



GUOYEXING OPTOELECTRONICS CO.LTD

SPECIFICATION

FOR APPROVAL

ISSUED DATE :

CUSTOMER :

DESCRIPTION :

MODEL NO.: GYX—P7.62F03L-45S-VER1.0

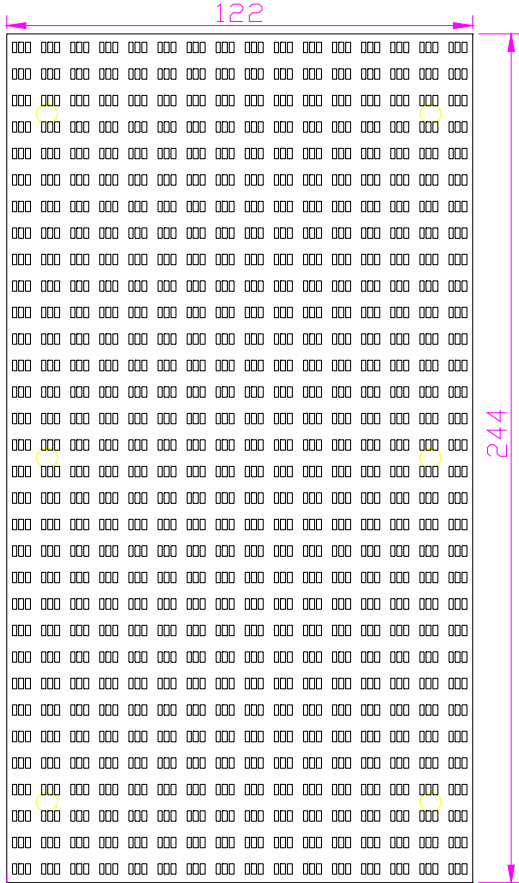
DOCUMENTNO. :

[GUOYEXING TECH.]

ISSUE	REVIEW	APPRL

[CUSTOMER APPROVAL]

***DATE—CONNECTOR (JIN1、JOUT1)**

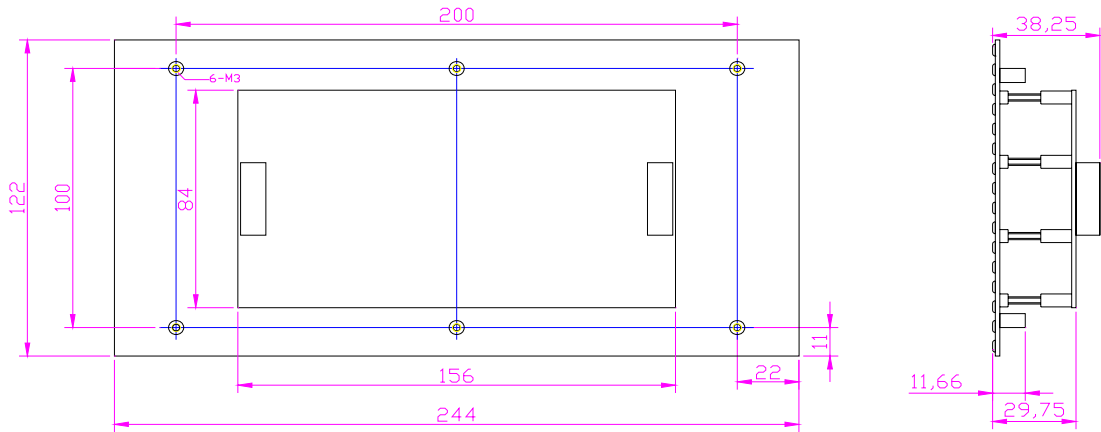


PIN NO	SIGNAL DESCRIBE	PIN NO	SIGNAL DESCRIBE
1	R0	2	G0
3	B0	4	GND
5	R1	6	G1
7	B1	8	A
9	B	10	C
11	CLK	12	LAT
13	OE	14	GND
15	GND	16	GND

***POWER CONNECTOR (J POWER1)**

NO	SIGNAL DESCRIBE	LEVEL
1	VDD	5 (V)
2	VDD	5 (V)
3	VCC	5 (V)
4	GND	0 (V)
5	GND	0 (V)

