

INSTALLATION

RCI ILO6 MULTI-FUNCTION DOOR CONTROLLER



This logic controller is a 6 input, 6 output programmable controller. It has 7 pre-programmed functions as listed in the following instructions.

1. Power the unit with 12-24VDC on the R/T terminals.
2. Select the various functions by pressing and holding the P/S button until the display flashes.
3. Use the +/- buttons to go forward and back in the function list.
4. Press the P/S button to select the function and return to normal operation.

Within the functions with Auto-operator, a delay timer can be set by holding the P/S button down until the delay time is displayed. The +/- button can be used to increase or decrease delay time 1-10 seconds.

The display will dim after about 5 seconds. Pressing the P/S button will display current function setting.

See attached diagrams for operational descriptions and wiring recommendations for Functions 1 to 7

Function #1: Barrier Free Washroom Control c/w Emergency Call Function

Function #2: Barrier Free Washroom c/w Controlled Access and Emergency Call Function

Function #3: Communicating Washroom c/w Auto-operator control and Emergency Call Function

Function #4: Communicating Washroom c/w Emergency Call Function

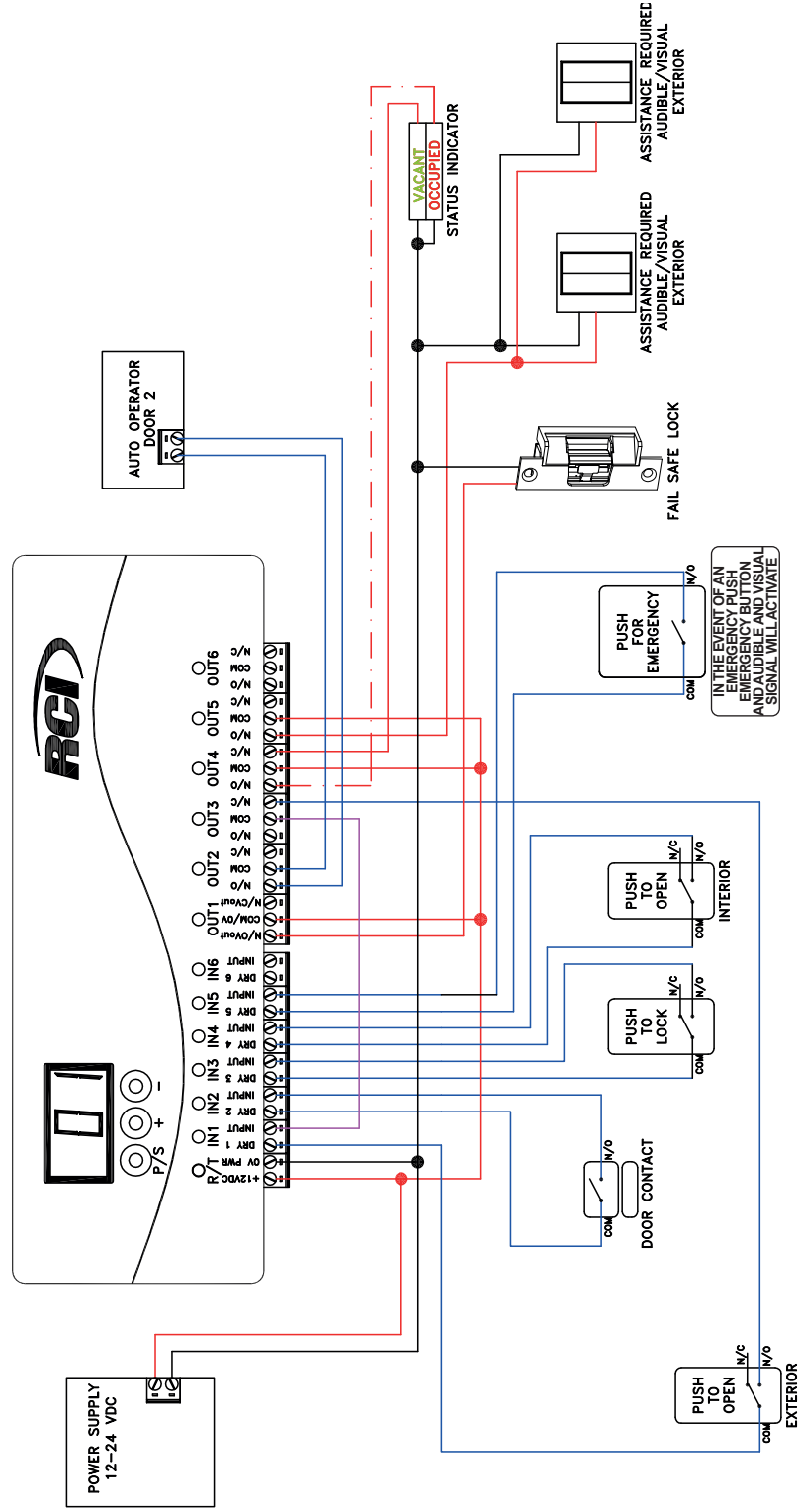
Function #5: 2 Door Security Interlock c/w Emergency Release

