

adt	MODEL NO.	ADT9024	SHEET NO	QB20130457
	DESCRIPTION	Car Charger	ISSUED DATE:	2013/06/17

APPROVAL SHEET

APPROVAL SIGNATURE
DATE:

Customer : XXXX

Model No : ADT9024

Type : Car Charger Adapter



Input Voltage	11V---16VDC or 22V---24VDC	Output Voltage	24V DC 3.75 A 90W
Output Cable	UL1185 16AWG L=1200mm Plug:5.5X2.5X9.5mm 180 度		
DC IN NET		Packaging	

ADT TECHNOLOGY CO., LTD

2F.-5, No.315, Sec. 3, Minsheng Rd., Banqiao Dist., New Taipei City 220, Taiwan

TEL:+886-2-22587990 FAX:+886-2-22586990

<http://www.adtweb.com.tw>

CONTENT:

1. INTRODUCTION
2. ELECTRONICS SPECIFICATION
3. ENVIRONMENTAL
4. INTERNATIONAL STANDARD
5. MECHANICAL

1. INTRODUCTION

This document defines the specifications for the 90 watts DC to DC adapter named ADT9024. The device shall accept DC input from either an Car mobile/RV Cigarette or Air Plug.

A working indicator LED will display green when the output voltage is ON. The input plug shall mate with all common vehicle lighter sockets.

2. ELECTRONICS SPECIFICATION

Parameter	Specification
Input Operation voltage	11V---16VDC or 22V---32VDC for operation voltage(After turn on) Turn on voltage must be over 11.5VDC.
Maximum input current	10A
Inrush current	No damage to the relative components
Output voltage	24VDC+/-5%
Output current (Max.)	3.75A
Maximum rated output power	90W continuous
Maximum output voltage ripple & noise	300mVpk
Input under-voltage protection	Shutdown if input voltage is below 10.5VDC with auto recovery mode
Over current protection	Shutdown if output load exceed 110%~150% of Max. load, with latch mode
Output over voltage protection	30V maximum, shut down with latch mode if output OVP is triggered.
Over temperature protection	Shutdown with auto recovery mode if internal temperature is higher than 120°C when abnormal condition occurred
Efficiency	85% minimum.

3.0 ENVIRONMENTAL

3-1. Operating Temperature

0°C to +40°C

3-2. Storage Temperature

-20°C to 85°C

3-3. Shock

Operational: 10G, 1/2 sine pulse, 11-millisecond duration, 3 drops each direction and axis

Non-operational: 60G, 1/2 sine pulse, 11-millisecond duration, 3 drops each direction and axis

The adapter shall survive a drop onto a hardwood surface from a height of 36" with no damage to the circuit board assembly and no cracking of the plastic case. The unit shall be dropped in a voluntary axis at least three times for this test. No components shall become loose from the PCB.

3-4. Vibration

Operational: 5 to 500Hz @ 0.5G acceleration for 30 minutes in each axis

Non-operational: 5 to 500Hz @ 1G acceleration for 1 hour in each axis

3-5. Electrostatic Discharge Sensitivity

No hardware failure up to $\pm 8\text{KV}$. The test procedure should be according to IEC801-2(1991).

3-6. Burn In

4 hours at 40°C ($\pm 5^{\circ}\text{C}$), nominal input voltage(24V), and 80% load condition.

3-7. MTBF

50,000 hours minimum.

