

Steering Panel

OPERATION MANUAL

KS81F
KS81A



KS81F
[Dip Switch]

Switch	ON	OFF	Default																								
1	Not available	PUMP Automatic Feed-back available	OFF																								
2	PUMP RUN/STOP Output time <table><tr><td></td><td>2</td><td>3</td><td>4</td></tr><tr><td>1 second</td><td>OFF</td><td>OFF</td><td>OFF</td></tr><tr><td>2 second</td><td>OFF</td><td>OFF</td><td>ON</td></tr><tr><td>3 second</td><td>OFF</td><td>ON</td><td>ON</td></tr><tr><td>4 second</td><td>ON</td><td>ON</td><td>ON</td></tr><tr><td>5 second</td><td>ON</td><td>OFF</td><td>ON</td></tr></table>			2	3	4	1 second	OFF	OFF	OFF	2 second	OFF	OFF	ON	3 second	OFF	ON	ON	4 second	ON	ON	ON	5 second	ON	OFF	ON	2 second
			2	3	4																						
1 second			OFF	OFF	OFF																						
2 second			OFF	OFF	ON																						
3 second			OFF	ON	ON																						
4 second			ON	ON	ON																						
5 second	ON	OFF	ON																								
3																											
4																											
5	PUMP Automatic Feed-back hold time <table><tr><td></td><td>5</td><td>6</td><td>7</td></tr><tr><td>1 second</td><td>OFF</td><td>OFF</td><td>OFF</td></tr><tr><td>2 second</td><td>OFF</td><td>OFF</td><td>ON</td></tr><tr><td>3 second</td><td>OFF</td><td>ON</td><td>ON</td></tr><tr><td>4 second</td><td>ON</td><td>ON</td><td>ON</td></tr><tr><td>5 second</td><td>ON</td><td>OFF</td><td>ON</td></tr></table>			5	6	7	1 second	OFF	OFF	OFF	2 second	OFF	OFF	ON	3 second	OFF	ON	ON	4 second	ON	ON	ON	5 second	ON	OFF	ON	2 second
			5	6	7																						
1 second			OFF	OFF	OFF																						
2 second			OFF	OFF	ON																						
3 second			OFF	ON	ON																						
4 second			ON	ON	ON																						
5 second	ON	OFF	ON																								
6																											
7																											
8	ASP available	Not available	ON																								
9	STBD	PORT	ON(STBD) OFF(PORT)																								
10	Operation mode	Test mode	ON																								

*Resistor Termination ON/OFF(PORT & STBD)

KS81A
[Dip Switch]

Switch	ON	OFF	Default
1	NC	NC	
2	NC	NC	
3	NC	NC	
4	Not available	IND_FU Available	OFF
5	STBD	PORT	ON(STBD) OFF(PORT)
6	Operation mode	Test mode	ON

*Resistor Termination ON/OFF(PORT&STBD)

COM

[Dip Switch]

Switch	ON	OFF	Default									
1	J1 input/output available <table><tr><th>Signal</th><th>Input</th><th>Output</th></tr><tr><td>FSP_SYNC</td><td>TB13-13</td><td>RL12 ON RL1 ON</td></tr></table>	Signal	Input	Output	FSP_SYNC	TB13-13	RL12 ON RL1 ON	Not available	ON			
Signal	Input	Output										
FSP_SYNC	TB13-13	RL12 ON RL1 ON										
2	J2 input/output available <table><tr><th>Signal</th><th>Input</th><th>Output</th></tr><tr><td>FSP_JS</td><td>TB13-15</td><td>R8J ON RL8P ON</td></tr><tr><td>FSP_DP</td><td>TB13-15A</td><td></td></tr></table>	Signal	Input	Output	FSP_JS	TB13-15	R8J ON RL8P ON	FSP_DP	TB13-15A		Not available	ON
Signal	Input	Output										
FSP_JS	TB13-15	R8J ON RL8P ON										
FSP_DP	TB13-15A											
3	J3 input/output available <table><tr><th>Signal</th><th>Input</th><th>Output</th></tr><tr><td>ASP_SYNC</td><td>TB13-16</td><td>RL1 ON RK12A ON RL11 ON</td></tr></table>	Signal	Input	Output	ASP_SYNC	TB13-16	RL1 ON RK12A ON RL11 ON	Not available	ON			
Signal	Input	Output										
ASP_SYNC	TB13-16	RL1 ON RK12A ON RL11 ON										
4	AP_RL1&RL4 activate	AP_RL4 activate	OFF									
5	STBD	PORT	ON(STBD) OFF(PORT)									
6	Operation mode	Test mode	ON									