Function #6: 2 Door Safety Interlock c/w Emergency Release

Function #7: Multi-Zone Control

NOTE: All provided wiring diagrams are a suggested solution. It is the responsibility of the individual installer and end user to ensure that all national, provincial/state, and local building and safety codes are complied with. If unsure, enlist a local building code authority for further assistance.

ILO6 - FUNCTION 1	R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
	0V	DRY 1	DRY 2	DRY 3	DRY 4	DRY 5	DRY 6	COM	COM	COM	COM	COM	COM
POWER 12VDC	+	COM											
EXTERIOR PUSH TO OPEN	-												
DOOR CONTACT		COM	COM	COM	COM	COM	COM						
PUSH TO LOCK													
INTERIOR PUSH TO OPEN													
EMERGENCY CALL													
ELECTRIC STRIKE - FAIL SAFE	-												
AUTO OPERATOR													
OCCUPIED (O) / VACANT (V) LIGHT	-												
EMERGENCY CALL LIGHT & SOUNDER	-												
JUMPER 1	*												
JUMPER 2													



Function #1: Barrier Free Washroom Control c/w Emergency Call Function

Operational Description: Door is normally closed and unlocked

Entry by Exterior Push to Open (PTO) button activates the Auto-Operator and allows entry or manual means.

Activating the Interior Push to Lock (PTL) button locks the door, deactivates the exterior PTO button & activates exterior Occupied Light

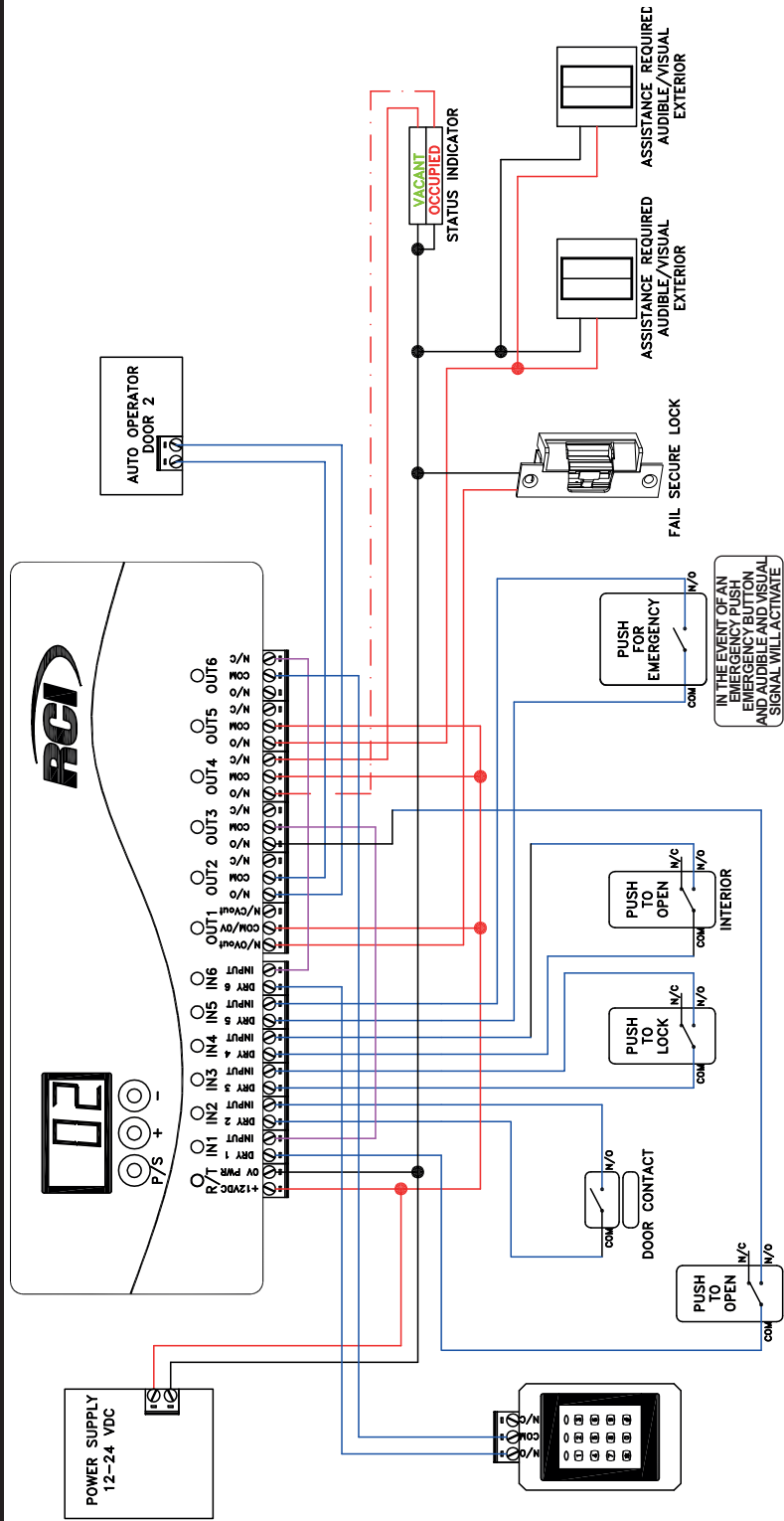
Egress can be by Interior PTO button or manually opening the door.

