Déclic.
TÉLÉCOMMANDE

DOCUMENTATION TECHNIQUE

Carte électronique DUCATI CTH48

Retrouvez les instructions, schémas et réglages de votre équipement dans les pages suivantes.

Avant toute manipulation

Vérifiez la référence exacte de votre appareil. Les instructions techniques et les avertissements du fabricant restent prioritaires. En cas de doute ou pour une intervention électrique, faites appel à un professionnel qualifié.

Une question sur votre référence ?

declictelecommande.com/contact

Document distribué par Déclic Télécommande.
Les marques et références des fabricants sont conservées dans la notice.

DUCATI HOME automation

SOFT STOP

SOLAR

AUTO LOCK

BAT

REVERSO

ECO

PEDESTRIAN



KONTROL 9048

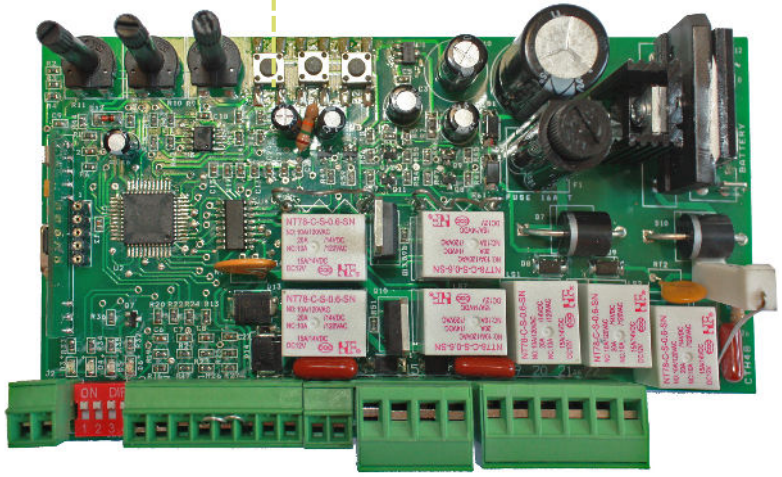
Complete Large size control box with CTH48

DUCOSOL SYSTEM

Versatile, operates by 3 type of power supply without any additional modules required:
1) A.C. 110/230V 60/50Hz
2) by emergency battery
3) By solar panel



Low consumption technology
0,007A
stand-by consumption



TECHNNICAL DATA	CTH48	CTH48/24
Power supply (on demand)	230V (110V) / 12V battery/ 12V solar panel	230V (110V) / 24V battery/ 24V solar panel
Solar module power supply	√ 12V	√ 24V
Use on 1 or 2 wings gate	√	
Protection fuse	√	
Transformer protection fuse	√ **0,8AT (1,2AT)**	
Toroidal transformer's Watt	105V	
Output services	12V	24V
Power consumption in stand-by	0,007A	
Radio receiver (channel)	2 channels	
Remote control storage capacity	20	
Radio transmission protocol	DUCATI rolling code 433MHz	
Radio receiver self learning	√	
On board Antenna	√	
External antenna input	√	
Automatic close function (timerized)	√ (1-100 sec)	
Anti-pressure safety system	√	
Motor power adjustment	√	
Reverse movement on obstacle detection	√	
Electric limit switch input	-	
Courtesy light contact	√	
Output for elecktrolock (reqires an electrolock with booster)	12V dc output	24V dc output
Elektrolock use while power by solar module/ battery	√ with additional booster only	
Safety beam/ Photocells input (NC contact)	√12V	√ 24V
Full cycle START output (NO contact)	√	
Pedestrian cycle START output (NO contact)	√	
Emergency STOP button (NC contact)	√	
Flashing light output	12V max 10W lamp	24V max 10W
Output to battery with on board charger	√	
Indication of battery charge status by blinking light	√	
solar panel input	√ 12V	√ 24V
LED indication of Power supply	√	
Slowdown (soft stop)	√	
Gear anti-pressure system	√	
wings time lag adjustment	√	
Status indicator output (open, closed, moving)	√	

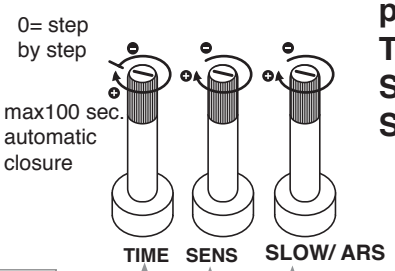
Compatible accessories





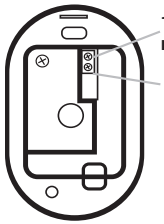
ATTENTION:
USE OF PHOTOCELLS ON CTH48
It is highly recommended to use original DUCATI photocells only.
Use only low consumption photocells model **7120** in case of solar panel power supply.
It is recommended to use photocells model DUCATI 7012 in case of standard supply by 230/110 V
For different needs first contact our technical department before connecting any non original photocells model.

