

BLACKBOX CE WIRE HARNESS MAP

Main Harness Name	WIRE Name	Component A	Connector A	Component B	Connector B	Length	Wire Gauge	Color Marker	Motion?	Connector Name
Power Inlet	Jumper - Line	Power Inlet	Female Spade	Power Switch	Female Spade	8CM	18 BLK	N		
	Jumper - Neutral	Power Inlet	Female Spade	Power Switch	Female Spade	8CM	18 WHT	N		
	Line Wire	Power Switch	Female Spade	24V Power Supply	Fork	20CM	18 BLK	N		
	Neutral Wire	Power Switch	Female Spade	24V Power Supply	Fork	20CM	18 WHT	N		
	Ground Wire	Power Inlet	Female Spade	24V Power Supply	Fork	20CM	18 GN/YEL	N		
Solid State Relay	Line Wire (IN)	24V Power Supply	Fork	SSR	Fork	57CM	18 BLK	N		
	LINE Wire (LOAD)	SSR	Fork	Heated Bed WAGO	Bare Wire?	86CM	18 BLK	Y		
	Trigger +	Duet 3 6HC	Molex LG Pin 2 of 2	SSR IN +	Fork	42CM	24 RED	N		OUT_3
	Trigger -	Duet 3 6HC	Molex LG Pin 1 of 2	SSR IN -	Fork	42CM	24 BLK	N		OUT_3
Heated Bed WAGOs	Neutral 120V Wire	24V Power Supply	Fork	Heated Bed WAGO	Bare Wire?	133CM	18 WHT	Y		
	Bed Thermistor +	Duet 3 6HC	Molex KK Pin 2 of 2	Heated Bed WAGO	Bare Wire?	118CM	24 RED	Y		TEMP_3
	Bed Thermistor -	Duet 3 6HC	Molex KK Pin 1 of 2	Heated Bed WAGO	Bare Wire?	118CM	24 BLK	Y		TEMP_3
SexBolt Offset Switch	Switch S	Sexbolt Switch	JST-XH Pin 1 of 2	Duet 3 6HC	Molex KK Pin 4 of 5	141CM	24 GREEN	Y		IO_5
	Switch -	Sexbolt Switch	JST-XH Pin 2 of 2	Duet 3 6HC	Molex KK Pin 3 of 5	141CM	24 BLK	Y		IO_5
12V DC Converter										
24V IN +	24V IN +	24V Power Supply	Fork	12V Converter	Fork	67CM	18 RED	N		
	24V IN -	24V Power Supply	Fork	12V Converter	Fork	67CM	18 BLK	N		
5V DC Converter										
24V IN +	24V IN +	24V Power Supply	Fork	12V Converter	Fork	74CM	18 RED	N		
	24V IN -	24V Power Supply	Fork	12V Converter	Fork	74CM	18 BLK	N		
	5V Out +	5V Converter	Fork	Duet 3 6HC	Molex KK PIN 3 of 3	60CM	20 RED	N		5V_EXT
	5V OUT -	5V Converter	Fork	Duet 3 6HC	Molex KK Pin 1 of 3	60CM	20 BLK	N		5V_EXT
Duet 3 6HC	24V IN +	24V Power Supply	Fork	Duet 3 6HC	Fork	91CM	18 RED	N		POWER_IN
	24V IN -	24V Power Supply	Fork	Duet 3 6HC	Fork	91CM	18 BLACK	N		POWER_IN
Duet 3 3HC										
24V IN +	24V IN +	Duet 3 6HC	Fork	Duet 3 3HC	Fork	39CM	18 RED	N		POWER_IN
	24V IN -	Duet 3 6HC	Fork	Duet 3 3HC	Fork	39CM	18 BLACK	N		POWER_IN
Water Pump										
Radiator Fan +	Radiator Fan +	Duet 3 6HC	Molex KK Pin 2 of 2	6020 Fan	Microfit Receptacle Pin 1 of 4	50CM	24 RED	N		OUT_9
	Radiator Fan -	Duet 3 6HC	Molex KK Pin 1 of 2	6020 Fan	Microfit Receptacle Pin 2 of 4	50CM	24 BLK	N		OUT_9
	12V Out +	12V Converter	Fork	Water Pump +	Microfit Receptacle Pin 3 of 4	86CM	20 RED	N		
	12V OUT -	12V Converter	Fork	Water Pump -	Microfit Receptacle Pin 4 of 4	86CM	20 BLK	N		