System is reset by PTO button and door contact.

Interior Emergency Button unlocks the door and activates an interior and exterior audible and visual alert.

Resetting is by manual means.

ILO6 - FUNCTION 2	R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
		INPUT	INPUT	INPUT	INPUT	INPUT	INPUT	COM	COM	COM	COM	COM	COM
POWER 12VDC	+12VDC	DRY 1	DRY 2	DRY 3	DRY 4	DRY 5	DRY 6	N/C	N/C	N/C	N/C	N/C	N/C
EXTERIOR PUSH TO OPEN	-	COM	COM										
DOOR CONTACT		COM	COM										
PUSH TO LOCK													
INTERIOR PUSH TO OPEN													
EMERGENCY CALL													
ACCESS CONTROL RELAY													
ELECTRIC STRIKE - FAIL SECURE	-												
AUTO OPERATOR	-												
OCCUPIED (O) / VACANT (V) LIGHT	-												
EMERGENCY CALL LIGHT & SOUNDER	-												
JUMPER 1	*												
JUMPER 2													
JUMPER 3													



Function #2: Barrier Free Washroom c/w Controlled Access and Emergency Call Function

Operational Description: Door is normally closed and locked

Entry by valid credential from exterior will enable Exterior Push to Open (PTO) button to unlock door and activate the Auto-operator and allows entry or manual means

Activating the Interior Push to Lock (PTL) button locks the door, deactivates exterior controls and activates exterior Occupied Light

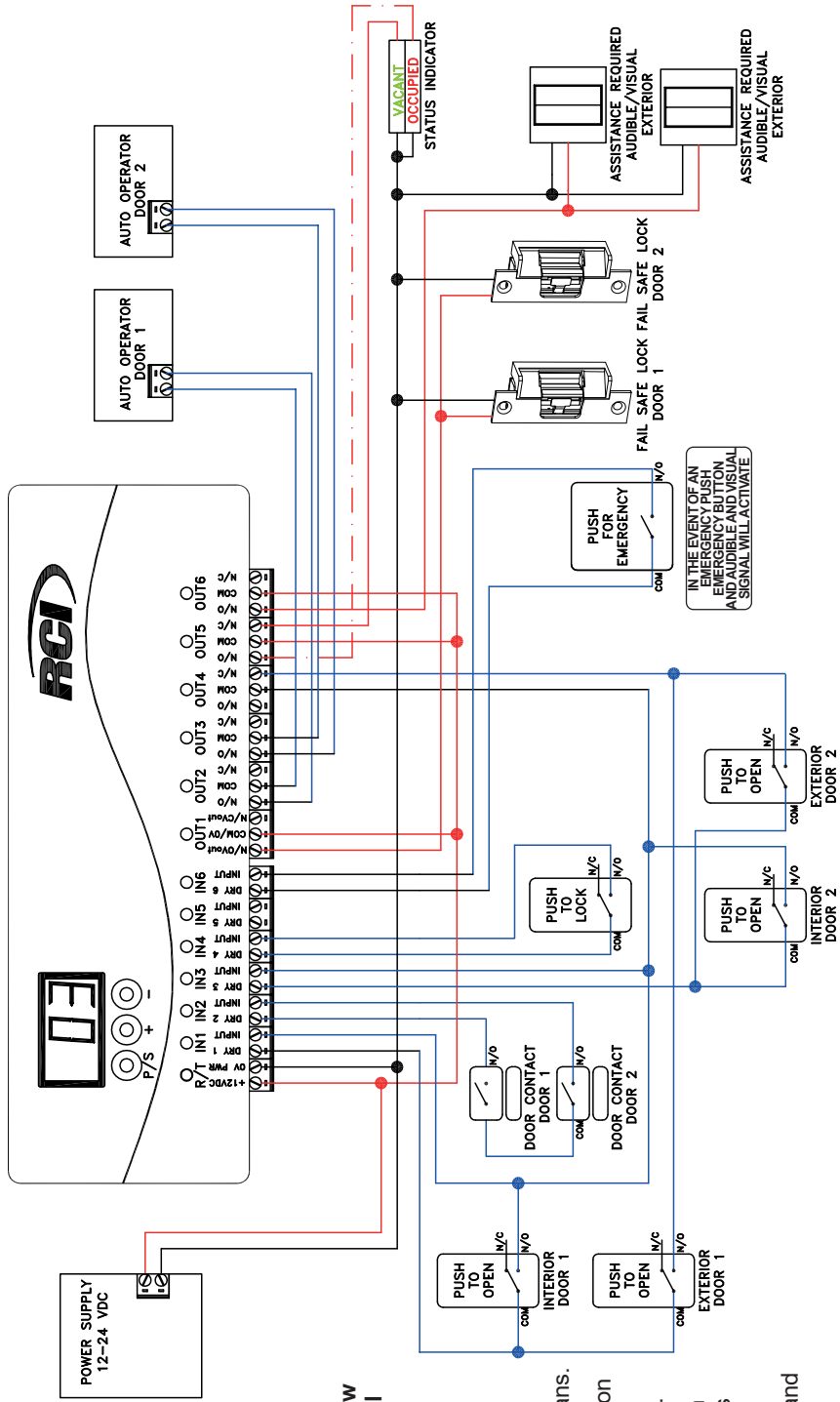
Egress can be by Interior PTO button or manually opening the door.

