

A440104d Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		

Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.

Connector 2 - Assy S047130			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		

Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
N	Red	TB3-1	+DR
J	Yellow	TB3-3	AIN1
D	Blue	TB3-4	-DR
B	Black	TB3-5	OV
E	Green	TB3-7	AIN2
A	Brown	NOT USED	
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOU4
R	Orange	TB7-11	RL2-NO
Pins C, F, H, K, M, P are not used			

Connector 4 - Assy S047140			
Pin	Wire	Terminal Block	Label
C	Red	TB3-6	+DR
A	Green	TB3-8	AIN3
D	Blue	TB3-10	-DR
B, E	not used		

C5 - No connector, Hole Seal P040134

Connector 6 - Assy S047160			
Pin	Wire	Terminal Block	Label
B	White	TB3-13	AIN 5
E	Green	TB3-14	AIN 6
D	Black	TB7-1	-CL
C	Red	TB7-2	+CL
A	not used		

Connector 7 - Assy S047170			
Pin	Wire	Terminal Block	Label
B	Black	TB6-9	0V
F	Yellow	TB6-10	+5VA
N	Red	TB6-11	+5VB
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES
C	Violet	TB6-15	0V

Connector 8 - Assy S047180			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO
A	not used		

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB7-2	+CL
2	Red	TB3-12	+DR
3	Black	TB7-1	-CL
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOU1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-8	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

20awg Jumper Wires
Red Wire from TB4-2 to TB7-4

Buss Bar P043005
From TB1-1 to TB1-2,3,4 (4 pins)
From TB7-8 to TB7-10 (2 pins)

1N6285A Diode P022003 - RTV on the back
Solder the Striped End to TB7-11
Solder the Black End to TB6-15

470ohm Res. From TB6-5 to TB7-4

A440105 Wiring Chart

G1		
Wire	Terminal Block	Label
Red	TB1-4	B+
Black	TB1-5	B-
White	TB5-5	DIN5
Green	TB5-6	DIN6

G2		
Wire	Terminal Block	Label
Red	TB2-6	+DR
Blue	TB2-7	-DR
Yellow	TB2-8	TX1+
Green	TB2-9	TX1-
TWIST THE GREEN AND YELLOW WIRES		

G3		
Wire	Terminal Block	Label
Red	TB2-1	+DR
Blue	TB2-2	-DR
Yellow	TB2-3	TXO+
Green	TB2-4	TXO-
TWIST THE GREEN AND YELLOW WIRES		

G4		
Wire	Terminal Block	Label
Brown	TB1-3	B+
Red	TB3-6	+DR
Yellow	TB3-7	AIN2
Green	TB3-8	AIN3
Blue	TB3-10	-DR
Orange	TB5-14	DIN14
White	TB5-15	DIN15
Black	TB5-16	ATBIN

G5 - EMPTY

G6		
Wire	Terminal Block	Label
Red	TB4-4	+VP
Black	TB4-8	0V
White	TB5-7	DIN7
Green	TB5-8	DIN8
Yellow	TB5-11	DIN11
Blue	TB5-12	DIN12

16 Awg Jumper Wires		
Red from TB1-1 (+B) to TB7-4 (Spare-C)		
Red from TB7-4 (Spare-C) to TB7-7 (RL1-C)		

G7		
Wire	Terminal Block	Label
Black	TB4	0V
Yellow	TB6-10	+5VA
Red	TB6-11	+5VB
White	TB6-12	DA
Green	TB6-13	DB
Blue	TB6-14	RES
Orange	TB6-15	0V

G8		
Wire	Terminal Block	Label
Red	TB5-1	DIN1
Green	TB7-05	RLS N/O
White	TB7-11	RL2 N/O

KEY SWITCH on Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	RL1 C
2	Black	TB7-8	RL1 N/O
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Pin	Wire	Terminal Block	Label
1	Red	TB4-3	SPARE
2	Red	TB3-12	+DR
3	Black	TB4-2	SPARE
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOUT1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-5	0V
+5V	Red	TB6-10	+5VA
A2BHI	Orange	not used	

BUSS BAR P043005	
Add a Buss Bar from TB1-1 to TB1-2,3,4	
Add a Buss Bar from TB7-8 to TB7-10	

1N6285 Diode P022003 - RTV on the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

22 Awg Jumper Wires	
Red wire from TB5-3 (DIN3) to TB4 (+VP)	
Yellow wire from TB7-2 (spare +CL) to TB6-11 (+5VB)	
Orange from spare TB7-1 (spare -CL) to TB6-5 (DOUT4)	

A440112a Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		

Twist the Green and Yellow wires and Tie Wrap the bundle up away from the board.

Connector 2 - Assy S047120			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		

Twist the Green and Yellow wires and Tie Wrap the bundle up away from the board.

