

WIRING PERIPHERAL DEVICES

PHOTOCELL SENSOR AND/OR LOOP DETECTOR WIRING (CLOSING OBSTRUCTION)

POWER + ----- 51
 POWER - ----- 50
 RELAY COMMON ----- 70
 RELAY N.C. ----- 72

PROGRAMMING: LOGIC > SAFE 1 = 004

"OPEN ONLY" DEVICE (RADIO RECEIVER, KEYPAD, ETC.)

POWER + ----- 51
 POWER - ----- 50
 RELAY COMMON ----- 60
 RELAY N.O. ----- 62

PROGRAMMING: LOGIC > IC 2 = 002

"START COMMAND" DEVICE (SINGLE PUSH-BUTTON, RADIO RECEIVER, KEYPAD, ETC.)

POWER + ----- 51 (ONLY IF POWER IS REQUIRED)
 POWER - ----- 50
 RELAY COMMON ----- 60
 RELAY N.O. ----- 61

SHADOW LOOP SENSOR WIRING (PREVENTS THE GATE FROM STARTING TO CLOSE)

PROGRAMMING: LOGIC > SAFE 2 = 004
 > AUX 3 = 006

POWER + ----- 51
 POWER - ----- 50
 RELAY COMMON ----- 70
 RELAY N.C. ----- 74

INSTALL JUMPERS

26
27

EXTERNAL LOCK WIRING
 P/N: KRELAY24V IS REQUIRED (NOT INCLUDED)

PROGRAMMING: LOGIC > AUX 3 > 007 = SOLENOID LOCK
 008 = MAGLOCK

WHITE 26
 RED 27

BLUE + POWER SUPPLY *MAGLOCK ONLY
 ORANGE + POWER SUPPLY *SOLENOID LOCK ONLY
 - POWER SUPPLY
 - LOCK POWER
 YELLOW + LOCK POWER

FUSE VALUES:
 F1 = 2.5 A SLOW-BLOW
 F2 = 3.15 A SLOW-BLOW

THALIA CONNECTION TERMINALS

10 - MOTOR 1 +
 11 - MOTOR 1 -
 14 - MOTOR 2 +
 15 - MOTOR 2 -
 20 & 21 - 24V COURTESY LIGHT OUTPUT (25W MAX)
 26 & 27 - AUX 3 - RADIO RECEIVER 2ND CHANNEL
 40 - ENCODER / LIMIT - REFERENCE
 41 - ENCODER / LIMIT COMMON
 42 - ENCODER / LIMIT 1
 43 - ENCODER / LIMIT 2
 44 - LIMIT 3
 45 - LIMIT 4
 ACCESSORY POWER (-) - 50
 ACCESSORY POWER (+) - 51
 COMMON - 60
 START COMMAND - IC1 - 61
 PED (PARTIAL OPENING) - IC2 - 62
 70 - COMMON
 71 - STOP
 72 - SAFE 1 - PHOT (OBSTRUCTION)
 73 - FAULT 1
 74 - SAFE 2 - BAR (SAFETY EDGE)
 75 - FAULT 2

thalia quick reference

version 120921A

SELECTING WHICH MOTOR IS MOTOR 1 AND WHICH IS MOTOR 2
 MOTOR 1 OPENS FIRST AND CLOSES SECOND; MOTOR 2 OPENS SECOND AND CLOSES FIRST

ONLY USE 16 AWG, STRANDED, SJTOW OR SJTOOW CABLE. AVOID SPLICES. IF NECESSARY, A SPLICE MUST BE ABOVE GROUND IN A DRY JUNCTION BOX

PHOBOS & IGEA BT WIRING

MOTOR TERMINAL	WIRE COLOR	THALIA P MOTOR 1	THALIA P MOTOR 2
1	WHITE	42	43
2	RED	10	14
3	BLACK	11	15

*IGEA ONLY - ON LEFT SIDE OPERATORS, BLACK & RED WIRES ARE SWAPPED AT THE MOTOR.