WARNING: start installation with potentiometers positioned as follows:
TIME: rotated anticlockwise
SENS: rotated clockwise
SLOW: rotated anticlockwise



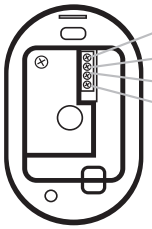
Attention: If photocells are connected take out the photocells bridge between connectors 6 & 7

TX (photocell transmitter
Same for both 7120 & 7012



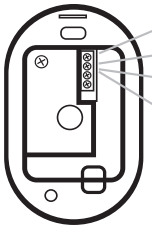
1 (+) connect to n° 9 on CTH48
2 (-) connect to n° 10 on CTH48

RX (photocell model 7012 receiver)

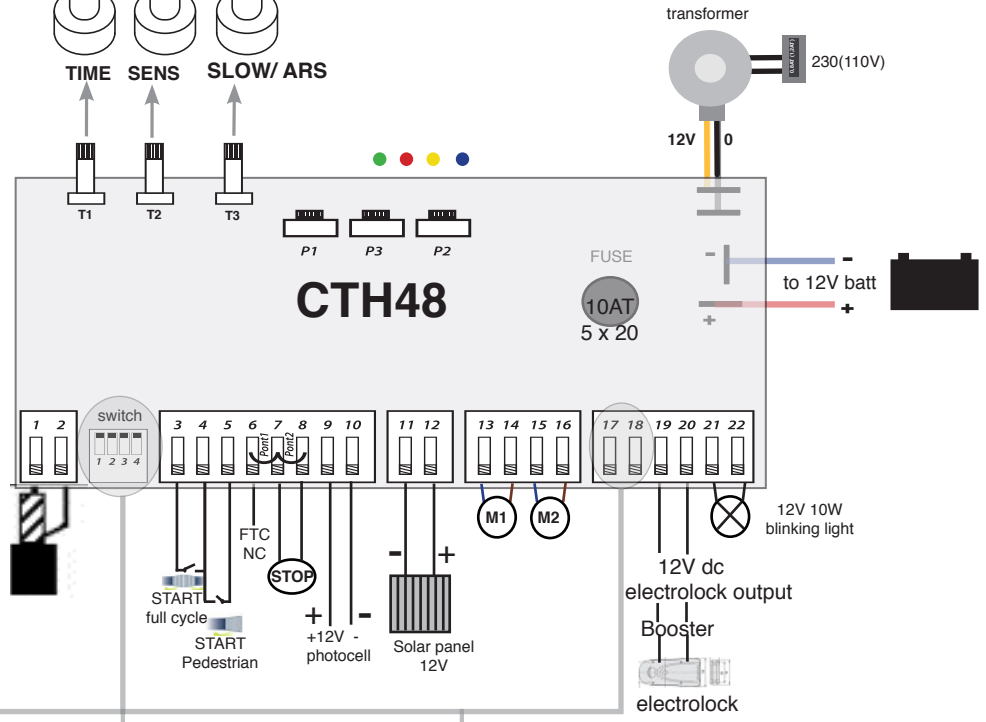


1 (+) connect to n° 9 on CTH48
2 (-) connect to n° 10 on CTH48
3 (COM) common connect to n° 7 on CTH48
4 FTC (photocell contact NC) connect to n° 6 on CTH48

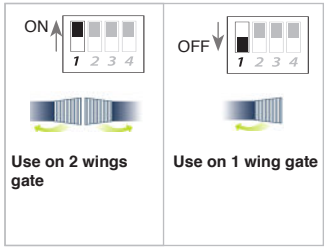
RX (photocell model 7120 receiver)

