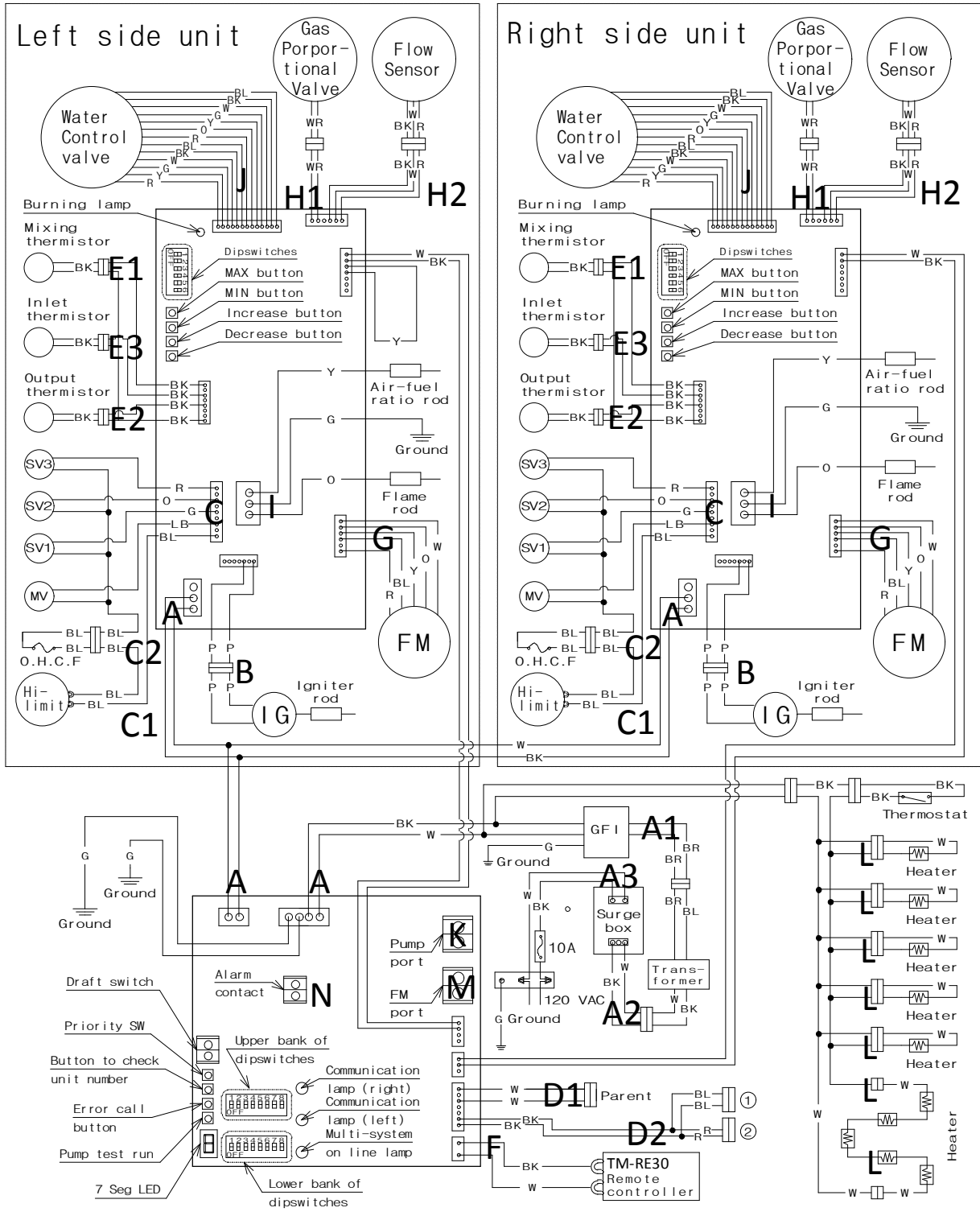


6. Wiring diagram

BK:BLACK LB:LIGHT BLUE G:GREEN O:ORANGE
P:PURPLE BL:BLUE Y:YELLOW BR:BROWN



7. Wiring diagram check points for diagnosis

Check-point	Parts and Description	Color of wires	Normal Range
A A1	100 V Power supply	White – Black (A) Brown – Brown (A1)	90 to 110 VAC
A2,A3	120 V Power supply	Black - White	108 to 132 VAC
B	Igniter	Purple – Purple	90 to 110 VAC
C	Gas valves	Light blue - blue at COM (MV)	78 to 100 VDC (during operation) / 0.9 to 1.3 k Ω
		Green - blue at COM (SV1)	78 to 100 VDC (during operation) / 1.3 to 1.9 k Ω
		Orange - blue at COM (SV2)	78 to 100 VDC (during operation) / 1.3 to 1.9 k Ω
		Red - blue at COM (SV3)	78 to 100 VDC (during operation) / 0.9 to 1.7 k Ω
C1	Hi-Limit switch	Blue - Blue	Less than 1 VDC and Less than 1 Ω
C2	Overheat cutoff fuse	Blue - Blue	Less than 1 VDC and Less than 1 Ω
D1	Easy-link and Multi-unit link connectors	White - White	15 VDC
D2		Black – Blue Black – Red	15 VDC (during Easy-link operation)
E1	Mixing thermistor	Black - Black	See table on p.12
E2	Output thermistor	Black - Black	
E3	Inlet thermistor	Black - Black	
F	Remote controller	Black - White	11 to 25 VDC
G	Fan motor	Red - Blue	110 to 160 VDC
		Yellow - Blue	13 to 17 VDC
		Orange - Blue	2 to 6.5 VDC

Check-point	Parts and Description	Color of wires	Normal Range
H1	Gas proportional valve	White - red	1 to 15 VDC(during operation) and 20 to 40 Ω
H2	Flow sensor	Red - Black	4 to 5.5 VDC
		White(+) – Black(GND)	1 to 4 VDC (1,200Pulse/min)
I	Air-fuel ratio rod	Yellow – AFR rod (Between AFR rod and the computer board)	More than 0.5 μ A (during operation)
	Flame rod	Orange – Flame rod (Between flame rod and the computer board)	More than 1 μ A (during operation)
J	Water control valve	Blue – Brown Orange – Brown Red – Brown	13 to 16 VDC ON: 12.5 to 16 VDC OFF: 0 to 1 VDC 1 VDC Less (0° position)
K	Pump connector	White - Black	Less than 1.3 Ω
L	Heater	Black – Black	90 to 110 VAC
M	FM port	White - Black	Less than 1.3 Ω
N	Alarm contact	White - Black	Less than 1.3 Ω