*Resistor Termination ON/OFF

– **SW5**: Silence key release to “communication error”

COM [Relay output chart]

No	Signal (Key)	Input (Terminal)	RL12	RL2E	RL1	RL2	RL4	R8J	RL8P	RK12A	RL11	RL3
1	POWER	V+		ON								
2	COM POWER	TB13-1D		ON								
3	KS81F_IND_FU	TB13-3		ON	ON							
4	KS81F_NFU	TB13-4		ON		ON						
5	KS81F_SYNC	TB13-13		ON	ON							
6	KS81F_AP	TB13-14		ON	ON (DIP 4 ON)		ON					
7	KS81F_JS	TB13-15		ON				ON				
8	KS81F_DP	TB13-15A		ON					ON			
9	KS81A_SYNC	TB13-16		ON	ON						ON	
10	KS81A_IND FU	TB13-12A		ON	ON						ON	
11	KS81A_NFU	TB13-11		ON								ON
12	KS81F_SYNC	DIP 1 ON TB13-13	ON	ON	ON							
13	KS81F_JS	DIP 2 ON TB13-15		ON				ON	ON			
14	KS81F_DP	DIP 2 ON TB13-15A		ON				ON	ON			
15	KS81A_SYNC	DIP 3 ON TB13-16		ON	ON					ON	ON	

KS81F&KS81A

[Test Mode]

Dip Switch “10” turn to OFF(KS81F)
Dip switch “6” turn to OFF(KS81A)

1. PUMP 1 RUN KEY: LAMP test
2. PUMP 1 STOP KEY: OUTPUT test
3. PUMP 2 RUN KEY: CAN BUS communication test
 - CAN BUS OK with “short” buzzer sound
 - CAN BUS malfunction with “long” buzzer sound
4. PUMP 2 STOP KEY: INPUT Test with DIP switch 1 ~ 6 ON/OFF