QUICK SETUP MENU
 PRESS THE [OK] BUTTON ONCE TO ENTER. USE [+] AND [-] TO FIND SELECTION. USE [OK] TO SELECT

LANG (LANGUAGE)	TYPE	N.MOT (NUMBER OF MOTORS)	DIR (OPEN DIRECTION)	PRESET	AUTOSET	MEM REMOTES
ITA (ITALIAN)	ELI	2	INT (INTERIOR)	AR (AUTOMATIC RESIDENTIAL)		HIDDEN BUTTON
FRA (FRENCH)	PHOB (PHOBOS)	1	EXT (EXTERIOR)	SR (SEMI-AUTOMATIC RESIDENTIAL)		RELEASE
DEU (GERMAN)	IGEA			AC (AUTOMATIC COMMERCIAL)		DESIRED BUTTON
ENG (ENGLISH)				SC (SEMI-AUTOMATIC COMMERCIAL)		
ESP (SPANISH)				IND (INDUSTRIAL)		

PRESET TABLE

FEATURES	AR (AUTOMATIC RESIDENTIAL)	SR (SEMI-AUTOMATIC RESIDENTIAL)	AC (AUTOMATIC COMMERCIAL)	SC (SEMI-AUTOMATIC COMMERCIAL)	IND (INDUSTRIAL)
AUTOMATIC CLOSING TIMER	X		X		
PRE-ALARM			X	X	
UNINTERRUPTED OPEN CYCLE			X	X	
INSTANT REVERSE ON CLOSING	X		X		
HOLD TO RUN					X
QUICK REMOTE PROGRAMMING	X	X	X	X	

PRE-ALARM: AUX WITH VALUE SET TO 6, ACTIVE FOR 3 SECONDS BEFORE GATE MOVEMENT

UNINTERRUPTED OPEN CYCLE: A START COMMAND WILL NOT STOP THE GATE FROM OPENING.

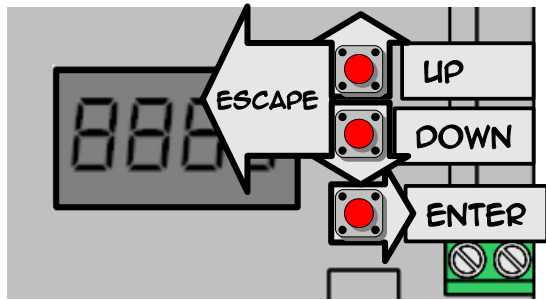
INSTANT REVERSE: A START COMMAND WILL STOP AND REVERSE A CLOSING GATE. OTHERWISE IT JUST STOPS IT AND AN ADDITIONAL START COMMAND WILL REVERSE IT.

PROGRAMMING REMOTES - AFTER YOU SEE "HIDDEN BUTTON" DISPLAYED ON THE SCREEN...

SIMULTANEOUSLY PRESS AND HOLD THE 2 BUTTONS ON YOUR REMOTE UNTIL THE SCREEN READS "RELEASE"

THE SCREEN WILL THEN READ "DESIRED BUTTON". PRESS THE BUTTON YOU WANT TO OPERATE THE GATE WITH

THE SCREEN WILL DISPLAY "OK" AND THE NUMBER OF THE REMOTE IN MEMORY. REPEAT THE PROCESS FOR ADDITIONAL REMOTES



NAVIGATING THE PROGRAMMING MENU

BUTTON	NAVIGATION	VALUE EDIT
[+]	SCROLLS UP	INCREASE VALUE
[-]	SCROLLS DOWN	DECREASE VALUE
[OK]	ENTER	ENTER VALUE
[+] & [-]	ESCAPE	ESCAPE

