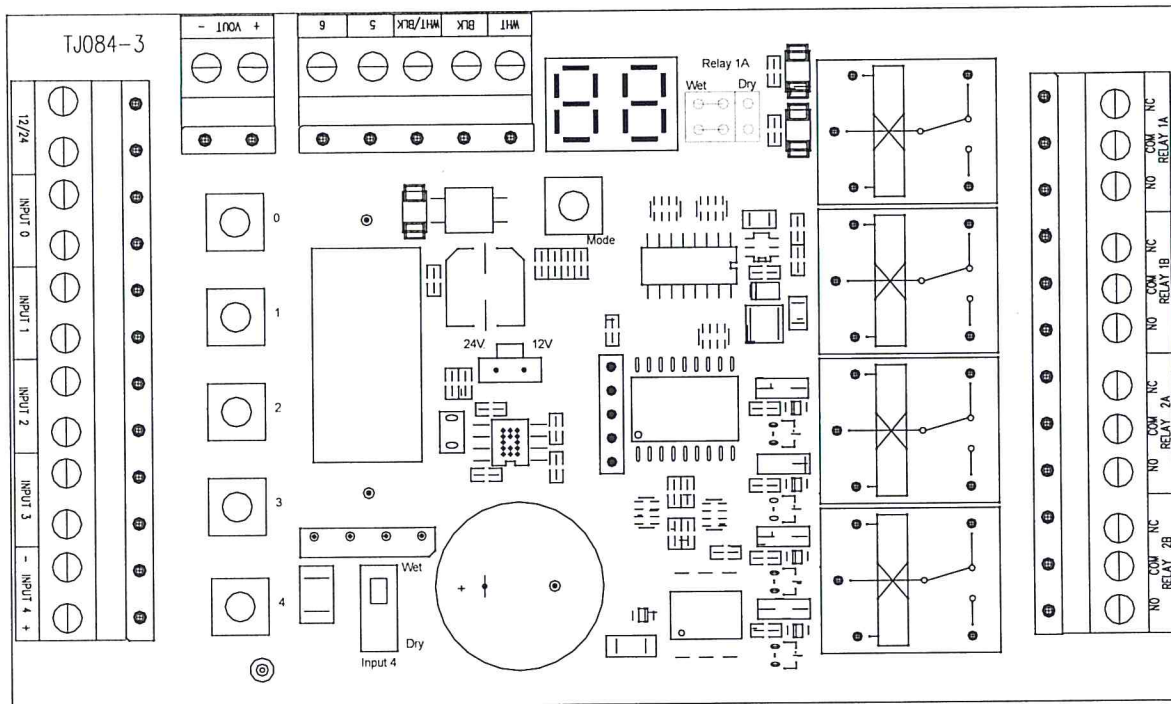


# TJ084 – V3



## **TJ084-3 Specifications**

12-24 AC input power or 12-35 DC input power

12 or 24 DC output power relay 1A – voltage selectable by slide switch on board 1.5Amp max

24 AC input –output relay 1A – 24VDC or 12 VDC based on slide switch

24 DC input –output relay 1A – 24VDC or 12 VDC based on slide switch

12VAC input –output relay 1A – 12VDC

12VDC input – output relay 1A – 12VDC

Output power is regulated to 12 or 24 VDC +/- 5%. Voltage based on slide switch.

Functions available:

82 Function – sequenced vestibule with locking

83 Function – ratchet or latch function

84 Function – electric lock interface w/ card reader option

### **Entering programming mode and changing parameter values**

To enter programming mode, push the mode button for two seconds. A dot will flash on the seven segment display when the button can be released. When in programming mode the display will flash. Button 0 and 1 will scroll through the available functions (82, 83, and 84) Button 2 sets the function and enters the parameter mode for that function. Once the function has been set, button 0 and 1 will scroll thru the available parameters. Button 2 will show the current value of the parameter. When holding button 2 and viewing the current value buttons 3 and 4 will increase or decrease the selected parameter value.