*Test mode would be work PORT/STBD separately

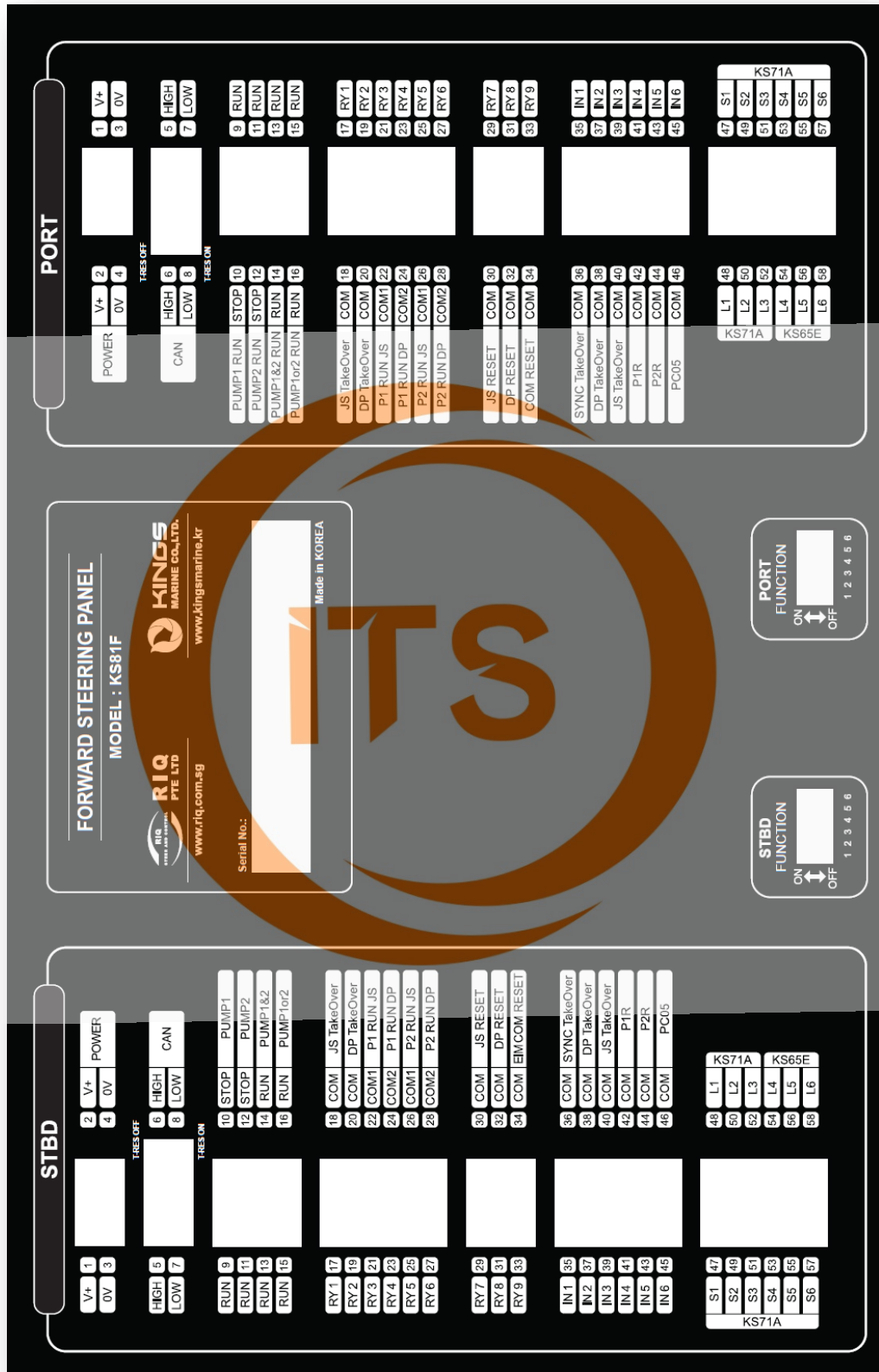
COM

[Test Mode]