System is reset by PTO button and door contact.

Interior Emergency Button unlocks the door and activates an interior and exterior audible and visual alert.

Resetting is by manual means.

ILO6 - FUNCTION 3		R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
POWER 12VDC		+12VDC	OV											
DOOR 1 INTERIOR PUSH TO OPEN		-	COM N/O											
DOOR 1 EXTERIOR PUSH TO OPEN			COM											
DOOR CONTACT 1 (DC1)				N/O								N/O		
DOOR CONTACT 2 (DC2)														
DOOR 2 INTERIOR PUSH TO OPEN			N/O											
DOOR 2 EXTERIOR PUSH TO OPEN														
INTERIOR PUSH TO LOCK														
EMERGENCY CALL														
DOOR 1 & 2 ELECTRIC STRIKE - FAIL SAFE		-												
DOOR 1 AUTO OPERATOR														
DOOR 2 AUTO OPERATOR														
OCCUPIED (O) / VACANT (V) LIGHT		-												
EMERGENCY CALL LIGHT & SOUNDER		-												
JUMPER 1		*												
JUMPER 2														
JUMPER 3: COM (DC1) - COM (DC2)														



Function #3: Communicating Washroom c/w Auto Operator control and Emergency Call Function

Operational Description: Both doors are normally closed and unlocked.

Entry from exterior with either door exterior Push To Open (PTO) button will activate the auto-operator and allows entry or manual means.

