

Product/Project: Hexapod 1.0		<a href="https://www.printables.com/@TomKnox">https://www.printables.com/@TomKnox</a>			
Revision date: 2026-02-05					
Level	Description	Qty	ALIEXPRESS	AMAZON	Description
>	<b>Electrical Components</b>				
>>	Custom PCB	1	<a href="#">Order PCB HERE</a>		2-layer PCB (Order with assembly!)
>>	WeAct Studio STM32H750	1	<a href="#">WeAct Studio - Adafruit</a>		Official main card (expensive)
>>	STM32H750VBT6 Core Board	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	<b>Alternative to WeAct Studio</b> - Note: QSPI Flash (at least 8MB / 64Mbit)
>>	LX-224 Serial Bus Servo Motor	18	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	20kg-cm torque minimum
>>	IMU/Gyroscope Module	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	6-axis (3-axis gyro + 3-axis accelerometer), I2C, DMP, 3.3V-5V
>>	Spektrum DX6e Transmitter	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Spektrum DX6e
>>	Remote Receiver	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Frsky X8R
>>	LiPo Battery 7.4v 5200mAh	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	2S LiPo, high discharge rate for RC models
>>	5v LDO	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	78D05AL-TN3-R - For 5V components (receiver, etc.)
>>	3.3v Voltage Regulator	1	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	3.3v LDO for MCU power supply
	<b>Misc</b>				
>>	Ferrules	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Optional, if used need approx 20 across robot
>>	Capacitor 1uF	2	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Input/output filtering for LDO
>>	10kΩ Resistor	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	CRGCC0805F10K
>>	Heat Shrink	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Only small amount required, for covering exposed solid-core wires
>>	Power Delivery Wire	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Minimum 12AWG, for wires expected to carry current above 2A and/or voltage above 5V
>>	Connection Wire	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	19-30AWG, recommend solid core, used for all other wires
>	<b>Assortment Boxes</b>		<b>(Recommended - Usually Cheaper to buy in bulk)</b>		
>>	M3 Nylon Standoffs	4	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	PCB mounting
>>	Socket Button Head Screw	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	M2-M3 x 2510pcs
>>	Socket head cap Screw	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	2500pcs M2M2.5M3
>>	Socket head cap Screw	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	1410pcs M3M4M5
>>	Countersunk Socket Head Cap Screw	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	3045pcs - M2, M3, M4, M5, M6, M8
>>	Heat Insert (with press)	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	1040pcs - M2-M4
>>	Heat Inserts	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	1400pcs - M2-M4
>>	Lock Nut	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	230pcs M3,M4,M5,M6,M8
	<b>Filament</b>				
>>	PC / ASA / ABS / PETG Filament	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	
>>	PC-CF / PETG-CF / PA-CF / ABS+ (Engineering G	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	
>>	PLA	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	
>>	TPU	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	
	<b>Tools</b>				
>>	Multimeter - Fluke	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Soldering Iron TS101	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Heat Inset Tip Kit - For TS101	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Electric Precision Screwdriver	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Allen Key Set	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Torx Key Set	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Torque Screwdriver	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Wire stripper	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Wire cutter	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Heat Insert Press Tool	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Crimp Tool	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	(Recommended)
>>	Soldering Iron - Generic (Alternative)	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Budget friendly alternative
>>	Heat insert tip - set (Alternative)	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Budget friendly alternative
>>	Precision Screwdriver Set	-	<a href="#">ALIEXPRESS LINK</a>	<a href="#">AMAZON Link</a>	Budget friendly alternative

>	Assemblies	QTY	Material (From best to ok)	Color
>	0013-0100 Main Assembly	1	Just for reference - No print	-
>	0013-0200 Leg Assembly	6	Just for reference - No print	-
>	0013-0300 Top Assembly	1	Just for reference - No print	-
>	0013-0400 Body Assembly	1	Just for reference - No print	-
>	3D printed components	QTY	Material (From best to ok)	Color
>>	0013-0201	6	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0202	6	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0203	6	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0204	12	Cosmetic	Secondary
>>	0013-0205	6	Cosmetic	Secondary
>>	0013-0206	6	Cosmetic	Secondary
>>	0013-0207	6	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0208	6	Cosmetic	Secondary
>>	0013-0209	12	Cosmetic	Secondary
>>	0013-0210	6	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0301	1	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0302	1	Cosmetic	Secondary
>>	0013-0303	1	Cosmetic	Secondary
>>	0013-0304	1	Cosmetic	Secondary
>>	0013-0305	1	Cosmetic	Secondary
>>	0013-0306	2	Cosmetic	Secondary
>>	0013-0307	1	Cosmetic	Secondary
>>	0013-0308	1	Cosmetic	Secondary
>>	0013-0309	1	Cosmetic	Secondary
>>	0013-0310	1	Cosmetic	Secondary
>>	0013-0311	1	Cosmetic	Secondary
>>	0013-0312	1	Cosmetic	Secondary
>>	0013-0313	1	Cosmetic	Secondary
>>	0013-0314	1	Cosmetic	Secondary
>>	0013-0315	1	Cosmetic	Secondary
>>	0013-0316	1	Cosmetic	Secondary
>>	0013-0317	1	Cosmetic	Secondary
>>	0013-0318	1	Cosmetic	Secondary
>>	0013-0319	1	Cosmetic	Secondary
>>	0013-0401	1	PCCF, PACF, ASA, ABS, PCTG, PETG	Primary
>>	0013-0402	1	Cosmetic	Secondary
>>	0013-0403	1	Cosmetic	Secondary
>>	0013-0404	1	Cosmetic	Secondary
>>	0013-0405	1	Cosmetic	Secondary
>>	0013-0406	1	Cosmetic	Secondary
>>	0013-0407	1	Cosmetic	Secondary
>>	0013-0408	1	Cosmetic	Secondary
>>	0013-0409	1	Cosmetic	Secondary