



Pan Tilt Mount Parts List





Part	Quantity
Nema 17 42x42x40mm Stepper Motor	2
A4988 Stepper Motor Driver	2
Arduino Nano	1
JDY-31 Bluetooth Module (Alternatively HC-05, HC-06 or JDY-30)	1
A3144 Hall Effect Sensor	2
6.4mm diameter x 1.7mm Neodymium Magnets	2
3.2mm diameter x 1.7mm Neodymium Magnets	2
WS2812B Addressable RGB LED	1
2N3904 NPN Transistor	1
330Ω Resistor	1
470Ω Resistor	1
15kΩ Resistor	2
33kΩ Resistor	2
100μF Electrolytic Capacitor	3
2 Pin Plug-In Screw Terminal Block Connector 5.08mm Pitch (for power)	1
6 Pin Female Header Connector 2.54mm (for Bluetooth module)	1
15 Pin Female Header Connector 2.54mm (for Arduino Nano)	2
15 Pin Male Header Connector 2.54mm (for Arduino Nano)	2
8 Pin Female Header Connector 2.54mm (for Stepper drivers)	4
8 Pin Male Header Connector 2.54mm (for Stepper drivers)	4
XH2.54 3 Pin Terminal Socket Header (for Hall Effect and WS2812B LED)	3
XH2.54 3 Pin Terminal Socket Plug (for Hall Effect and WS2812B LED)	3
XH2.54 2 Pin Terminal Socket Header (for camera shutter trigger)	1
XH2.54 2 Pin Terminal Socket Plug (for camera shutter trigger)	1
2.5mm 3 pole Jack Male (for camera trigger)	1
11.1V 3S LiPo Battery or 12V DC Power Source and connector to screw terminal	1
Pan Tilt Mount PCB	1
Solder Wire	
Cyanoacrylate or Hot Glue (for magnets and Hall Effect sensor)	
Wire (for Stepper motors, Hall sensors, WS2812B LED, Bluetooth module)	
M3 Hexagonal Nyloc Nut	9
M3 Square Nut	8
M3 Button Head Hex Bolt 16mm	6
M3 Button Head Hex Bolt 12mm	13
M3 Button Head Hex Bolt 6mm	5
M3 Button Head Hex Bolt 3.5mm	1
Camera Mounting Bolt	1
8 x 22 x 7 ABEC-5 Bearing	2
127 x 146.05 x 12.7mm INA CSXU050-2RS Bearing Or 3D printable bearing parts 1-3 and 28 x 6mm balls (BB pellets)	1
21 Tooth Herringbone Gear	1
64 Tooth Herringbone Gear	1
17 Tooth Herringbone Gear	1
144 Tooth Herringbone Gear Base Mount	1
Tilt U-Mount	1
Idle Side Bearing Mount	1
Gear Side Bearing Mount	1
Idle Side Support	1
Gear Side Support	1
Pan Mount	1
Pan Mount Bearing Clamp	1
Base Mount Bearing Clip Ring	1
Hall Effect Stepper Mount	1