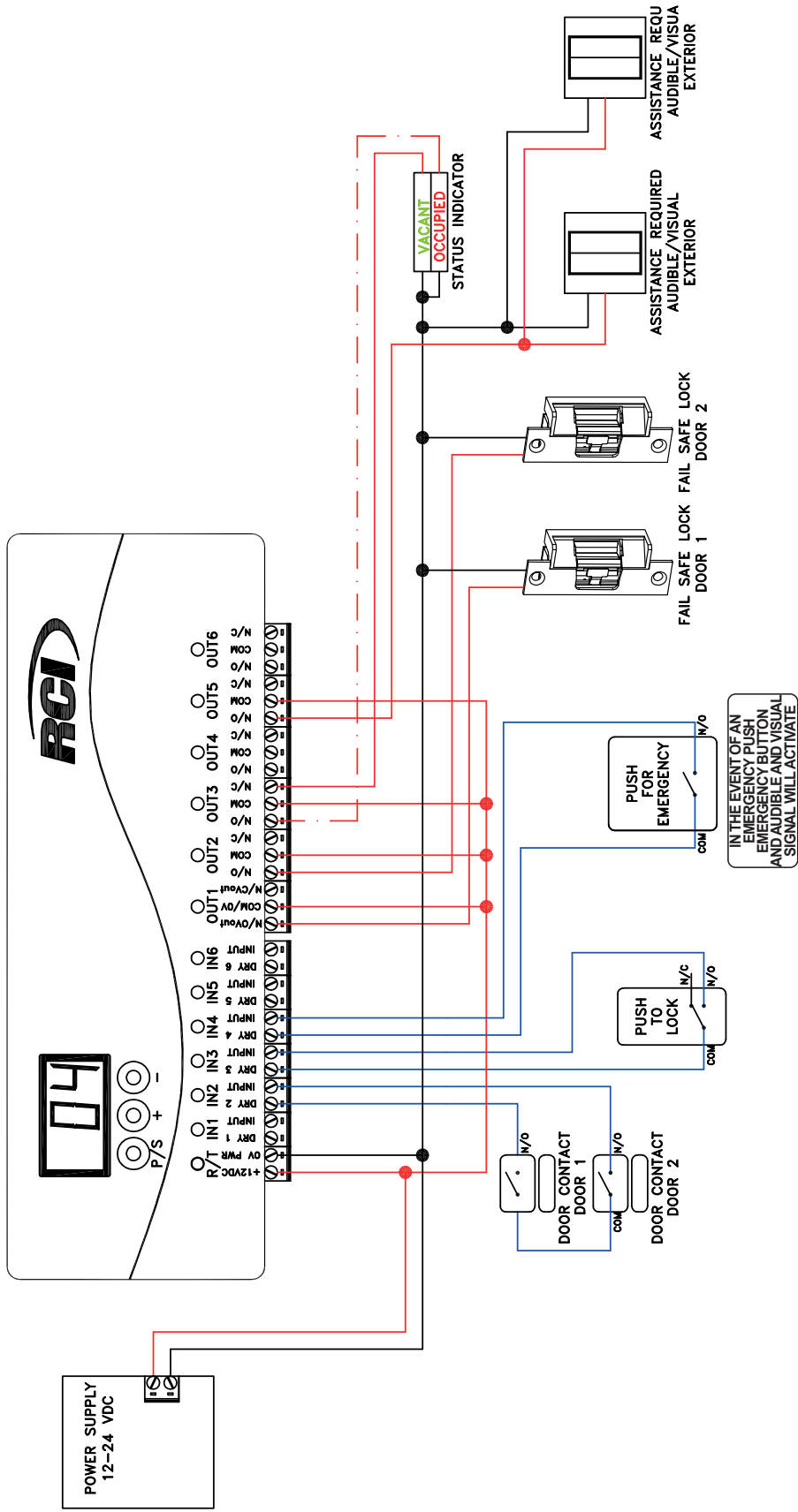
Activating the Interior Push to Lock (PTL) button locks both doors, and deactivates exterior controls and activates exterior Occupied Light.

Egress can be by interior PTO button for each door or manually opening the door. System is reset by PTO button and door contact.

Interior Emergency button unlocks the doors and activates an interior and exterior audible and visual alert.

Resetting is by manual means.

ILO6 - FUNCTION 4	R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
	0V +12VDC	DRY 1 INPUT	DRY 2 INPUT	DRY 3 INPUT	DRY 4 INPUT	DRY 5 INPUT	DRY 6 INPUT	N/O COM	N/C COM	N/O COM	N/C COM	N/O COM	N/O COM
POWER 12VDC	+		N/O										
DOOR CONTACT 1 (DC1)	-												
DOOR CONTACT 2 (DC2)			N/O										
INTERIOR PUSH TO LOCK				COM	N/O								
EMERGENCY CALL								+					
DOOR 1 ELECTRIC STRIKE - FAIL SAFE	-								+				
DOOR 2 ELECTRIC STRIKE - FAIL SAFE	-									+O			
OCCUPIED (O) / VACANT (V) LIGHT	-											+	
EMERGENCY CALL LIGHT & SOUNDER	-												*
JUMPER 1	*												
JUMPER 3: COM (DC1) - COM (DC2)									*	*		*	

