	RESERVED (JRST)
3	EMERGENCY POWER INPUT +28V	8	LED OUTPUT #1	13	RESERVED (JMISO)
4	SYNC-LINK	9	KEY INPUT BRT-DIM (-)	14	POWER-UP ON OPTION (JMOSI)
5	ANNUNCIATOR OUTPUT (-)	10	KEY INPUT ON-OFF (-)	15	OPTION RETURN (JSCK)

Notes:

1. RECOMMENDED MATING CONNECTOR: AMP P/N 748656-1 Female Connector with 748610-4 Crimp Socket pins or equivalent.
2. POWER INPUT RETURN: Power return pin. Connect to Power Ground.
3. NORMAL POWER INPUT: +28VDC power input pin. Connect to Power Bus Hi-side.
4. EMERGENCY POWER INPUT: +28VDC power input pin. Connect to Emergency Power Bus Hi-side. Light turn ON Full-bright if power applies.
5. SYNC-LINK: 1-wire communication link to synchronize multiple Light Assemblies in the same group. The synchronizations are for the panel interface command set only which operated in Multiple Master control mode. The last panel interface command input received within the same group will become the master, and the command will be transmit and control all lights as once.
6. ANNUNCIATOR OUTPUT (-): Output switch to Ground when Light turn ON with maximum of 1 Amp sinks. DO NOT use this pin if LED Output #1 or #2 is in used.
7. KEY INPUT ON-OFF (-): Momentary connect to Ground will activate this multi-function key. Press key once to toggle On-Off State. Press and Hold will become continue brightness controls. Press and Hold again toggle the Bright-Dim adjustment directions. This key will only be operate as toggle On-Off function if the Brt-Dim key is in use and/or being activate once.
8. KEY INPUT BRT-DIM (-): Momentary connect to Ground will activate this multi-function key. Press key once to toggle between Full-Bright and Dim State. Press and Hold will become continue brightness controls. Press and Hold again toggle the Bright-Dim adjustment directions. Activation of this key once will disable the On-Off key Brt-Dim control functions.
9. KEY INPUT ON-OFF (+): DPI Multi-Touch Standard Panel Interface with same functions as Key Input On-Off (-) except the activation of this key required momentary switch to Panel-Common (+12V) This key will only be operate as multi-function for On-Off and Brt-Dim functions.
10. LED OUTPUT #1, #2: LED Annunciator for DPI Multi-Touch Standard Panel Interface equipped with onboard LED current sink limit resistor to drive external individual LED load. The Panel's LED will turn ON as indicator if light ON.
11. PANEL COMMON (+12V): DPI Multi-Touch Standard Panel Interface Panel Common connection. Use in conjunction with LED Output #1, #2 and Key Input (+).
12. Power-Up ON Option/Return: Add Jumper across will set light turn ON at Power-Up.