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
J	Yellow	TB3-3	AIN1
B	Black	TB3-5	OV
N	Red	TB3-6	+DR
E	Green	TB3-7	AIN2
A	Brown	TB3-8	AIN3
D	Blue	TB3-10	-DR
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOU4
R	Orange	TB7-11	RL2-NO

Pins C, F, H, K, M, P are not used

C4 - No connector, Hole Seal P040134

Connector 5 - Assy S047151			
Pin	Wire	Terminal Block	Label
C	Black	TB6-9	OV
A	Red	TB6-10	+5VA
D	White	TB6-12	DA
E	Green	TB6-13	DB
B	not used		

Connector 6 - Assy S047160			
Pin	Wire	Terminal Block	Label
C	Red	TB4-3	SPARE
B	White	TB3-13	AIN 5
E	Green	TB3-14	AIN 6
D	Black	TB4-2	SPARE
A	no used		

Connector 7 - Assy S047171			
Pin	Wire	Terminal Block	Label
F	Yellow	TB4-4	+VP
N	Red	TB4-5	+VP
B	Black	TB4-11	OV
C	Violet	TB6-09	OV
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES

Pins G, H, J, K, L, M, P, R not used

Connector 8 - Assy S047181			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
A	Blue	TB7-5	Spare-NO
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB4-3	SPARE
2	Red	TB3-12	+DR
3	Black	TB4-2	SPARE
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOU1
+VP	Yellow	TB4-7	+VP
0V	Black	TB4-9	OV
+5V	Red	TB6-10	+5VA
A2BHI	Orange	Not used, Tie Wrap	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

20awg Jumper Wires	
Add a Yellow Wire from TB7-2 to TB6-11	
Add an Orange Wire from TB7-1 to TB6-5	
Add a Red Wire from TB7-4 to TB1-4	

1N6285A Diode P022003 - RTV to the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

A440110a Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 2 - Assy S047120			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
J	Yellow	TB3-3	AIN1
N	Red	TB3-6	+DR
E	Green	TB3-7	AIN2
A	Brown	TB3-8	AIN3
D	Blue	TB3-10	-DR
B	Black	TB3-15	OV
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOU4
R	Orange	TB7-11	RL2-NO
Pins C, F, H, K, M, P are not used			

C4 - No connector, Hole Seal P040134

C5 - No connector, Hole Seal P040134

Connector 6 - Assy S047161			
Pin	Wire	Terminal Block	Label
C	Red	TB1-1	B+
B	White	TB5-1	DIN1
E	The Green wire is extra. Tie wrap		
A, D	not used		

Connector 7 - Assy S047170			
Pin	Wire	Terminal Block	Label
C	Violet	TB6-9	0V
F	Yellow	TB6-10	+5VA
N	Red	TB6-11	+5VB
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES
B	Black	TB6-15	0V
Pins G, H, J, K, L, M, P, R not used			

Connector 8 - Assy S047180			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO
A	not used		

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB7-2	+CL
2	Red	TB3-12	+DR
3	Black	TB7-1	-CL
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOU1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-5	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

20awg Jumper Wires	
Red Wire from TB5-2 to TB4-1	
White Wire from TB5-1 to TB5-8	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

1N6285A Diode P022003 - RTV to the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

A440109a Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 2 - Assy S047120			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
J	Yellow	TB3-3	AIN1
B	Black	TB3-5	OV
N	Red	TB3-6	+DR
E	Green	TB3-7	AIN2
A	Brown	TB3-8	AIN3
D	Blue	TB3-10	-DR
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOU4
R	Orange	TB7-11	RL2-NO
Pins C, F, H, K, M, P are not used			

C4 - No connector, Hole Seal P040134

Connector 5 - Assy S047151			
Pin	Wire	Terminal Block	Label
C	Black	TB6-9	OV
A	Red	TB6-10	+5VA
D	White	TB6-12	DA
E	Green	TB6-13	DB
B	not used		

Connector 6 - Assy S047160			
Pin	Wire	Terminal Block	Label
B	White	TB3-13	AIN 5
E	Green	TB3-14	AIN 6
D	Black	TB4-2	Spare
C	Red	TB4-3	Spare
A	not used		

Connector 7 - Assy S047170			
Pin	Wire	Terminal Block	Label
B	Black	TB4-11	0V
F	Yellow	TB6-10	+5VA
N	Red	TB6-11	+5VB
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES
C	Violet	TB6-15	0V
Pins G, H, J, K, L, M, P, R not used			

Connector 8 - Assy S047181			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
A	Blue	TB7-5	RLS-NO
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO

KEY SWITCH on Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB4-3	Spare
2	Red	TB3-12	+DR
3	Black	TB4-2	Spare
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOU1
+VP	Yellow	TB4-7	+VP
0V	Black	TB4-9	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

20awg Jumper Wires	
Red Wire from TB1-4 to TB7-4	
Yellow Wire from TB6-11 to TB7-2	
Orange Wire from TB6-5 to TB7-1	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

1N6285A Diode P022003 - RTV on the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