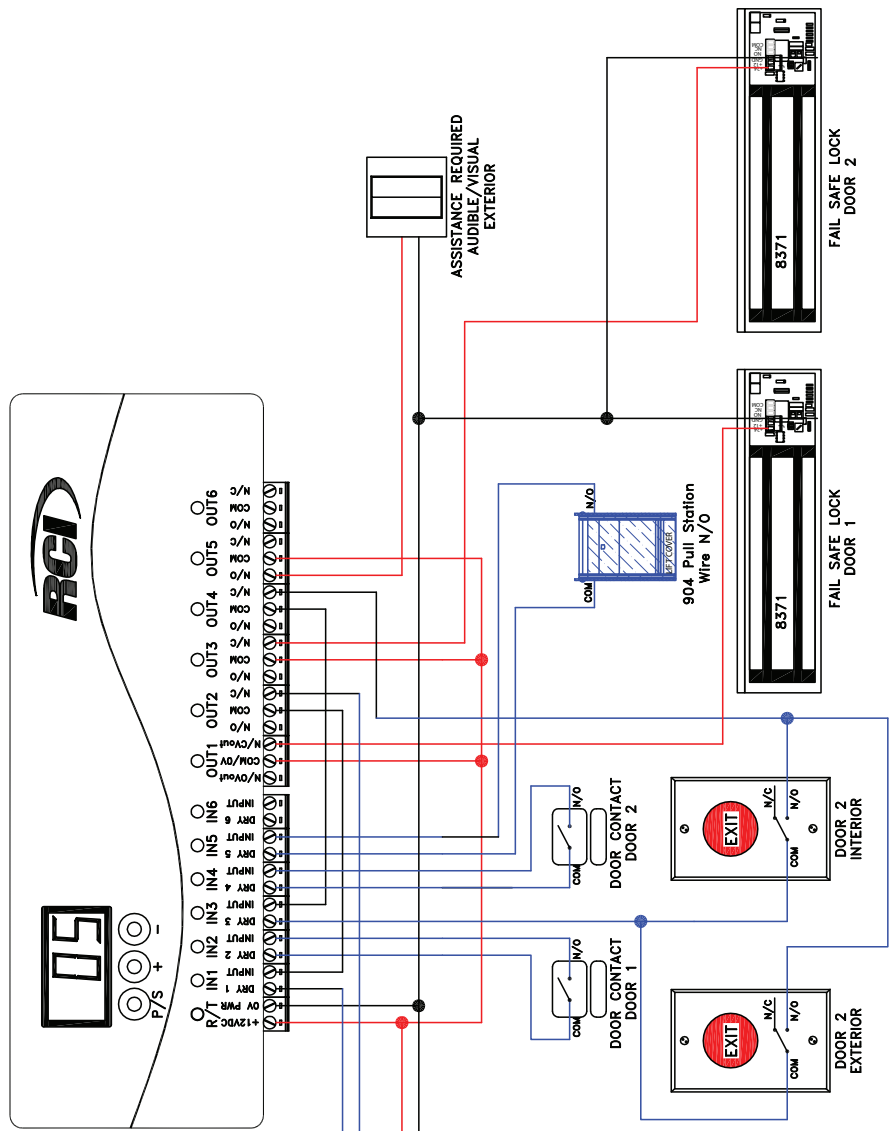


Function #4: Communicating Washroom c/w Emergency Call Function

Operational Description: Both doors are normally closed and unlocked. Entry from exterior by manual means. Activating the Interior Push to Lock (PTL) button locks both doors, and activates exterior Occupied Light.

Egress by manually opening the door. System is reset by door contact. Interior Emergency button unlocks the doors and activates an interior and exterior audible and visual alert. Resetting is by manual means.

ILO6 - FUNCTION 5	R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
	0V	DRY 1	DRY 2	DRY 3	DRY 4	DRY 5	DRY 6	COM	COM	COM	COM	COM	COM
POWER 12VDC	+12VDC												
DOOR 1 EXTERIOR ACCESS CONTROL, INTERIOR PUSH TO UNLOCK													
DOOR CONTACT 1 (DC1)													
INT & EXT EXIT BUTTON DOOR 2													
DOOR CONTACT 2 (DC2)													
EMERGENCY PULL STATION													
DOOR 1 MAGLOCK													
DOOR 2 MAGLOCK													
EMERGENCY CALL LIGHT & SOUNDER													
JUMPER 1	*												
JUMPER 2													
JUMPER 3													



Function #5: 2 Door Security Interlock c/w Emergency Release

Operational Description: Both doors are normally closed and locked.

Input of door #1 unlocks door #1 and disables door #2 buttons until door #1 closes.