PRESS THE [OK] BUTTON RAPIDLY TWICE TO ENTER PROGRAMMING

MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE	
PARAM >	OPEN DELAY TIME	MOTOR 2 OPENING DELAY IN SECONDS	1	0-10	
	CLS DELAY TIME	MOTOR 1 CLOSING DELAY IN SECONDS	1	0-10	
	TCA	AUTO-CLOSE TIME ADJUSTMENT IN SECONDS	10	1-180	
	TRF. LHGT.CLR. T	TRAFFIC ZONE CLEAR TIME ADJUSTMENT IN SECONDS	40	1-180	
	OP. DIST. SLOWD	SLOWDOWN STARTING DISTANCE FROM END OF OPEN TRAVEL EXPRESSED IN PERCENTAGE	10	0-50	
	CL. DIST. SLOWD	SLOWDOWN STARTING DISTANCE FROM END OF CLOSE TRAVEL EXPRESSED IN PERCENTAGE	10	0-50	
	DIST. DECEL	SLOWDOWN STARTING DISTANCE FROM END OF OPEN AND CLOSE TRAVEL EXPRESSED IN PERCENTAGE	15	0-50	
	OP. FORCE	PERCENTAGE OF OPENING FORCE EXERTED OVER THE AUTOSET VALUE BEFORE OBSTRUCTION IS SENSED	50	1-99	
	CLS. FORCE	PERCENTAGE OF CLOSING FORCE EXERTED OVER THE AUTOSET VALUE BEFORE OBSTRUCTION IS SENSED	50	1-99	
	OP SPEED	MOTOR OPENING SPEED EXPRESSED IN PERCENTAGE	99	15-99	
	CL SPEED	MOTOR CLOSING SPEED EXPRESSED IN PERCENTAGE	99	15-99	
	SLOW SPEED	SLOWDOWN SPEED EXPRESSED IN PERCENTAGE FROM MAXIMUM SPEED.	25	15-99	
	LOGIC >	MOTOR TYPE	1=ELI 250; 2=PHOBOS BT, 3=I&EA BT	0	0-3
		TCA	TIMER TO CLOSE AUTOMATICALLY. 0=OFF / 1=ON	0	0-1
		FAST CLS.	CLOSES WHEN SENSORS ARE CLEARED. 0=OFF / 1=ON	0	0-1
STEP-BY-STEP MOVEMENT *		DETERMINES HOW THE SYSTEM REACTS WHEN A START COMMAND IS RECEIVED DURING OPERATION	0	0-2	
PRE-ALARM		GATE RUNNING OUTPUT (AUX VALUE=6) CLOSING 3 SEC. BEFORE GATE MOVEMENT. 0=OFF / 1=ON	0	0-1	
HOLD-TO-RUN		REQUIRES CONTINUOUS OPEN OR CLOSE COMMAND INPUT FOR GATE TO OPERATE. 0=OFF / 1=ON	0	0-2	
IBL OPEN		IGNORES START INPUT DURING THE OPENING CYCLE. 0=OFF / 1=ON	0	0-1	
IBL TCA		IGNORES THE START INPUT WHILE COUNTING DOWN FOR AUTOMATIC CLOSING. 0=OFF / 1=ON	0	0-1	
IBL CLOSE		IGNORES THE START INPUT DURING THE CLOSING CYCLE. 0=OFF / 1=ON	0	0-1	
RAM BLOW C. OP		PUSHES GATE AGAINST PHYSICAL STOP BEFORE OPENING	0	0-1	
RAM BLOW C. CL		PUSHES GATE AGAINST PHYSICAL STOP BEFORE CLOSING	0	0-1	
BLOC PERSIST		HOURLY PUSH AGAINST PHYSICAL STOP	0	0-1	
PRESS SWC		PUSHES GATE AGAINST PHYSICAL STOP FOR 5 SECONDS AFTER CLOSE LIMIT HAS BEEN REACHED.	0	0-1	
ICE		CONTINUOUS FORCE LEARNING ON EVERY OPERATION.	0	0-1	
1 MOT. ON		SINGLE MOTOR OPERATION. 0= (2)MOTORS; 1=(1)MOTOR.	0	0-1	
OPEN IN OTHER DIRECT.		0 = PULL TO OPEN; 1 = PUSH TO OPEN	0	0-1	
SAFE 1 *		CONFIGURATION OF SAFETY INPUT TERMINAL 72. DEFAULTED AS PHOT (OBSTRUCTION)	0	0-8	
SAFE 2 *		CONFIGURATION OF SAFETY INPUT TERMINAL 74. DEFAULTED AS BAR (SAFETY EDGE)	6	0-8	
IC 1 *		CONFIGURATION OF COMMAND INPUT TERMINAL 61. DEFAULTED AS START E	0	0-6	
IC 2 *		CONFIGURATION OF COMMAND INPUT TERMINAL 62. DEFAULTED AS PED (PARTIAL OPEN)	4	0-6	
AUX 3 *		CONFIGURATION OF AUXILIARY OUTPUT TERMINALS 26 & 27. DEFAULTED AS 2 ND CHANNEL CONTACTS.	0	0-8	
FIXED CODE		ROLLING CODE DEFEAT. 0 = ROLLING CODE; 1 = FIXED CODE	0	0-1	
RADIO PROG		QUICK REMOTE PROGRAMMING. 0 = DISABLED; 1 = ENABLED	1	0-1	
SERIAL MODE		0 = SLAVE UNIT; 1 = MASTER UNIT	0	0-1	
ADDRESS		UNIT'S NETWORK IDENTIFICATION NUMBER.	0	0-127	
EXPI 1 *		CONFIGURATION OF EXPANSION BOARD INPUT 1. DEFAULTED AS START COMMAND.	1	0-14	
EXPI 2 *		CONFIGURATION OF EXPANSION BOARD INPUT 2. DEFAULTED AS START COMMAND.	0	0-10	
EXPO 1 *		CONFIGURATION OF EXPANSION BOARD OUTPUT 1. DEFAULTED AS TRAFFIC LIGHT CONTROL..	9	0-9	
EXPO 2 *		CONFIGURATION OF EXPANSION BOARD OUTPUT 2. DEFAULTED AS TRAFFIC LIGHT CONTROL..	9	0-9	
TRAFFIC LIGHT PREFLASHING		RED LIGHT FLASHES FOR 3 SEC. AT EVERY START. 0 = OFF; 1 = ON	0	0-1	
TRAFFIC LIGHT RED LAMP ALWAYS ON		RED LIGHT REMAINS ON WHEN GATE IS CLOSED. 0 = OFF; 1 = ON	0	0-1	
RADIO >		ADD START	LEARNS TRANSMITTER BUTTON AS START COMMAND		
		ADD 2CH	LEARNS TRANSMITTER BUTTON AS 2 ND CHANNEL		
		ERASE 64	ERASE COMPLETE MEMORY		
		COD RX	SHOW RECEIVER ID CODE		
	WK	W LINK.			
DEFAULT	RESTORES BOARD TO FACTORY SETTINGS. NO EFFECT ON RADIO				
LANGUAGE >	ITA	ITALIAN			
	FRA	FRENCH			
	DEU	GERMAN			
	ENG	ENGLISH			
	ESP	SPANISH			
AUTOSET	OPERATES MOTOR(S) SEVERAL TIMES AND AUTOMATICALLY ADJUST ITS FORCE SETTINGS				
L. SW ADJ	LIMIT OF TRAVEL ADJUSTMENT. ONLY AVAILABLE WITH TYPE 4 AND 5 MOTORS				
STAT >	VERS	DISPLAYS BOARD FIRMWARE VERSION.			
	N. CYCLES	DISPLAYS NUMBER OF HUNDREDS OF CYCLES (001=100; 010=1000; 100=10,000)			
	N. REMOTES	DISPLAYS THE NUMBER OF REMOTES IN MEMORY.			
	ERR	DISPLAYS THE LAST 30 BOARD ERRORS IN DESCENDING ORDER.			
PASSWORD	PASSWORD SETTING FOR WIRELESS PROGRAMMER				