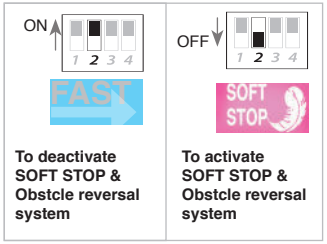


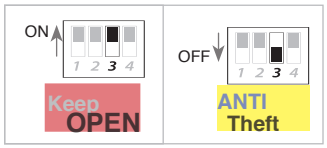
1 (+) connect to n° 9 on CTH48 on 9
2 (-) connect to n° 10 on CTH48
3 FTC (photocell contact NC) connect to n° 6 on CTH48
4 not to be used

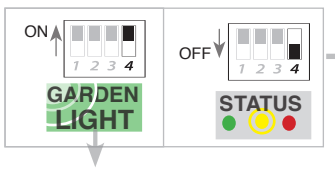


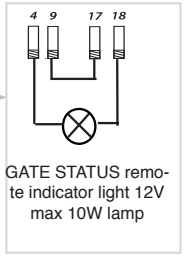
DEEP SWITCHES
see next page for detailed instructions

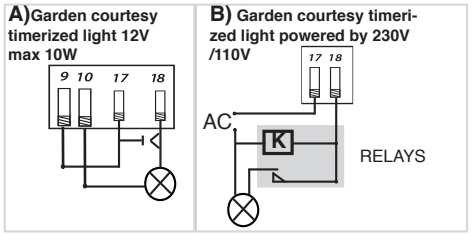


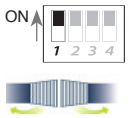








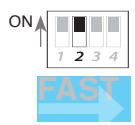




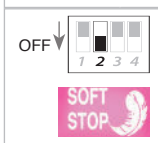
SWITCH 1 on **ON** = use on single wing gate and connect the motor as M1



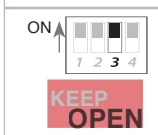
SWITCH 1 on OFF = use on double wing gate



SWITCH 2 on ON
Deactivate SOFT STOP & Obstacle reversal system.The opener will work at high speed only and will stop if an obstacle is detected

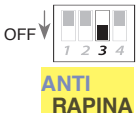


SWITCH 2 on OFF
Activate SOFT STOP. The opener will start at high speed and then slow down the motion. During the high speed phase it will reverse the movement in case of obstacle detection. During the slow speed phase it will stop in case of obstacle detection. The starting point of the slow speed phase can be adjusted by potentiometer T3; turn T3 clockwise to delay (postpone) the slow speed phase.

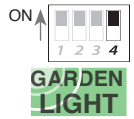


SWITCH 3 on ON only if coombined with automatic closure (potentiometer T1 must have been turned clockwise to activate the automatic closure function) will enable:

- any impulse/ command (by remote control or wired keyswitch) during the automatic closing operation, will re-open of the gate
- any impulse/ command (by remote control or wired keyswitch) during the timerized pause time(while gate is open), will increase the dwell time for a time equivalent to that programmed.
- maintaining closed the"START" NO contact (for example by connecting a braker), the gate will stay open any command



SWITCH 3 on OFF, only if coombined with automatic closure (potentiometer T1 must have been turned clockwise to activate the automatic closure function) will enable activates the SEMI-AUTOMATIC MODE (or also called ANTI-THIEF MODE)
The Opener will accepts impulses (by remote control or wired keyswitch) during both opening and dwell pause phase, and produces the sequence: STOP-REVERSE OPERATION
(also called SEMI-AUTOMATIC MODE)

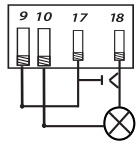


SWITCH 4 on ON : active courtesy light / garden light lighting time 20sec.

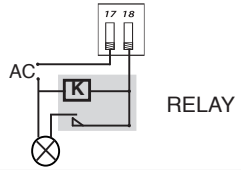
A1) NO dry contact becomes NC to activate a small 12V bulb max.10W

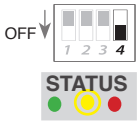
B1)a relay for any lighting system of higher power. 12V 10W max output terminals 17 -18

A1) courtesy light 12V max 10W



B1) Garden Light powered by 220/110V /110V

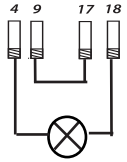




SWITCH 4 on OFF ***activate the remote indication of the gate status .
A2) by wiring a LED lamp for example, you can remotely monitor the gate status: open = light on, slow flashing = opening, quick flashing = closing; off = gate closed.
Output 12V max 10W lamp to be connected to terminals 17 -18

