HEBER

Pluto Video PSU User Manual

Document No. 80-22572 Issue 2

HEBER LIMITED
Belvedere Mill
Chalford Stroud
GL6 8NT
UK

Tel +44 (0) 1453 886000
Fax +44 (0) 1453 885013
Email support@heber.co.uk
Website http://www.heber.co.uk/

CONTENTS

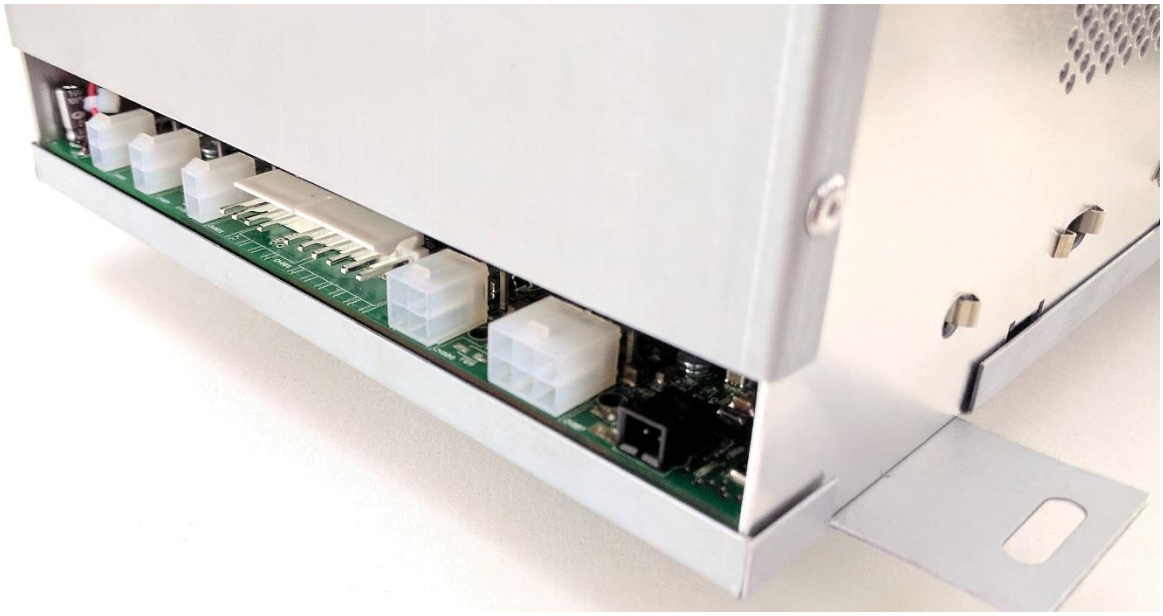
LIST OF TABLES

LIST OF FIGURES

This page intentionally left blank.

1 INTRODUCTION

The Pluto Video PSU has been designed to support the growing demands of video based slot machines. A wide range mains input is coupled with high current 24 and 12 volt outputs. Utilising experience of Sanken designs the power supply has been designed for reliability and long life. Over current and voltage protection is provide along with a high peak current capability to handle stalled motor currents.



1.1 Specification

1.1.1 Input Characteristics

Input Voltage	AC115 – AC230V
Input Current (typ)	6A max at nominal input voltage and load (including AC output)
Rated Frequency	50 / 60Hz
Frequency Range	47 ~ 63Hz
Efficiency (typ)	80% min at nominal input voltage and load
Inrush Current (max)	40A peak, cold start
Leakage Current (max)	1.5mA @ 230V

Table 1 - Input Characteristics

1.1.2 Output Characteristics

Output Voltage	+12V	+24V	AC Outputs	AC Power Fail
Rated Output Current	22A	2.7A	1A (120V) 2A (230V)	12V Square Wave
Peak Current	24A	9A		0.5mA
Rated Power	264W	52.8W		
Voltage Accuracy	+- 3%	+- 3%		
Output Hold Up Time	>10mS @ 120V			

Table 2 - Output Characteristics

1.1.3 Protection

Over Current	Yes, All outputs 12V > 27A, 24V > 10A (auto restart)
Over Voltage	Yes, Shutdown > 110% requires mains reset to unlatch
Over Heating	Yes, Thermostat fitted to prevent damage in event of fan failure

Table 3 - Protection

1.1.4 Environmental

Operating Temperature	0 ˚C ~ 50 ˚C
Storage Temperature	-10 ˚C ~ +70 ˚C
Operating Humidity Range	5% ~ 84% non-condensing
Cooling Fan	Internal variable speed fan

Table 4 - Environmental

1.2 Mechanical Layout

The overall mechanical footprint is (W) 266mm x (D) 250mm x (H) 90mm and is footprint compatible with the Sanken 2H167W-1.