Display	Display Data 1	Duet 3 6HC	Molex KK Pin 1 of 5	PanelDue	Molex KK Pin 1 of 4	62CM	24 RED	N		IO_0
	Display Data 2	Duet 3 6HC	Molex KK Pin 2 of 5	PanelDue	Molex KK Pin 4 of 4	62CM	24 GREEN	N		IO_0
	Display Data 3	Duet 3 6HC	Molex KK Pin 3 of 5	PanelDue	Molex KK Pin 2 of 4	62CM	24 BLACK	N		IO_0
	Display Data 4	Duet 3 6HC	Molex KK Pin 4 of 5	PanelDue	Molex KK Pin 3 of 4	62CM	24 BLUE	N		IO_0
Tool Docks										
LED + (Stick1)	LED + (Stick1)	Duet 3 6HC	Molex KK Pin 2 of 2	Light Stick 1	JST XH Pin 2 of 2	144CM	20 RED	N		OUT_8
	LED - (Stick1)	Duet 3 6HC	Molex KK Pin 1 of 2	Light Stick 1	JST XH Pin 1 of 2	144CM	20 BLACK	N		OUT_8
LED + (Stick2)	LED + (Stick2)	Light Stick 1	JST XH Pin 2 of 2	Light Stick 2	JST XH Pin 2 of 2	16CM	20 RED	N		
	LED - (Stick2)	Light Stick 1	JST XH Pin 1 of 2	Light Stick 2	JST XH Pin 1 of 2	16CM	20 BLACK	N		
LED + (Stick3)	LED + (Stick3)	Light Stick 2	JST XH Pin 2 of 2	Light Stick 3	JST XH Pin 2 of 2	16CM	20 RED	N		
	LED - (Stick3)	Light Stick 2	JST XH Pin 1 of 2	Light Stick 3	JST XH Pin 1 of 2	16CM	20 BLACK	N		
FDM Tools										
Tool 0 Heater +	Tool 0 Heater +	Tool Dock 0	Microfit Receptacle Pin 4 of 4	Tool Heater +	Microfit Receptacle Pin 1 of 2	70CM	20 RED	Y		
	Tool 0 Heater -	Tool Dock 0	Microfit Receptacle Pin 1 of 4	Tool Heater -	Microfit Receptacle Pin 2 of 2	70CM	20 BLACK	Y		
	Tool 0 Thermistor +	Tool Dock 0	Microfit Receptacle Pin 2 of 4	Tool Thermistor +	Microfit Receptacle Pin 1 of 2	72CM	24 RED	Y		
	Tool 0 Thermistor -	Tool Dock 0	Microfit Receptacle Pin 3 of 4	Tool Thermistor -	Microfit Receptacle Pin 2 of 2	72CM	24 BLACK	Y		
TOOL HEAD										
E Motor Pair 1	E Motor Pair 1	Duet 3 6HC	Molex LG Pin 1 of 4	Extruder Motor	JST PH Pin 1 of 6	256CM	24 RED	Y		DRIVER_3



	E Motor Pair 1	Duet 3 6HC	Molex LG Pin 2 of 4	Extruder Motor	JST PH Pin 3 of 6	256CM	24 BLUE	Y	DRIVER_3
	E Motor Pair 2	Duet 3 6HC	Molex LG Pin 3 of 4	Extruder Motor	JST PH Pin 4 of 6	256CM	24 GREEN	Y	DRIVER_3
	E Motor Pair 2	Duet 3 6HC	Molex LG Pin 4 of 4	Extruder Motor	JST PH Pin 6 of 6	256CM	24 BLACK	Y	DRIVER_3
	T Motor Pair 1	Duet 3 6HC	Molex LG Pin 1 of 4	Tool Lock Motor	Microfit Connector Pin 1 of 4	256CM	24 RED	Y	DRIVER_4
	T Motor Pair 1	Duet 3 6HC	Molex LG Pin 2 of 4	Tool Lock Motor	Microfit Connector Pin 2 of 4	256CM	24 BLUE	Y	DRIVER_4
	T Motor Pair 2	Duet 3 6HC	Molex LG Pin 3 of 4	Tool Lock Motor	Microfit Connector Pin 3 of 4	256CM	24 GREEN	Y	DRIVER_4
	T Motor Pair 2	Duet 3 6HC	Molex LG Pin 4 of 4	Tool Lock Motor	Microfit Connector Pin 4 of 4	256CM	24 BLACK	Y	DRIVER_4
	X Endstop +	Duet 3 6HC	Molex KK Pin 5 of 5	X Endstop	JST XH Pin 1 of 3	256CM	24 RED	Y	IO_1