UNIT:MM

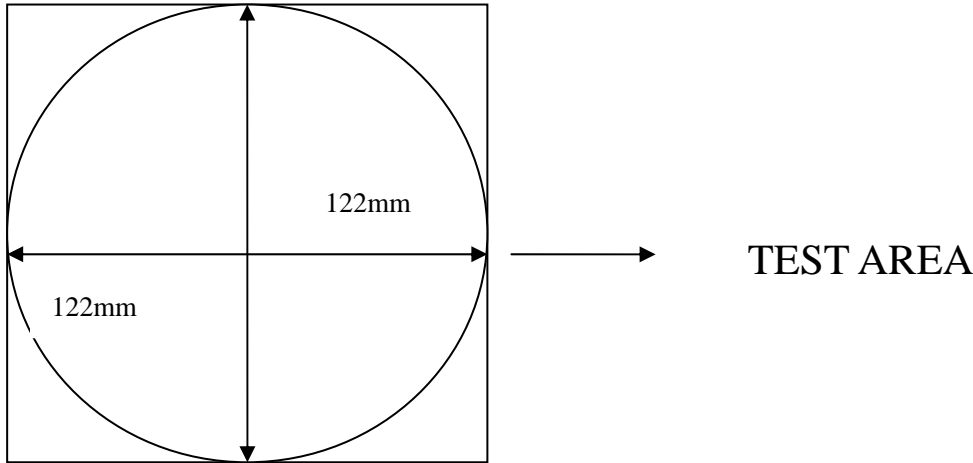


5、 OPTICAL CHARACTERISTICS

Ta=25°C

TITEM	SYMBOL	COND	MIN.	TYP	MAX	UNIT
Brightness	RED	Vcc=5V VDD=5V	180	320	400	Mcd
	P-GREEN		280	420	600	
	BLUE		70	130	150	
	WHITE		1800	2000	2200	Cd/m ²
Wavelength	RED	—	—	625	—	nm
	GREEN		—	525	—	
	BLUE		—	468	—	

(*1)

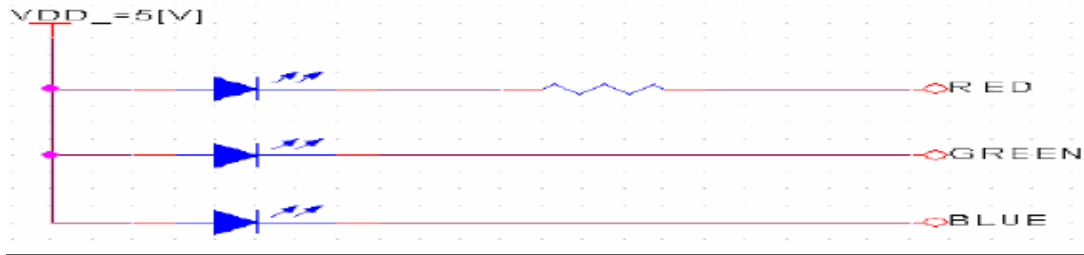


6、 ELECTRICAL CHARACTERISTICS

6-1.Voltage-Current Characteristics

Ta=25°C

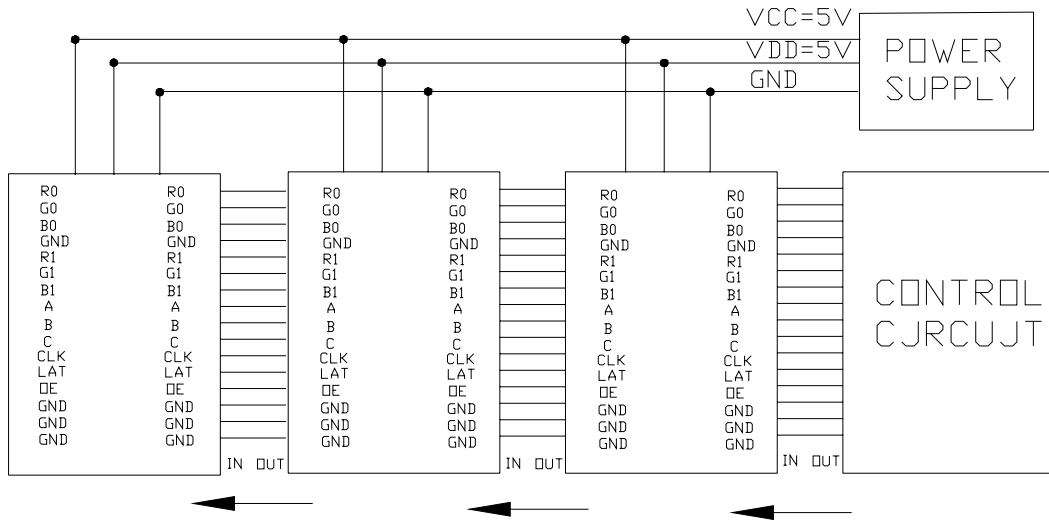
ITEM	SYMBOL	COND	MIN	TYP.	MAX	UNIT
Supply voltage(LOGIC)	Vcc	—		5		V
Supply voltage(LED)	Vdd	—		5		V
Supply current(LOGIC)	Icc	Vcc=5V	—	200		mA
Supply-current	RED	Lighting —all		7.68		A
	GREEN					
	BLUE					