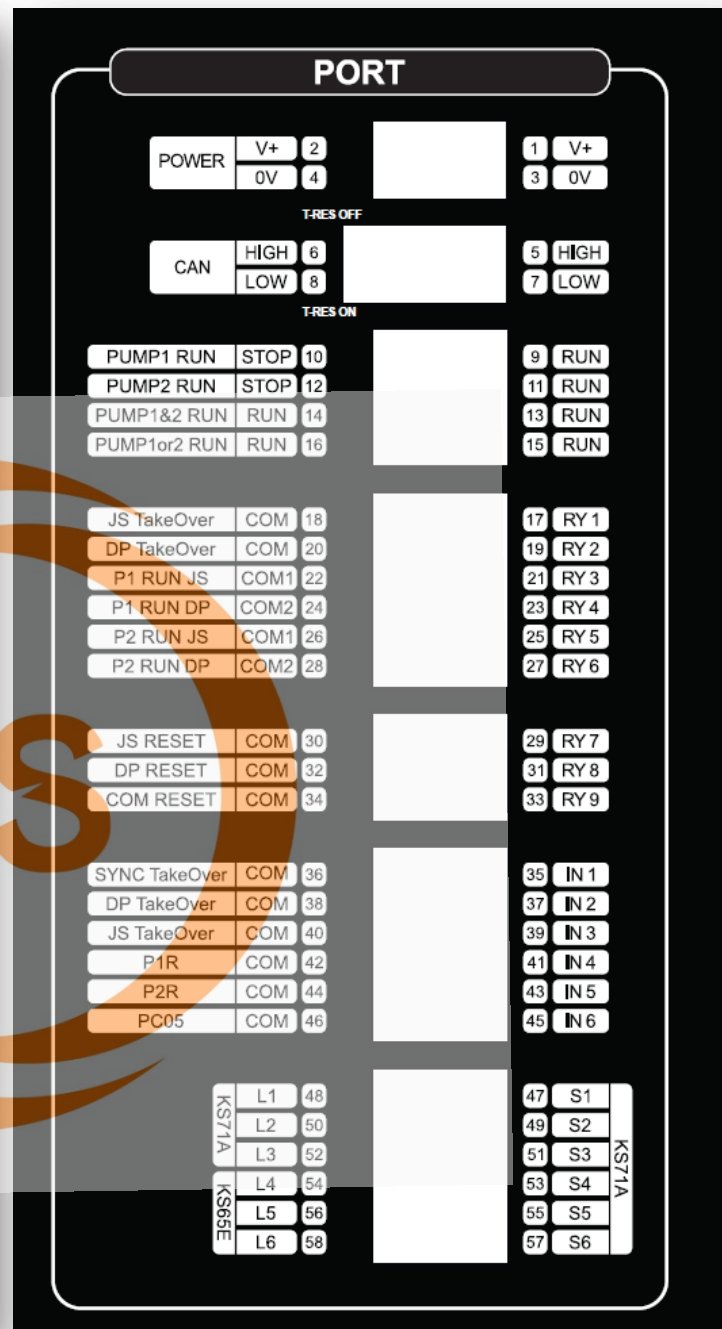
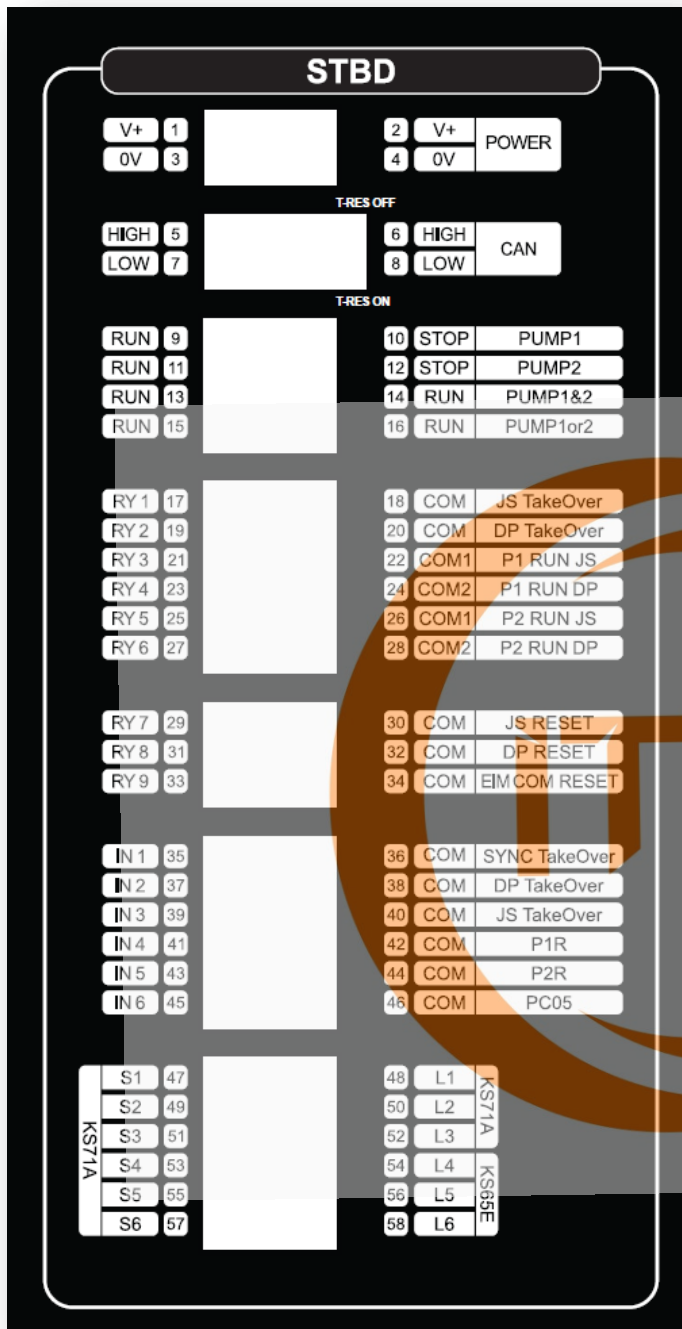
Dip switch “6” turn to OFF