4.0 INTERNATIONAL STANDARD

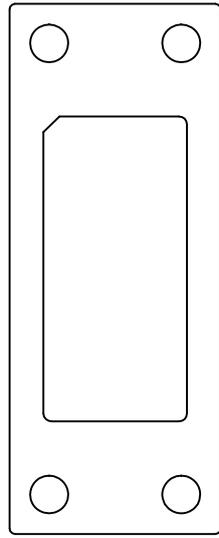
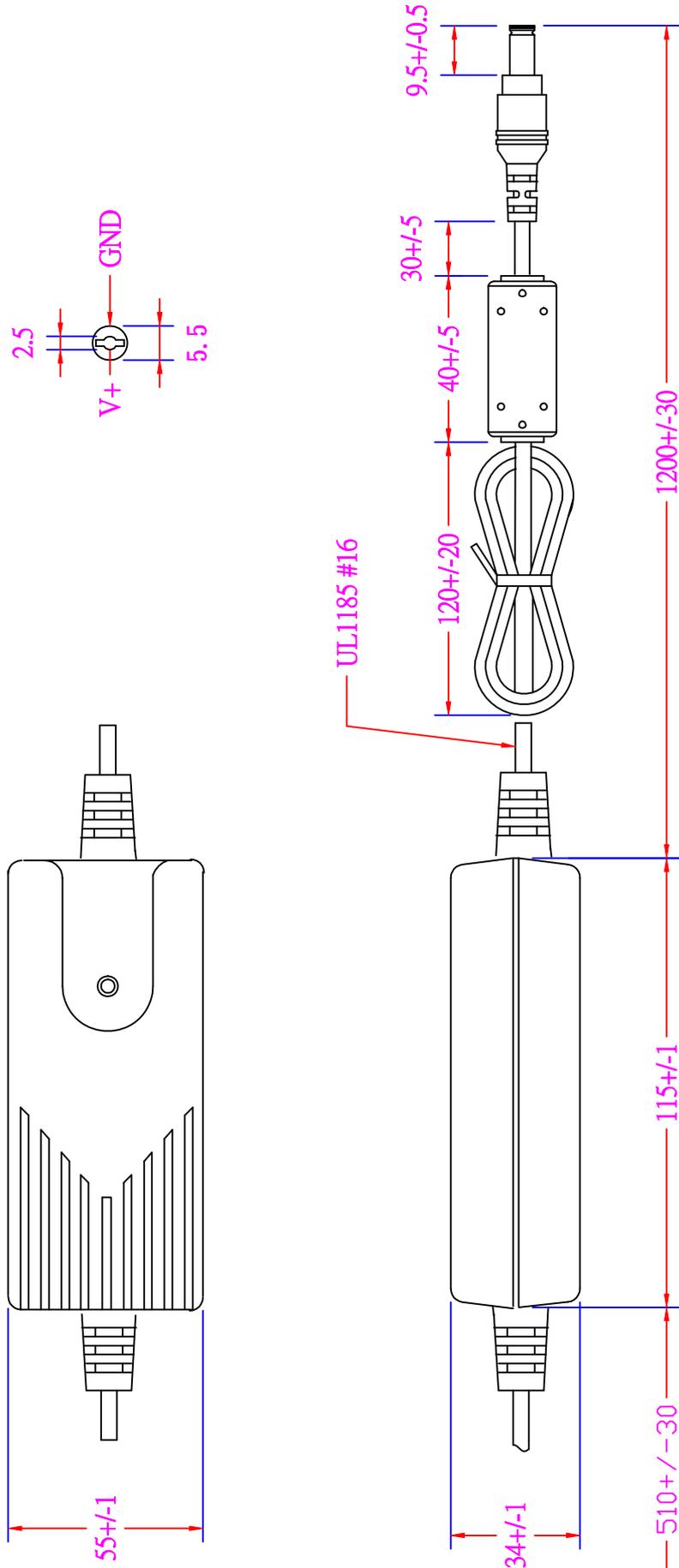
4.1 Safety Standard

TBD

5.0 MECHANICAL

5-1. Case Dimensions

L115 x W55 x H34 mm



MODEL	ED1082(10)	UNIT	APPROVED
DESCRIP	OUTLINE	SCALE	DESIGNED
NAME	CAR ADAPTER	DATE	CHECK
CUSTOMER		CUS. P/N	DRAWING
			L. J. YU

adt ADT TECHNOLOGY CO.,LTD
CAR CHARGER

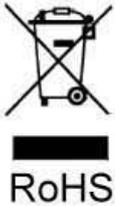
MODEL : ADT9024

DC INPUT: 11-16V & 22-24V dc

DC OUTPUT: 24V = 3.75A

DATE CODE:

13	14	15			1	2	3	4	5
1	2	3	4	5	6	7	8	9	0



E9-10R-04. 1083

MADE IN CHINA 23121062002

[http://www.adtweb.com.tw /](http://www.adtweb.com.tw/)



EDAC P/N.: 312

Background: Black color

Character: Silver color

Unit: mm