B2) to get the remote gate status signal and an aditional command to keep the gate open by 3 wires only follow this instructions:
(warning: this is possible only with automatic closure mode = potentiometer T1 turned clockwise and switch n° 3 on ON position)
1-connect terminal 9 to terminal 17
2- connect 3 wires to terminals 3-4-18
3- By closing contact between terminal 3 & 4 you will open the gate (connect a switch) chiudendo il circuito tra 3 e 4 si produrrà l'apertura del cancello (collegare un apposito pulsante)
4- Buy holding the contact betweenterminals 3 & 4 closed the gate will keep open (connect a braker)
5- *** connecting terminals 4 & 18 to a 12V max 10W lamp you will get the remote indication of the gate status .

A2) remote gate status signal



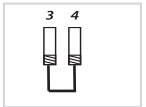
remote gate status signal
12V max 10W lamp

B2) ONLY 3 wires to get remote gate status signal **and a wired command to keep the gate open**

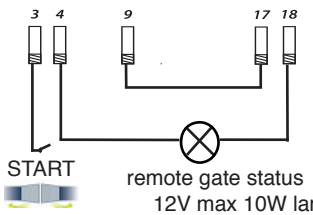


switch





Keep the gate open

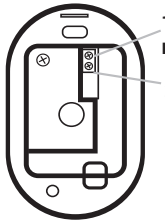


remote gate status signal
12V max 10W lamp

ATTENTION: PHOTOCELLS ON CTH48
It is strictly recommended to use original DUCATI photocells only.
Use only low consumption photocells model **7120** in case of solar panel power supply. no other model is compatible.
It is recommended to use photocells model DUCATI 7012 in case of standard supply by 230/110 V
For different needs first contact our technical department before connecting any non original photocells model.

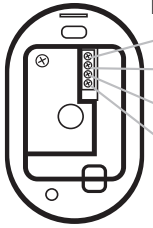


TX (photocell transmitter (same for both 7120 & 7012)



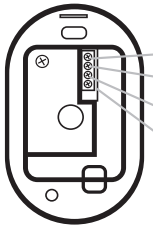
1 (+) connect to n° 9
2 (-) connect to n° 10

RX (photocell model 7012)



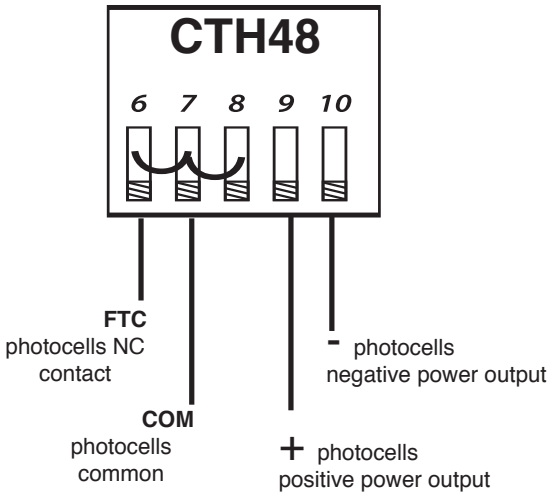
1 (+) connect to n° 9
2 (-) connect to n° 10
3 (COM) common connect to n° 7
4 FTC (photocell contact NC) connect to n° 6

RX (photocell model 7120)