1. Switch “S5”: OUTPUT test
2. Switch “S6”: CAN BUS communication test
 - CAN BUS OK with “short” buzzer sound
 - CAN BUS malfunction with “long” buzzer sound

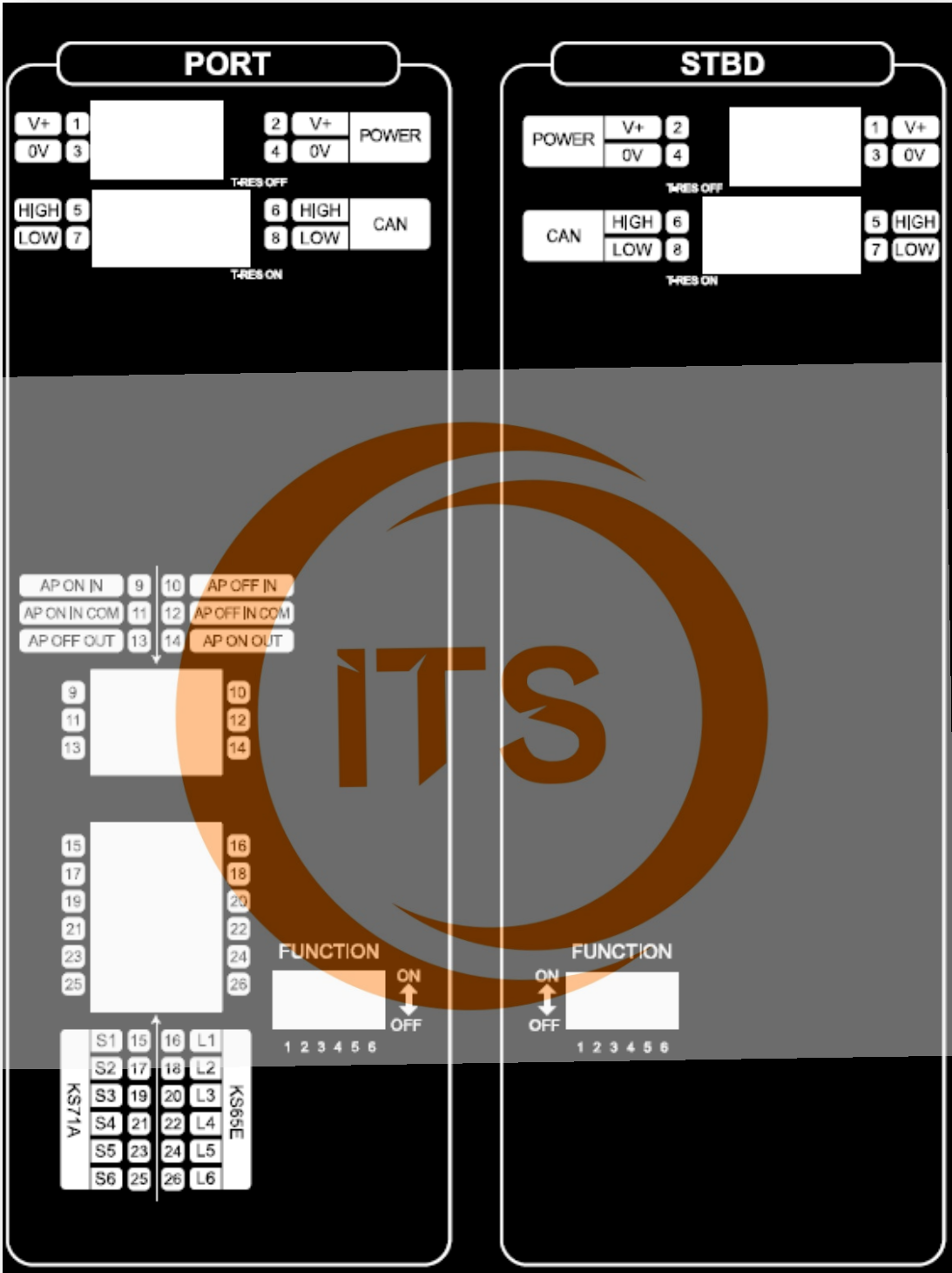
Terminal assignment [KS81F]



[KS81F]



[KS81A]



[COM]