7. OTHER ITEM

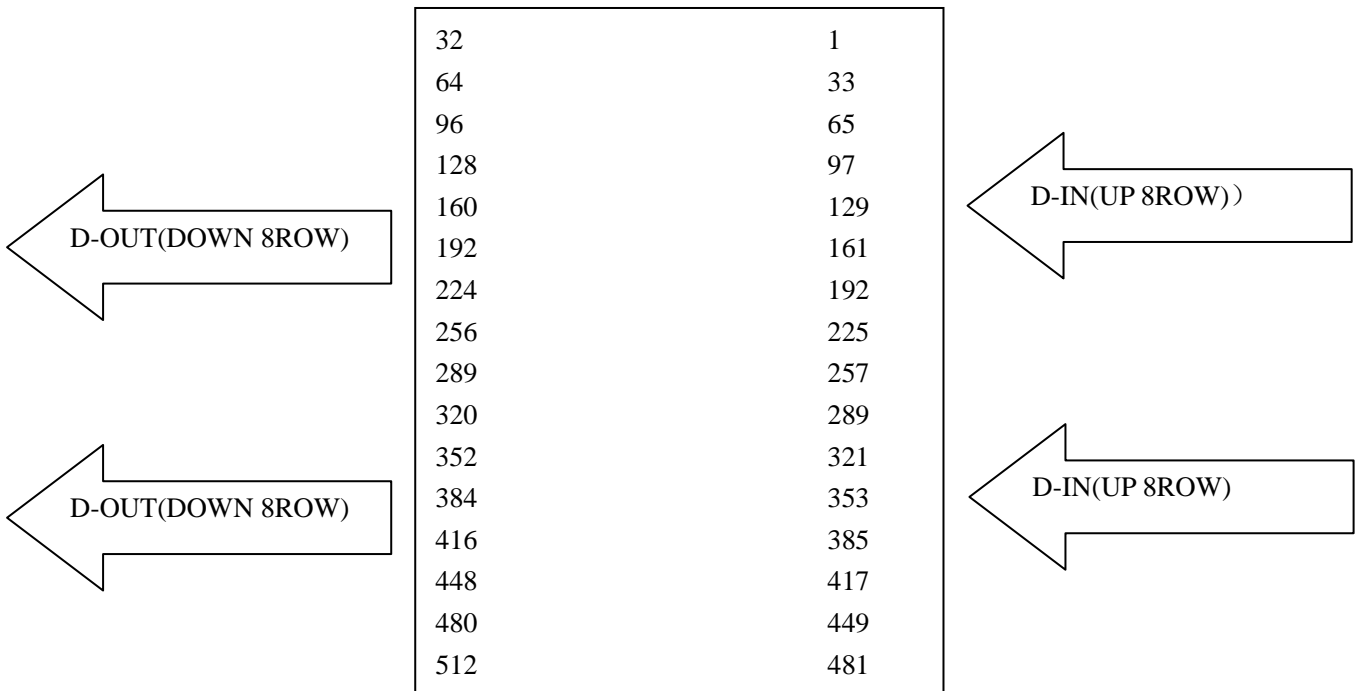
7-1. Connection example between products

UNIT:mm



7.2 Explanation of data direction

Inputed signal with picture of summer period shift after is done.



