

M2D Gyro Stabilized
Gimbal ball turret for
Suas, UAV, multicopter,
hexacopter, unmanned
drones Cameras' Pinout
Ver 1.0

This document is the property of Sierra Pacific Innovations Corp ("SPI Corp"). SPI Corp reserves all rights to this document, data, invention, and content herein described. This document is confidential, including the fact of its existence and is not to be disclosed, in whole or in part, to any other party and it shall not be duplicated, used, transmitted or copied in any form

without the express prior written permission of SPI Corp. Acceptance of this document will be construed as acceptance of the foregoing conditions.



## **Compilation and Publication Notice**

This manual is covering the latest product descriptions and specifications.

It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding. The contents of this manual and the specifications of this product are subject to change without notice.

SPI Corp reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

For Further information please contact

Sierra Pacific Innovations Corp

sales@x20.org



# Table of Content

1	Overview	4
2	Connector	4
2.	Numbering plan	4
2	Pin Assignment	5
2	Power Supply	6



#### 1 Overview

The document describes the pinout of the M2-D camera.

#### 2 Connector

The cameras are interfaced using single 1.25mm pitch 10-pin header connector (Molex 53047-1010) which carries power, control and video signals.

The wire harness connecting to the camera should include Molex (51021-1000) (10 pos / 1.25mm) connector.

### 2.1 Numbering plan

The numbering plan of the camera header connector (Molex 53047-1010) is depicted in Figure 1:

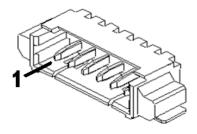


Figure 1: Camera Header Connector Numbering Plan



The numbering plan of the cable connector (Molex 51021-1000) is depicted in Figure 2:

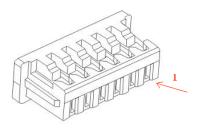


Figure 2: Wire Housing Connector Numbering Plan

## 2.2 Pin Assignment

The pin assignment is depicted in the following table:

Pin	NAME	DIR	Description
1	SYS_PWR	IN	System Power Input
2	GND	-	System Ground
3	RS232_IN	IN	RS232 Receive Input
4	RS232_OUT	OUT	RS232 Transmitter Output
5	GND	-	RS232 Ground
6	Reserved	-	Do not connect
7	Reserved	-	Do not connect

- Page 5 of 6 -

<sup>-</sup> SPI Corp Proprietary and Confidential Information -



8	GND	-	System Ground
9	VIDEO_OUT	OUT	Video Out (PAL or NTSC)
10	VIDEO_GND	-	Video Ground

### 2.3 Power Supply

### Note

Power supply range is specified at camera connector. One should consider the voltage drop on the wires connecting the camera to the power supply. Using +12VDC power supply is recommended.



# Warning

The camera will be seriously damaged if power exceeds the maximum allowed voltage

The camera will be seriously damaged if power polarity is reversed

The camera will be seriously damaged if power is applied to video port