A440107a Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 2 - Assy S047120			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
J	Yellow	TB3-3	AIN1
B	Black	TB3-5	OV
N	Red	TB3-6	+DR
E	Green	TB3-7	AIN2
A	Brown	TB3-8	AIN3
D	Blue	TB3-10	-DR
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOU4
R	Orange	TB7-11	RL2-NO
Pins C, F, H, K, M, P are not used			

C4 - No connector, Hole Seal P040134

C5 - No connector, Hole Seal P040134

Connector 6 - Assy S047161			
Pin	Wire	Terminal Block	Label
C	Red	TB1-1	B+
E	Green	TB5-2	DIN 2
B	White	TB5-3	DIN 3
A, D	not used		

Connector 7 - Assy S047170			
Pin	Wire	Terminal Block	Label
C	Violet	TB6-9	0V
F	Yellow	TB6-10	+5VA
N	Red	TB6-11	+5VB
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES
B	Black	TB6-15	0V
Pins G, H, J, K, L, M, P, R not used			

Connector 8 - Assy S047180			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO
A	not used		

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB7-2	+CL
2	Red	TB3-12	+DR
3	Black	TB7-1	-CL
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOU1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-5	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

20awg Wire Jumpers	
White Wire from TB5-3 to TB5-7	
Red Wire from TB5-2 to TB4-1	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

1N6285A P022005 Diode -RTV on the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

A440106c Wiring Chart

Connector 1 - Assy S047110			
Pin	Wire	Terminal Block	Label
C	Red	TB2-1	+DR
D	Blue	TB2-2	-DR
B	Yellow	TB2-3	TXO+
E	Green	TB2-4	TXO-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 2 - Assy S047120			
Pin	Wire	Terminal Block	Label
C	Red	TB2-6	+DR
D	Blue	TB2-7	-DR
B	Yellow	TB2-8	TX1+
E	Green	TB2-9	TX1-
A	not used		
Twist the Green and Yellow Wires and Tie Wrap the bundle up away from the board.			

Connector 3 - Assy S047131			
Pin	Wire	Terminal Block	Label
J	Yellow	TB3-3	AIN1
B	Black	TB3-5	OV
N	Red	TB3-6	+DR
E	Green	TB3-7	AIN2
A	Brown	TB3-8	AIN3
D	Blue	TB3-10	-DR
G	Violet	TB5-16	ATBIN
L	White	TB6-5	DOUT4
R	Orange	TB7-11	RL2-NO
Pins C, F, H, K, M, P are not used			

C4 - No connector, Hole Seal P040134

C5 - No connector, Hole Seal P040134

Connector 6 - Assy S047160			
Pin	Wire	Terminal Block	Label
B	White	TB3-13	AIN 5
E	Green	TB3-14	AIN 6
D	Black	TB7-1	-CL
C	Red	TB7-2	+CL
A	not used		

Connector 7 - Assy S047170			
Pin	Wire	Terminal Block	Label
C	Violet	TB6-9	0V
F	Yellow	TB6-10	+5VA
N	Red	TB6-11	+5VB
A	White	TB6-12	DA
E	Green	TB6-13	DB
D	Blue	TB6-14	RES
B	Black	TB6-15	0V
Pins G, H, J, K, L, M, P, R not used			

Connector 8 - Assy S047180			
Pin	Wire	Terminal Block	Label
C	Red	TB1-4	B+
D	Black	TB1-5	B-
B	White	TB7-7	RL1-C
E	Orange	TB7-11	RL2-NO
A	not used		

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

A2B Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB7-2	+CL
2	Red	TB3-12	+DR
3	Black	TB7-1	-CL
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOUT1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-5	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

1N6285A Diode P022003 - RTV on the back	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	

A440113a Wiring Chart

This unit doesn't use connectors. The wires pass through Cable Glands and connect directly to the terminal blocks on the interface board.
Cable Gland Part No. P040102

KEY SWITCH Top Plate Assy S440150			
Pin	Wire	Terminal Block	Label
8	Red	TB7-7	C
2	Black	TB7-8	NO
7	Yellow	TB5-10	DIN10

Piggy Back Board Assy S440200			
Wire	Color	Terminal Block	Label
1	Red	TB4-2	SPARE
2	Red	TB3-12	+DR
3	Black	TB4-1	SPARE
4	Blue	TB3-15	-DR
A2BOUT	White	TB5-13	DIN13
A2BLO	Violet	TB5-16	ATBIN
RLOUT	White	TB6-2	DOUT1
+VP	Yellow	TB4-3	+VP
0V	Black	TB4-5	0V
+5V	Red	TB6-10	+5A
A2BHI	Orange	Not used, Tie Wrap	

Buss Bar P043005	
From TB1-1 to TB1-2,3,4 (4 pins)	
From TB7-8 to TB7-10 (2 pins)	

1N6285A Diode P022003	
RTV on the back of the board.	
Solder the Striped End to TB7-11	
Solder the Black End to TB6-15	