8. INTERFACE

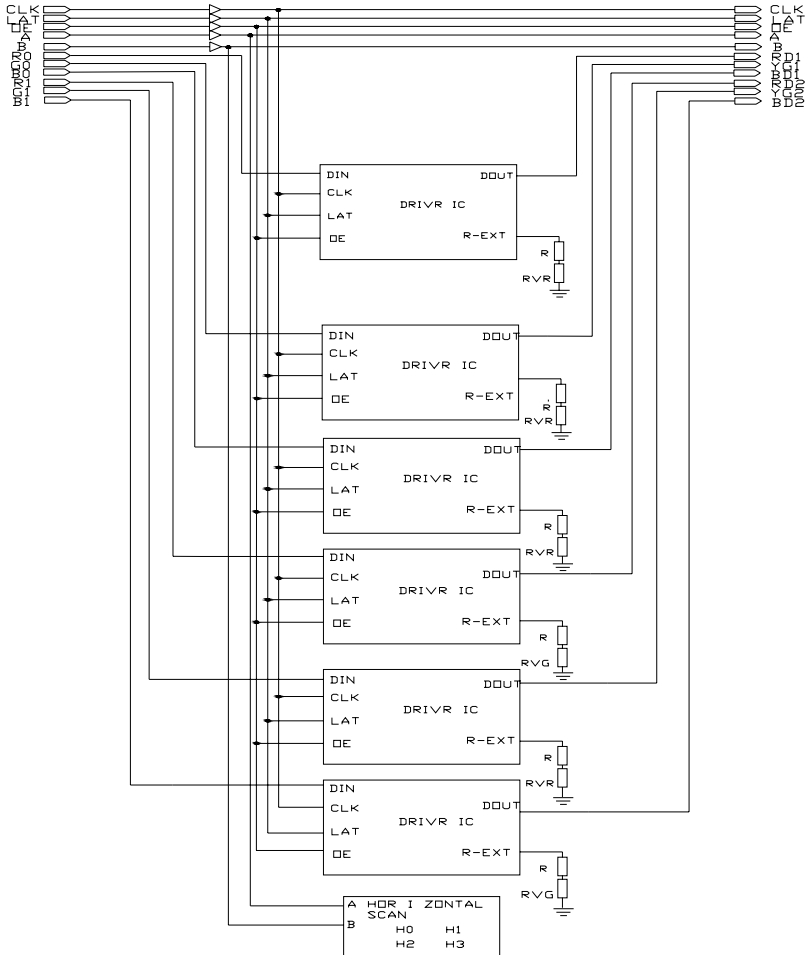
8-1.IN/OUT PUT connector pin number & signal function

	Pin No.	SIGNAL	SIGNAL-FUNCTION
TRANSVERSE INPUT/ OUTPUT SIGNAL (IN) PORT	1	R1	RED DATA (UP 8 ROW)
	2	G1	GREEN DATA (UP 8 ROW)
	3	B1	BLUE DATA (UP 8 ROW)
	4	GND	GROUND
	5	R2	RED DATA (DOWN 8 ROW)
	6	G2	GREEN DATA (DOWN 8 ROW)
	7	B2	BLUE DATA (DOWN 8 ROW)
	8	A	HORIZONTAL SCAN ADDRESS 0
	9	B	HORIZONTAL SCAN ADDRESS 1
	10	C	HORIZONTAL SCAN ADDRESS 2
	11	SCLK	SHIFT CLOCK
	12	GND	GROUND
	13	LATCH	DATA LATCH
	14	GND	GROUND
	15	OE	OUTPUT ENABLE
	16	GND	GROUND

8-2. Power connector pin number & signal function

NO	SIGNAL	LEVEL	FUNCTION	WIRE
1	VDD	5 [V]	LOGIC	RED
2	VDD	5 [V]	POWER OF LED	RED
3	VCC	5 [V]	LOGIC	RED
4	GND	0 [V]	GROUND	BLACK
5	GND	0 [V]	GROUND	BLACK