ADVANCED PROGRAMMING OF INPUTS AND OUTPUTS

STEP-BY-STEP LOGICS

VALUE	0	1	2
LOGIC	4-STEP	3-STEP	2-STEP
OPENING	STOPS + TCA	STOPS + TCA	REVERSES
CLOSING	STOPS	REVERSES	REVERSES

SAFE LOGICS

VALUE	FUNCTION	DESCRIPTION
0	PHOT	OBSTRUCTION SENSOR INPUT, NON-CONTACT
1	PHOT TEST	OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED (FAULT ACTIVE)
2	PHOT OP	OPENING OBSTRUCTION SENSOR INPUT, NON-CONTACT
3	PHOT OP TEST	OPENING OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED (FAULT ACTIVE)
4	PHOT CL	CLOSING OBSTRUCTION SENSOR INPUT, NON-CONTACT
5	PHOT CL TEST	CLOSING OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED (FAULT ACTIVE)
6	BAR	SAFETY EDGE (CONTACT OBSTRUCTION) INPUT
7	BAR TEST	SAFETY EDGE (CONTACT OBSTRUCTION) INPUT, SUPERVISED (FAULT ACTIVE)
8	BAR 8K2	SAFETY EDGE (CONTACT OBSTRUCTION) EOL RESISTOR SUPERVISED INPUT

