

GENERAL DESCRIPTION OF MODEL LA-3098

TECHNICAL NOTE

June 12, 2009



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1.0 PURPOSE

This document describes the electrical and mechanical interfaces of the AC adapter model LA-3098. Model LA-3098 is designed to work with any of the A3LA-D and A3LA-X modem/tracker series as shown in Figure 1. It can be connected directly to an Iridium modem/tracker using an RS232/data cable model HRC-24-7, HRC-24-7X, HRC-24-8 or HRC-24-8X as depicted in Figure 2.



Figure 1. NAL Research's A3LA-D and A3LA-X series.



Figure 2. Model LA-3098 connected to an A3LA-D/-XM via the HRC-24-8/8X DB25 data kits.

2.0 INPUT SPECIFICATIONS

Voltage Range:	100VAC to 240VAC
Line Frequency:	47Hz to 63Hz
Minimum Input Voltage:	90VAC
Maximum Input Voltage:	264VAC
Maximum Input Current:	0.8A at 100VAC
AC Rush Current:	Limited to 30A at 100VAC

3.0 OUTPUT SPECIFICATIONS

Output Voltage Range:	4.2VDC to 4.8VDC
Minimum Load:	0A
Maximum Load:	4A
Line Regulation:	Within 1%
Ripple Voltage at 4.5VDC:	50mV peak-to-peak
Efficiency:	70% typical at 100VAC
Maximum Output Power:	Limited to 20W
Reliability:	MTBF exceeds 50,000 hrs in accordance with MIL-STD-HDBK-217

4.0 ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	32°F to 104°F (0°C to 40°C)
Relative Humidity:	< 90%
Altitude:	< 7,000 ft
Storage Temperature:	-4°F to 176°F (-20°C to 80°C)
Storage Humidity:	< 90%

5.0 MECHANICAL SPECIFICATIONS

Dimensions:	3.54" L x 2.30" x 1.19" (90.0mm L x 58.5mm W x 30.2mm D)
Weight:	0.5 pounds (225 g)
Output Connector:	Mouser DC locking plug model 171-0725

6.0 STANDARDS COMPLIANCE

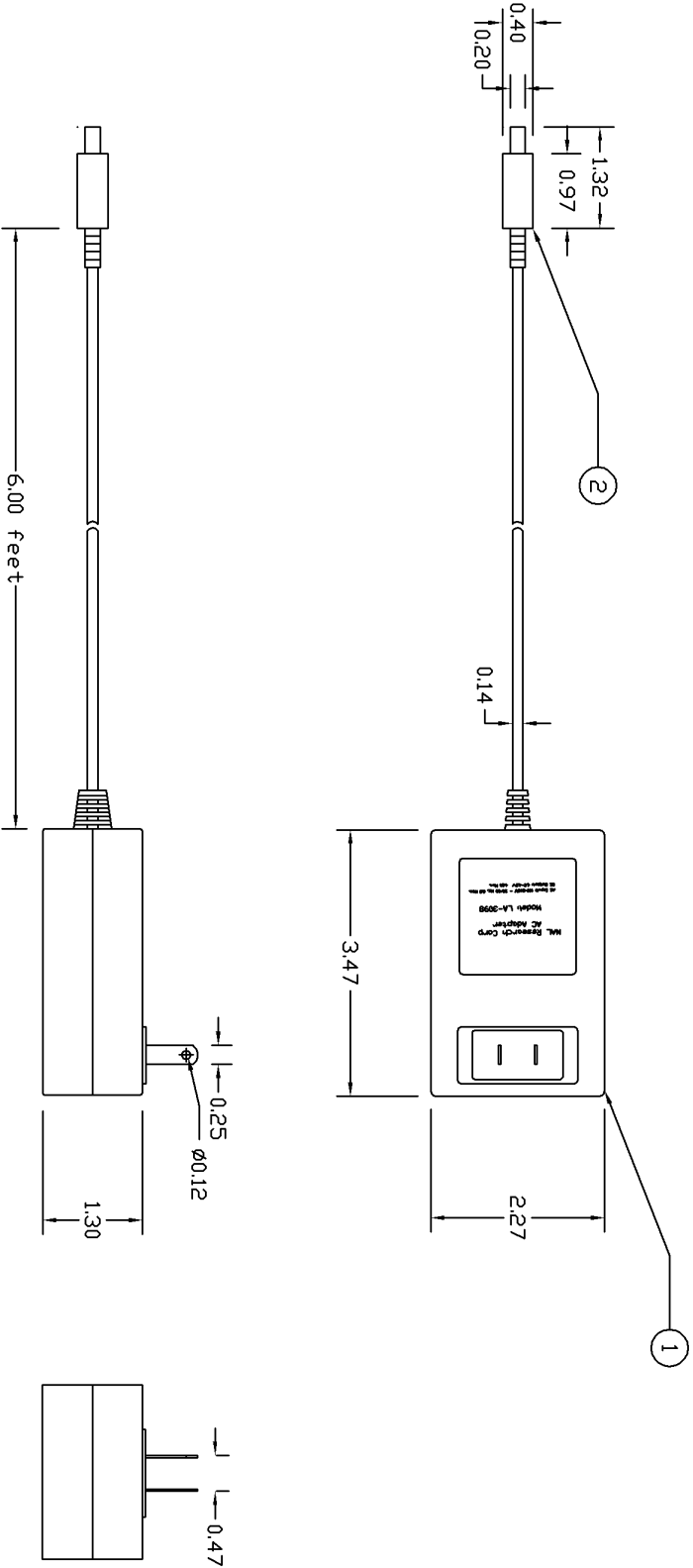
EMI Standards:	Meets FCC Part 15 Class B, EN55022 Class B
UL Approval:	UL 1950

DMG REV	A																			
BD REV																				
A/W REV																				

PTR. NO. 92338 SH. 1 REV. C

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- PARTS:
1. AC-ADAPTER
INPUT: 100-240VAC, 50/60HZ, 0.8A MAX
OUTPUT: 4.2 - 4.8VDC, 4.0A MAX.
 2. CONNECTOR: MDUSER 171-0725 DC POWER PLUG



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