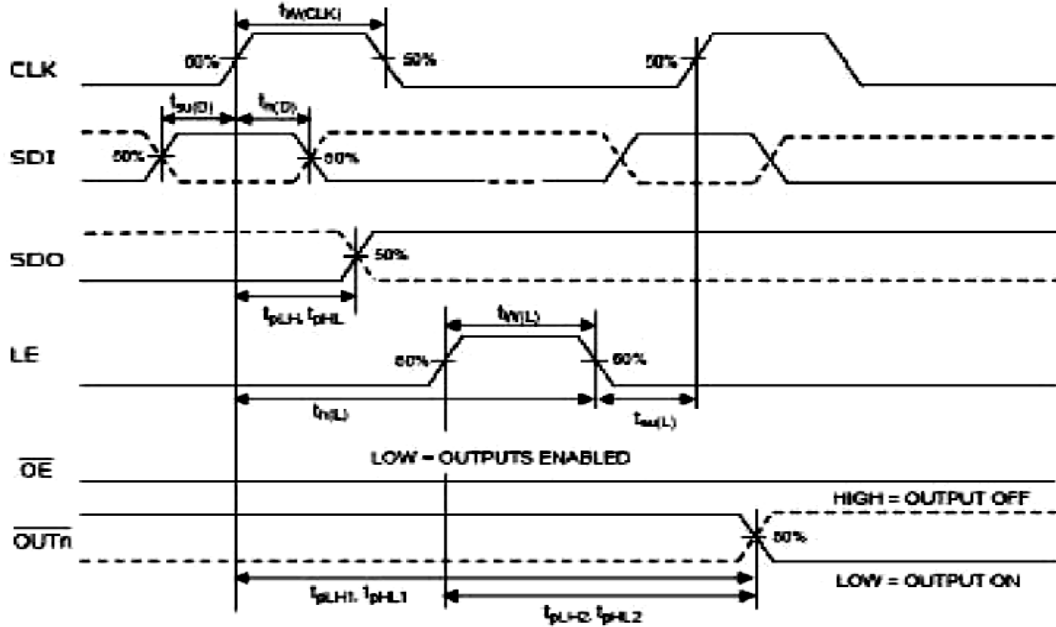
9.BLOCK DIAGRA



ROUT1 {1:16}	ROUT2 {1:16}	ROUT3 {1:16}	ROUT4 {1:16}	GOUT1 {1:16}
LED ARRAY (16×32)				GOUT2 {1:16}
				GOUT3 {1:16}
BOUT1 {1:16}	BOUT2 {1:16}	BOUT1 {1:16}	BOUT2 {1:16}	GOUT3 {1:16}

10. TIMING

10-1. MAP

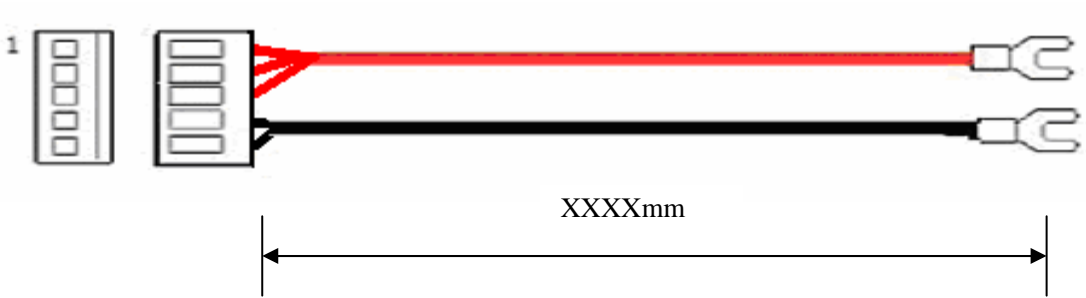


10-2. OPERATION TIMING

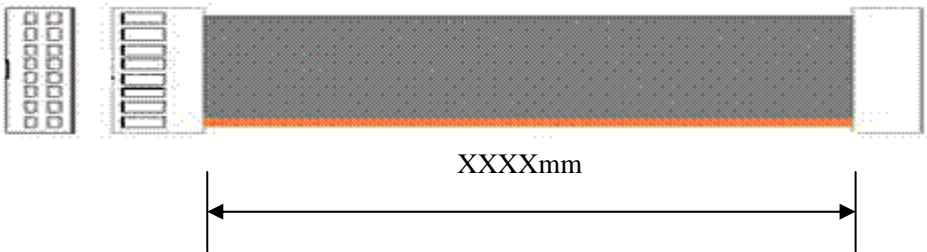
Characteristic	Symbol	condition	min	typ	max	unit
Propagation Delay Time ("L" To "H")	CLK • OUTn	T plh1	-	50	100	ns
	LE • OUTn	T plh2	-	50	100	ns
	OE ⁻ • OUTn	T plh3	-	20	100	ns
	CLK • SDO	T plh	V _{IL} =GND	15	20	-
Propagation Delay Time ("H" To "L")	CLK • OUTn	T phl1	-	100	150	ns
	LE • OUTn	T phl2	-	100	150	ns
	OE ⁻ • OUTn	T phl3	-	50	150	ns
	CLK • SDO	T phl	V _L =4.0v	16	20	-
Pulse width	CLK	T (clk)	20	-	-	ns
	LE	T (l)	20	-	-	ns
	OE	T (oe)	200	-	-	ns
Hold time for LE	T h(l)		5	-	-	ns
Setup time for LE	T su(l)		6	-	-	ns
Hold time for SDI	T n(d)		10	-	-	ns
Setup time for SDI	Lsu(d)		5	-	-	ns
Clock Frequency	F _{clk}	Cascade operation	-	-	25.0	MHz
Maximum CLK rise time	t _{cr}		-	-	500	ns
Maximum CLK fall time	T _{fr}		-	-	500	ns
Output rise time of vout (turn off)	T _{cr}		-	40	120	ns
Output fall time of vout (turn on)	T _{ct}		-	70	200	ns