To exit programming mode, hold mode button for two seconds. All values are automatically saved.

To reset the TJ084-3 to factory settings hold mode button for 10 seconds.

## On / Off / Hold open switch

When the 3 position switch is in the center position or off all of the inputs for the TJ084 will be off except for the card reader input. If the card reader input is triggered relay 1A will trigger, however the exterior input will not turn on. Also the two terminal output to the door control will be open when the 3 position switch is off. This will turn off the door control.

When the three position switch is in the hold open position the TJ084 will act like the exterior input is triggered. Relay 1A will trigger as well as relay 2A. Also the two terminal output to the door control must be closed.

When the three position switch is in the auto position the TJ084 will function normally and accept any input. The two position terminal output to the door control will be closed.

## Parameters of the on/off/hold open switch

SW 5'1' This parameter will determine if a 3 position switch will be used with the TJ084. If the parameter is off the board will function without the switch in place, all inputs will function based on what function the board is set to. If the parameter is on the board will need the three position switch in place to operate. Without the switch the board will remain off, all inputs will be ignored.

ON - need a 3 position switch (default value)

OFF - no 3 position switch needed

HO H' This parameter will determine when the Hold Open portion of the three Position switch will operate. The parameter will only operate if SW (5'1') is set to ON ( ON). If the HO (H') parameter is on the hold open function of the switch will always operate. If HO (H') is off hold open would only operate when the card reader input is triggered. In order for the door to hold open both the card reader input and hold open switch must be triggered. Door will only hold open as long as card reader is triggered.

ON - Hold open will always function

OFF - Hold open will only operate if card reader is triggered as well as switch

Default value - ON  ON

## **Function 84 – Electric locking interface with card reader input**

Function 84 provides output voltage or a contact to a locking device as well as delay between the lock being triggered and the door operator opening the door. Output is selectable via jumper strap located on the board. The 84 function also provides a selectable input for a card reader. The card reader input can be set to either unlock and open a door or unlock and turn on an activation device. Card reader input can be a dry contact or a wet (voltage) input. This is selectable by a slide switch located on the board.

Terminal connections for 84 Electric lock interface:

- Input 0 – Interior activation – this activation will always function if on/off/hold switch is on
- Input 1 – Exterior activation – the activation will only work if on/off hold switch is on and either input 4 (card reader) or input 2 (key switch) is triggered.
- Input 2 – key switch – day/night function. When input 2 is closed input 1 will operate
- Input 3 – Card reader input – dry input only for a card reader / access control system. This input will trigger the relay 1A (lock) and either open door or enable exterior activation based on parameter settings.
- Input 4 – Card reader input – selectable wet or dry input from card reader / access control system. This input will trigger relay 1A (lock) and either open the door or enable exterior activation based on parameter settings.
  
- Relay 1A – selectable wet or dry output to electric lock. Voltage selectable based on slide switch on board and input power. See specifications listed above.
- Relay 1B – relay output – triggers at the same time as relay 1A.
- Relay 2A – output – triggers based on time delay parameter D2 and RF
- Relay 2B – output to door control for activation – triggers based on time delay parameter D2 – delays door opening for lock to unlock.