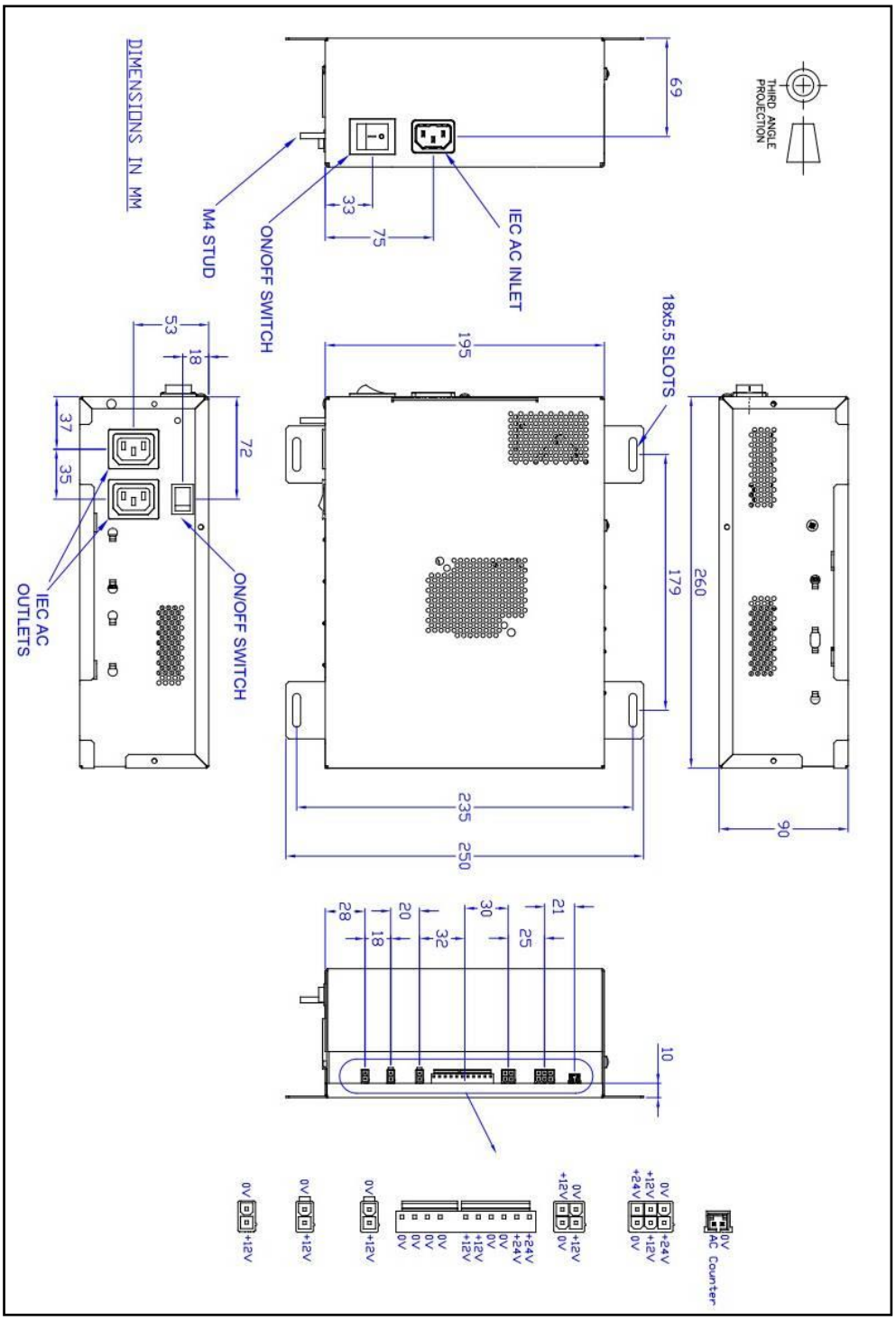


Figure 1 – PSU Mechanical Format

1.3 Connectors

1.3.1 CN101 AC Input Connector

CN802	AC Input (Male)
Pin	IE C14

1.3.2 CN102 AC Output Connector

CN802	AC Output (Female)
Pin	IE C14

1.3.3 CN103 AC Output Connector

CN802	AC Output (Female)
Pin	IE C14

1.3.4 CN802 AC Power Fail

CN802	Molex Ref: 70551-001 (Mating part 50-57-9402)
Pin	**Output**
1	Power Fail
2	0V

1.3.5 CN807 Aux Output

CN802	Molex Ref: 39-29-1067 (Mating part 39-01-2060)
Pin	**Output**
1	24V
2	12V
3	0V
4	0V
5	12V
6	24V

1.3.6 CN808 LED Lighting / Effect

CN802	Molex Ref: 39-29-1047 (Mating part 39-01-2040)
Pin	**Output**
1	12V
2	0V
3	0V
4	12V

1.3.7 CN806 General Machine Supply

CN806	Molex Ref: 26-60-5110 (Mating part 09-50-3111)
Pin	Output
1	24V
2	24V
3	0V
4	0V
5	12V
6	12V
7	No Pin Key
8	0V
9	0V
10	0V
11	0V

1.3.8 CN803 LCD Monitor Supply 1

CN803	Molex Ref: 39-29-1027 (Mating part 39-01-2020)
Pin	Output
1	12V
2	0V

1.3.9 CN804 LCD Monitor Supply 2

CN804	Molex Ref: 39-29-1027 (Mating part 39-01-2020)
Pin	Output
1	12V
2	0V

1.3.10 CN805 LCD Monitor Supply 3

CN805	Molex Ref: 39-29-1027 (Mating part 39-01-2020)
Pin	Output
1	12V
2	0V

1.3.11 Output Connector Layout

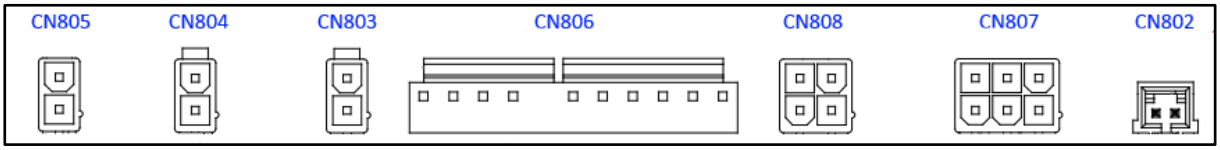


Figure 2 - Output Connector Layout

1.4 Contact Details

For sales enquires please contact sales@heber.co.uk

For technical support enquires please contact support@heber.co.uk