11. CABLE SPEC

<POWER CABLE>



<SIGNAL CABLE>



PART NO.	STANDARD	VENDOR
FL01-8D-50mm	2.54mm PITCH 16 P WIRE (FLAT CABLE/50mm)	
VH2.54-300	4mm PITCH 5 P WIRE 4MM	

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12. PART LIST

NO	PART LIST	DWG NO	QUAN.	TYPE	PART NAME	MAKER	NOTE
1	RED LED		512	SMD-0603			
2	P/G LED		512	SMD-0603			
3	BLUE LED		512	SMD-0603			
4	PCB1(Display)		1	4Layer/1.8t			244*122 mm
5	Radiator		1	Aluminous			
6	DRIVE IC		12	SOP-24	MBI5026C(GF)		
7	IC		2	SSOP-20	74AHC541D		
8	IC		2	SSOP-16	74HCI38D		
9	IC		1	SOP-16	74HCI23		
10	Transistor		16	So-8	CEM4953		DRIVE
11	CONDENSER		1	DIP	470uF/16V		POWER
12	CONDENSER		1	DIP	100uF/16V		POWER
13	CHIPSEAMICCON.		12	SMD-0805	0.1 uF		DRIVE
14	CHIPSEAMICCON		6	SMD-0805	0.1 uF		POWER
15	CHIP RESISTOR		1	SMD-0805	150K Ω		
16	CHIP RESISTOR		8	SMD-0805	330 Ω		
17	CHIP RESISTOR		4	SMD-0805	210 Ω		
18	CHIP RESISTOR		64	SMD-0805	33 Ω		
19	CHIP RESISTOR		12	SMD-0805	10K Ω		
20	VAR RESISTOR		1	SMD-0805	150 Ω		
21	POWER WAFER		1		GW 4		
22	POWER HOUSING		2		XH 4*4 p		
23	SOCKET 1		2	DIP	2X8FPC-2.54		
24	SOCKET 2		6	SMD	1X32-2.0mm		
25	SOCKET 3		2	SMD	1X16-2.0mm		
26	PCB2(Drice)		1	4Layer/1.8t			156*84mm

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13. INSTALLATION NOTICES

1) Please apply this modules at a safe surrounding against noise because the error or mis-operation may occur at fragile place of noise.

2) Check surely the power condition to operation test in order to prevent module damage which might be caused by the excessive power.

3) Modules should be set up within the guarantee limitation and especially kept away from salt dust, soot and SO₂ gas etc.

4) When there is no data transmission at operation test just turn power off immediately. Otherwise operating gets damaged.

5) Please apply this product under the range of guarantee, considering the sufficient radiation in case of the assembled multi-module.

6) V led is recommended the maximum of rating voltage for best result under the low temperature such as -15° C below.

7) Please check the insert direction when you attach SIGNAL CONNECTOR or link the power. (refer to Harness wire colors of which the the insert direction is same.)

14 .REFERENCES

1) Check SYSTEM weight before apply modules into housing.

2) Operation test or anti-static electricity need for the COMS attached in circuit board.

3) Sufficient power capability is necessary to deal with the excessive power which might be drastically caused depending on the condition of the on/off of unit.(peak current times 1.5 and higher)

4) power for logic or LED requires Switching Mode Supply.

5) Use power bus bar when connecting power. It helps power to keep from falling down..

6) Please don't change "switch was set as outgoing" The switch was set as out-going.

7) Any further question or trouble herein will be worked out mutually by customer and supplier through sales manager.