	X Endstop S	Duet 3 6HC	Molex KK Pin 4 of 5	X Endstop	JST XH Pin 2 of 3	256CM	24 GREEN	Y	IO_1
	X Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	X Endstop	JST XH Pin 3 of 3	256CM	24 BLACK	Y	IO_1
	Z Endstop S	Duet 3 6HC	Molex KK Pin 4 of 5	Z Endstop	Microfit Connector Pin 1 of 2	256CM	24 GREEN	Y	IO_3
	Z Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	Z Endstop	Microfit Connector Pin 2 of 2	256CM	24 BLACK	Y	IO_3
	TL Endstop +	Duet 3 6HC	Molex KK Pin 5 of 5	Tool Lock Endstop	JST XH Pin 1 of 3	256CM	24 RED	Y	IO_4
	TL Endstop S	Duet 3 6HC	Molex KK Pin 4 of 5	Tool Lock Endstop	JST XH Pin 2 of 3	256CM	24 GREEN	Y	IO_4
	TL Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	Tool Lock Endstop	JST XH Pin 3 of 3	256CM	24 BLACK	Y	IO_4
	Part Fan +	Duet 3 6HC	Molex KK Pin 2 of 2	Part cooling Fan	Microfit Connector Pin 1 of 2	256CM	24 RED	Y	OUT_7
	Part Fan -	Duet 3 6HC	Molex KK Pin 1 of 2	Part cooling Fan	Microfit Connector Pin 2 of 2	256CM	24 BLACK	Y	OUT_7
	Y Endstop								
	Y Endstop +	Duet 3 6HC	Molex KK Pin 5 of 5	Y Endstop	JST XH Pin 1 of 3	83CM	24 RED	N	IO_2
	Y Endstop S	Duet 3 6HC	Molex KK Pin 4 of 5	Y Endstop	JST XH Pin 2 of 3	83CM	24 GREEN	N	IO_2
	Y Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	Y Endstop	JST XH Pin 3 of 3	83CM	24 BLACK	N	IO_2
	B Motor								
	B Motor Pair 1	Duet 3 6HC	Molex LG Pin 1 of 4	B Motor	JST PH Pin 1 of 6	61CM	24 RED	N	DRIVER_0
	B Motor Pair 1	Duet 3 6HC	Molex LG Pin 2 of 4	B Motor	JST PH Pin 3 of 6	61CM	24 BLUE	N	DRIVER_0
	B Motor Pair 2	Duet 3 6HC	Molex LG Pin 3 of 4	B Motor	JST PH Pin 4 of 6	61CM	24 GREEN	N	DRIVER_0
	B Motor Pair 2	Duet 3 6HC	Molex LG Pin 4 of 4	B Motor	JST PH Pin 6 of 6	61CM	24 BLACK	N	DRIVER_0
	A Motor								
	A Motor Pair 1	Duet 3 6HC	Molex LG Pin 1 of 4	A Motor	JST PH Pin 1 of 6	173CM	24 RED	N	DRIVER_1
	A Motor Pair 1	Duet 3 6HC	Molex LG Pin 2 of 4	A Motor	JST PH Pin 3 of 6	173CM	24 BLUE	N	DRIVER_1
	A Motor Pair 2	Duet 3 6HC	Molex LG Pin 3 of 4	A Motor	JST PH Pin 4 of 6	173CM	24 GREEN	N	DRIVER_1
	A Motor Pair 2	Duet 3 6HC	Molex LG Pin 4 of 4	A Motor	JST PH Pin 6 of 6	173CM	24 BLACK	N	DRIVER_1
	Z Motor								
	Z Motor Pair 1	Duet 3 6HC	Molex LG Pin 1 of 4	Z Motor	JST PH Pin 1 of 6	17CM	24 RED	N	DRIVER_2
	Z Motor Pair 1	Duet 3 6HC	Molex LG Pin 2 of 4	Z Motor	JST PH Pin 3 of 6	17CM	24 BLUE	N	DRIVER_2
	Z Motor Pair 2	Duet 3 6HC	Molex LG Pin 3 of 4	Z Motor	JST PH Pin 4 of 6	17CM	24 GREEN	N	DRIVER_2
	Z Motor Pair 2	Duet 3 6HC	Molex LG Pin 4 of 4	Z Motor	JST PH Pin 6 of 6	17CM	24 BLACK	N	DRIVER_2
	Raspberry Pi								
	RPI 5V+	5V DC Converter	Fork	RPI	USB-C	40CM	20 RED	N	
	RPI 5V-	5V DC Converter	Fork	RPI	USB-C	40CM	20 BLK	N	