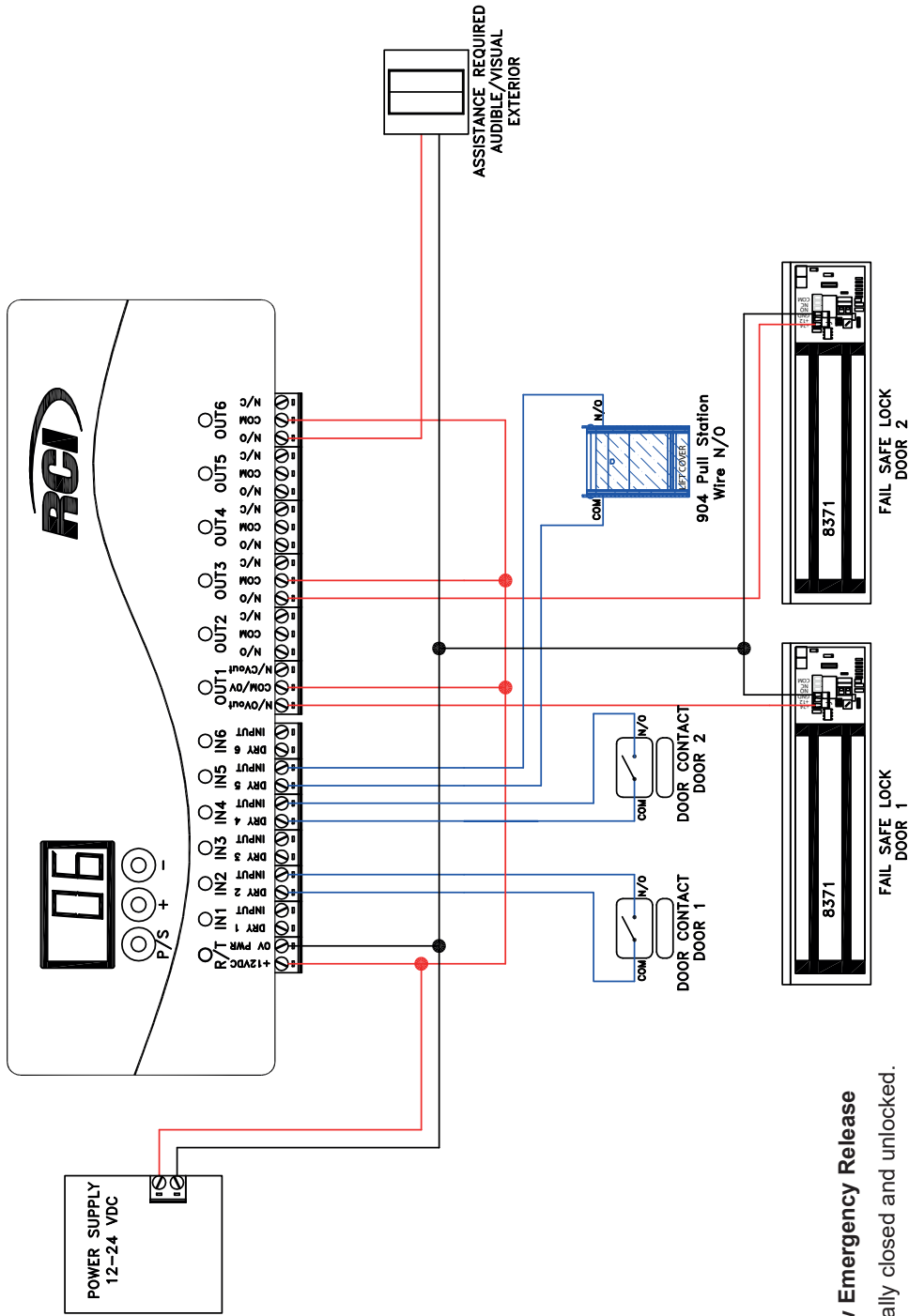
Input of door #2 unlocks door #2 and disables door #1 buttons until door #2 closes.

If doors are not opened within 10 seconds, system resets to normal state.

Emergency pull station unlocks the doors and activates an interior and exterior audible and visual alert.

Resetting is by manual means.

ILO6 - FUNCTION 6	R/T		IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1		OUT 2	OUT 3	OUT 4	OUT 5	OUT 6	
	+	-	DRY 1	DRY 2	DRY 3	DRY 4	DRY 5	DRY 6	COM	N/O	COM	N/O	COM	N/O	COM	N/O
POWER 12VDC	+	-	INPUT	COM N/O	INPUT	COM N/O	INPUT	INPUT	COM	N/O	COM	N/O	COM	N/O	COM	N/O
DOOR CONTACT 1 (DC1)																
DOOR CONTACT 2 (DC2)																
EMERGENCY PULL STATION																
DOOR 1 MAGLOCK	-	-														
DOOR 2 MAGLOCK	-	-														
EMERGENCY CALL LIGHT & SOUNDER	*	*														
JUMPER 1																



Function #6: 2 Door Safety and Interlock c/w Emergency Release

Operational Description: Both doors are normally closed and unlocked.

