BLACKBOX CE WIRE HARNESS MAP

Main Harness Name	WIRE Name	Component A	Connector A	Component B	Connector B	Length	Wire Gaug	e Color Marker	Motion?	Connector Name
Power Inlet										
	Jumper - Line	Power Inlet	Female Spade	Power Switch	Female Spade	8CM		18 BLK	N	
	Jumper - Neutral Line Wire	Power Inlet Power Switch	Female Spade Female Spade	Power Switch 24V Power Supply	Female Spade Fork	8CM 20CM		18 WHT 18 BLK	N 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	11	247.0	F. 1	SSR	F. 1	F7C14		40 DIV		
	Line Wire (IN) LINE Wire (LOAD)	24V Power Supply SSR	Fork Fork	Heated Bed WAGO	Fork Bare Wire?	57CM 86CM		18 BLK 18 BLK	N 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										
The state of the s	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
12 V DC C	Switch -	Sexbolt Switch	JST-XH Pin 2 of 2	Duet 3 6HC	Molex KK Pin 3 of 5	141CM		24 BLK	Y	10_5
12V DC Converter	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 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	И	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	И	POWER_IN
Duet 3 3HC										
Duet 3 311C	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										
water Pump	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	10_0
	Display Data 2 Display Data 3	Duet 3 6HC Duet 3 6HC	Molex KK Pin 2 of 5 Molex KK Pin 3 of 5	PanelDue PanelDue	Molex KK Pin 4 of 4 Molex KK Pin 2 of 4	62CM 62CM		24 GREEN 24 BLACK	N N	IO_0 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	10_0
Tool Docks										
1001 Docks	Tool 0 Heater +	Duet 3 6HC	Molex LG Pin 2 of 2	Tool Dock 0	Microfit Receptacle Pin 4 of 4	136CM		20 RED	N	OUT_1
	Tool 0 Heater -	Duet 3 6HC	Molex LG Pin 1 of 2	Tool Dock 0	Microfit Receptacle Pin 1 of 4	136CM		20 BLACK	N	OUT_1
	Tool 0 Thermistor +	Duet 3 6HC	Molex KK Pin 1 of 2	Tool Dock 0	Microfit Receptacle Pin 2 of 4	136CM		24 RED	N	TEMP_0
	Tool 0 Thermistor -	Duet 3 6HC	Molex KK Pin 2 of 2	Tool Dock 0	Microfit Receptacle Pin 3 of 4	136CM		24 BLACK	М	TEMP_0
	Tool 1 Heater +	Duet 3 6HC	Molex LG Pin 2 of 2	Tool Dock 1	Microfit Receptacle Pin 4 of 4	141CM		20 RED	N	OUT_2
	Tool 1 Heater -	Duet 3 6HC	Molex LG Pin 1 of 2	Tool Dock 1	Microfit Receptacle Pin 1 of 4	141CM		20 BLACK	N	OUT_2
	Tool 1 Thermistor + Tool 1 Thermistor -	Duet 3 6HC Duet 3 6HC	Molex KK Pin 1 of 2 Molex KK Pin 2 of 2	Tool Dock 1 Tool Dock 1	Microfit Receptacle Pin 2 of 4 Microfit Receptacle Pin 3 of 4	141CM 141CM		24 RED 24 BLACK	N N	TEMP_1 TEMP_1
	Tool 2 Heater +	Duet 3 3HC	Molex LG Pin 2 of 2	Tool Dock 2	Microfit Receptacle Pin 4 of 4	131CM		20 RED	N	OUT_0
	Tool 2 Heater - Tool 2 Thermistor +	Duet 3 3HC Duet 3 3HC	Molex LG Pin 1 of 2 Molex KK Pin 1 of 2	Tool Dock 2 Tool Dock 2	Microfit Receptacle Pin 1 of 4 Microfit Receptacle Pin 2 of 4	131CM 131CM		20 BLACK 24 RED	N N	OUT_0 TEMP_0
	Tool 2 Thermistor -	Duet 3 3HC	Molex KK Pin 2 of 2	Tool Dock 2	Microfit Receptacle Pin 3 of 4	131CM		24 BLACK	N	TEMP_0
	Tool 3 Heater + Tool 3 Heater -	Duet 3 3HC	Molex LG Pin 2 of 2	Tool Dock 3	Microfit Receptacle Pin 4 of 4	136CM		20 RED	N	OUT_1
	Tool 3 Heater - Tool 3 Thermistor +	Duet 3 3HC Duet 3 3HC	Molex LG Pin 1 of 2 Molex KK Pin 1 of 2	Tool Dock 3 Tool Dock 3	Microfit Receptacle Pin 1 of 4 Microfit Receptacle Pin 2 of 4	136CM 136CM		20 BLACK 24 RED	N N	OUT_1 TEMP_1
	Tool 3 Thermistor -	Duet 3 3HC	Molex KK Pin 2 of 2	Tool Dock 3	Microfit Receptacle Pin 3 of 4	136CM		24 BLACK	N	TEMP_1
			W.L. 100: - 4-	- 15				PF-		····
	Tool 4 Heater + Tool 4 Heater -	Duet 3 3HC Duet 3 3HC	Molex LG Pin 2 of 2 Molex LG Pin 1 of 2	Tool Dock 4 Tool Dock 4	Microfit Receptacle Pin 4 of 4 Microfit Receptacle Pin 1 of 4	141CM 141CM		20 RED 20 BLACK	N N	OUT_2 OUT_2
	Tool 4 Thermistor +	Duet 3 3HC	Molex KK Pin 1 of 2	Tool Dock 4	Microfit Receptacle Pin 2 of 4	141CM		24 RED	N	TEMP_2
	Tool 4 Thermistor -	Duet 3 3HC	Molex KK Pin 2 of 2	Tool Dock 4	Microfit Receptacle Pin 3 of 4	141CM		24 BLACK	N	TEMP_2
Enclosure Lighting	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
Enclosure Lighting	LED + (Stick1)	Duet 3 6HC Duet 3 6HC	Molex KK Pin 2 of 2 Molex KK Pin 1 of 2	Light Stick 1 Light Stick 1	JST XH Pin 2 of 2 JST XH Pin 1 of 2	144CM		20 RED 20 BLACK	N	OUT_8
										-
	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)	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	
EDM T										
FDM Tools										
	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 0 Thermistor -	Tool Dock 0 Tool Dock 0	Microfit Receptacle Pin 2 of 4 Microfit Receptacle Pin 3 of 4	Tool Thermistor + Tool Thermistor -	Microfit Receptacle Pin 1 of 2 Microfit Receptacle Pin 2 of 2	72CM 72CM		24 RED 24 BLACK	Y Y	
									-	
TOOL HEAD										
	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	10_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	10_1
	X Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	X Endstop	JST XH Pin 3 of 3	256CM	24 BLACK	Y	10_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	10_3
	Z Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	Z Endstop	Microfit Connector Pin 2 of 2	256CM	24 BLACK	Y	10_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	10_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	10_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	10_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	10_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	10_2
	Y Endstop -	Duet 3 6HC	Molex KK Pin 3 of 5	Y Endstop	JST XH Pin 3 of 3	83CM	24 BLACK	N	10_2
B Motor									
D 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	