IC & EXPI LOGICS

VALUE	FUNCTION	IC 1 & 2	EXPI 1	EXPI 2
0	START - EXTERNAL	●	●	●
1	START - INTERNAL	●	●	●
2	OPEN	●	●	●
3	CLOSE	●	●	●
4	PED (PARTIAL OPEN)	●	●	●
5	TIMER (HOLD OPEN)	●	●	●
6	TIMER PED (HOLD PARTIAL OPEN)	●	●	●
7	OBSTRUCTION (PHOT)		●	●
8	OPENING OBSTRUCTION (PHOP)		●	●
9	CLOSING OBSTRUCTION (PHCL)		●	●
10	SAFETY EDGE (BAR)		●	●
11	OBSTRUCTION, SUPERVISED		●	
12	OPENING OBSTRUCTION, SUPERVISED		●	
13	CLOSING OBSTRUCTION, SUPERVISED		●	
14	SAFETY EDGE, SUPERVISED		●	

*NOTE - WHEN THE EXPANSION BOARD INPUT 1 (EXPI 1) IS SET TO VALUES 11 ~ 14, THE EXPANSION BOARD INPUT 2 (EXPI 2) AUTOMATICALLY BECOMES THE SUPERVISION CIRCUIT (FAULT).

AUX & EXPO LOGICS

VALUE	FUNCTION
0	2ND CHANNEL RECEIVER OUTPUT
1	GATE OPEN LIGHT. OUTPUT ACTIVE WHEN GATE IS NOT CLOSED. FLASHES WHILE CLOSING
2	COURTESY LIGHT. OUTPUT ACTIVE DURING AND FOR 90 SECONDS AFTER OPERATION.
3	GATE NOT CLOSED. OUTPUT ACTIVE UNTIL CLOSE LIMIT IS REACHED
4	START OF CYCLE. OUTPUT ACTIVE FOR 1 SECOND AT THE BEGINNING OF EACH CYCLE
5	GATE OPEN ALARM. OUTPUT ACTIVE IF GATE IS HELD OPEN FOR MORE THAN DOUBLE THE TIMER TO CLOSE TIME
6	GATE RUNNING. OUTPUT ACTIVE WHILE MOTORS ARE POWERED
7	SOLENOID LOCK. OUTPUT ACTIVE FOR 2 SECOND AT THE BEGINNING OF OPEN CYCLE
8	MAGNETIC LOCK. OUTPUT ACTIVE WHEN GATE IS CLOSED
9	TRAFFIC LIGHT CONTROL (EXPANSION BOARD OUTPUT WITH TLB BOARD ONLY)

COMMON ERROR CODES

ERROR	DESCRIPTION	ERROR	DESCRIPTION
ER20	MOTOR 2 IMPROPER ENCODER MOVEMENT DETECTED	ER35	MOTOR 1 OBSTACLE DETECTION DURING OPENING
ER22	MOTOR 2 OPPOSITE MOVEMENT	ER36	MOTOR 1 OBSTACLE DETECTION DURING CLOSING
ER25	MOTOR 1 IMPROPER ENCODER MOVEMENT DETECTED	ER37	MOTOR 1 OBSTACLE DETECTION DURING OPENING SLOWDOWN
ER27	MOTOR 1 OPPOSITE MOVEMENT	ER38	MOTOR 1 OBSTACLE DETECTION DURING CLOSING SLOWDOWN
ER30	MOTOR 2 OBSTACLE DETECTION DURING OPENING	ER40	THERMAL OVERLOAD
ER31	MOTOR 2 OBSTACLE DETECTION DURING CLOSING	ER61	OPERATING ON BATTERY POWER
ER32	MOTOR 2 OBSTACLE DETECTION DURING OPENING SLOWDOWN	ERSW	ERROR SETTING LIMITS
ER33	MOTOR 2 OBSTACLE DETECTION DURING CLOSING SLOWDOWN	ERF9	LOCK OUTPUT OVERLOAD