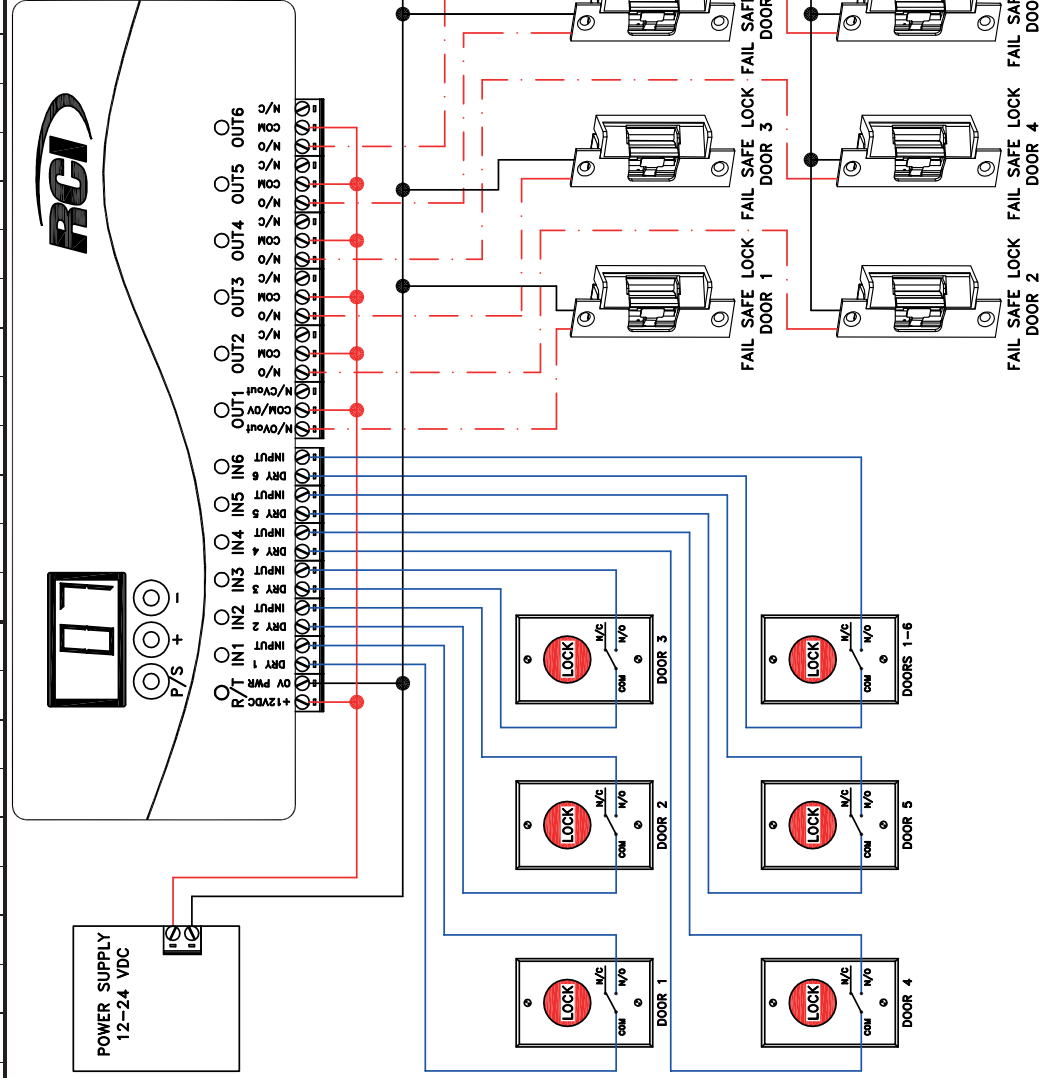
Opening door #1 locks door #2

Opening door #2 locks door #1

Emergency Pull Station unlocks the doors and activates an interior and exterior audible and visual alert

Resetting is by manual means.

ILO6 - FUNCTION 7	R/T	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6
		DRY 1 INPUT	DRY 2 INPUT	DRY 3 INPUT	DRY 4 INPUT	DRY 5 INPUT	DRY 6 INPUT	COM N/O	N/O INPUT	COM N/O	N/O INPUT	COM N/O	COM N/O
POWER 12VDC	+12VDC	OV											
DOOR 1 BUTTON	-	COM N/O											
DOOR 2 BUTTON			COM N/O										
DOOR 3 BUTTON				COM N/O									
DOOR 4 BUTTON					COM N/O								
DOOR 5 BUTTON						COM N/O							
DOOR 6 BUTTON							COM N/O						
DOOR 1 ELECTRIC STRIKE - FAIL SAFE	-												
DOOR 2 ELECTRIC STRIKE - FAIL SAFE	-												
DOOR 3 ELECTRIC STRIKE - FAIL SAFE	-												
DOOR 4 ELECTRIC STRIKE - FAIL SAFE	-												
DOOR 5 ELECTRIC STRIKE - FAIL SAFE	-												
DOOR 6 ELECTRIC STRIKE - FAIL SAFE	-												
JUMPER 1	*												



Function #7: Multi-Zone Control

Operational Description: All doors are closed and unlocked.

Entry from exterior by manual means. Activating any of the first 5 buttons locks corresponding doors.

Activating button 6 locks all 6 doors.

Free egress at all times.