84 function	Code	Parameter	Preset value	display	Adjusts	Display meaning
	S'	SW	on	on	on/off	on/off/hold switch being used
	HQ	HO	on	on	on/off	On - hold open will always function. Off - hold open will only operate after a card read
	d1	D1	1 sec	1	2-30 sec	Relay 1A & 1B time delay and 2A and 2B
	d2	D2	0.5	-5	1-30 sec	Delay between relay 1 and 2
	d3	D3	5 sec	5	2-30 sec	Card reader input delay input 4
	d4	D4	5 sec	5	2-30 sec	Card reader input delay input 3
	CL	CL	NO	n0	NO / NC	Card reader input NO or NC input 4
	F2	F2	ON	0n	on / off	Relay 2A & 2B ON or OFF delay
	CF	CF	ON	0n	OP / ON	Card reader function ON will turn on ext switch and unlock door OP will perform as a standard input
	to	to	NO	n0	NO / NC	toggle output function NO or NC signal out for operator toggle input
	C2	C2	NO	n0	NO / NC	Card reader input NO or NC input 3
	2F	2F	ON	0n	on / off	Card reader function ON will turn on ext switch and unlock door OP will perform as a standard input - input 3 only
	rF	rF	off	oFF	on/off	when set to on relay 1A, 1B and 2A all trigger together. Relay 2B will be separate.
83 function	Code	Parameter	Preset value	display	Adjusts	Display meaning
	S'	SW	on	on	on/off	on/off/hold switch being used
	HQ	HO	on	on	on/off	On - hold open will always function. Off - hold open will only operate after a card read
	d1	D1	1 sec	1	2-30 sec	Relay 1A & 1B time delay
	d2	D2	0.5	-5	1-30 sec	Relay 2A & 2B time delay
	d3	D3	5 sec	5	2-30 sec	Card reader input delay
	d4	D4	5 sec	5	2-30 sec	Card reader input delay input 3
	CL	CL	NO	n0	NO / NC	Card reader input NO or NC
	F2	F2	ON	0n	on / off	Relay 2A & 2B ON or OFF delay
	FC	FC	5 min	-5	1-99 -- infinity	Force closed timer 1-99 minutes
	CF	CF	ON	0n	OP / ON	Card reader function ON will turn on ext switch and unlock door OP will perform as a standard input
	to	to	NO	n0	NO / NC	toggle output function NO or NC signal out for operator toggle input
	C2	C2	NO	n0	NO / NC	Card reader input NO or NC input 3
	2F	2F	ON	0n	on / off	Card reader function ON will turn on ext switch and unlock door OP will perform as a standard input
	rF	rF	off	oFF	on/off	when set to on relay 1A, 1B and 2A all trigger together. Relay 2B will be separate.
82 function	Code	Parameter	Preset Value	display	Adjusts	Display meaning
	S'	SW	on	on	on/off	on/off/hold switch being used
	HQ	HO	on	on	on/off	On - hold open will always function. Off - hold open will only operate after a card read
	d1	D1	1 sec	1	2-30 sec	Delay of relay 1A - (Strike if present)
	F1	F1	ON	0n	on / off	Relay 1A ON or OFF delay
	d2	D2	0.5	-5	1-30 sec	Relay 1B time delay
	d3	D3	1 sec	1	2-30 sec	Relay 2A time delay
	F2	F2	ON	0n	on / off	Relay 2B ON or OFF delay
	d4	D4	0.5	-5	1-30 sec	Relay 2B time delay
	d5	D5	5 sec	5	1-30 sec	Time delay between relay 2AB triggered and relay 1AB being triggered
	d6	D6	5 sec	5	1-30 sec	Time delay between relay 1AB triggered and relay 2AB being triggered
	to	to	NO	n0	NO / NC	toggle output function NO or NC signal out for operator toggle input
	Cr	Cr	Y	YE	ye / no	card reader present If yes input four is active and function based on CF and CP
	CP	CP	in	in	in / ot	card reader location in/out. If set to in card reader input controls input 2. If set to ot card reader input controls input 1
	CF	CF	on	0n	OP / ON	When CP is set to OT input 1 will only sequentially trigger if input 4 has been triggered.
	d7	D7	1 sec	1	2-30 sec	When CP is set to IN input 2 will only work if input 4 has been triggered
	CL	CL	NO	n0	NO / NC	Card reader function ON will turn on ext switch and unlock door OP will perform as a standard input
						card reader delay - only used if card reader set to ON
						Card reader input NO or NC input