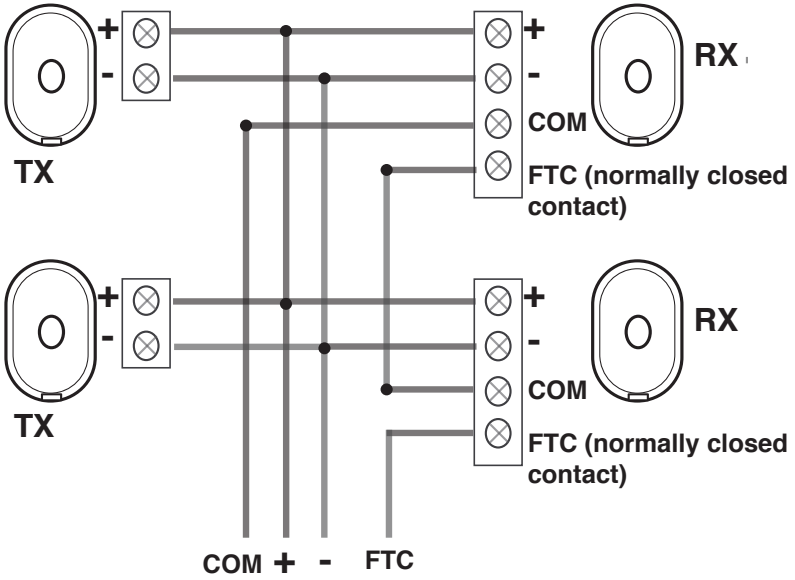


1 (+) connect to n° 9
2 (-) connect to n° 10
3 FTC (photocell contact NC) connect to n° 6
4 DO NOT USE !

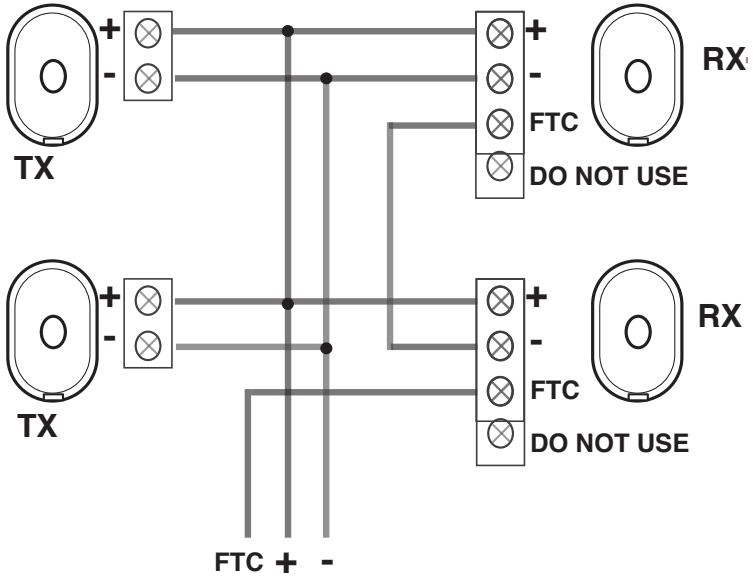
Attention: If photocells are connected take out the photocells bridge between connectors 6 & 7



PHOTOCELLS **MODEL 7012 (AC/DC 12V/24V)**:
how to connect double pair of photocells:



LOW CONSUMPTION PHOTOCELLS **MODEL 7120**: (DC 12V/24V)
how to connect double pair of photocells:



CTH48 featuring DUCOSOL system

Connections and adjustments:
ATTENTION ! all settings have to be made with gate in closed position

ATTENTION ! in case of use use with power from photovoltaic panel use low consumption photocells mod. 7120 only!

CONNECTORS:

1/2 antenna / sock
3/4 START NO complete cycle
4/5 START NO pedestrian opening
6 Photocell NC contact (FTC) to be connected to terminal 3 of the photocell 7120 and / or 7012
7 Photocell common contact (COM) to be connected to terminal 4 of the photocell 7012. In case of use by 230V power and use of the photocell model 7120 is not used
7/8 NC Contact for safety/emergency STOP (WARNING: if the contact is not hold closed (by the bridge or by a NC switch button the gate will not operate as condidering it an EMERGENCY STOP)
9 + power photocell positive
10 - power photocell negative
11 - negative solar panel
12 + positive solar panel
13/14 blue/brown cable motore M1
15/16 blue/brown cable motore M2
17/18 2 possible function can be settled:
A) with switch No. 4 in the “ON” position, connectors n°17/18 become output for garden/courtesy light
B) with switch No. 4 in the “OFF” position connectors n°17/18 become output for gate status light indicator.
Connect one bulb 12V 10W max.
light on indicates the gate is open
light off indicates the gate is closed
Slowly flashing light indicates the gate is opening
Quick flashing light indicates the gate is closing
19/20 12V dc electrolock output (to be always used with a booster)
21/22 12V 10W max. blinking light

Photocells bridge: between connectors 6/7
Remove the bridge only when connecting the photocells.

Safety stop bridge: between terminals 7/8.
Remove the bridge only when connected to a NC switch for emergency STOP

DEEP SWITCHES

1: ON positioned= use on double wing gate
OFF positioned= use on single wing gate
2: ON positioned= fast speed only
OFF positioned= soft stop
3: ON positioned= by closing the “START” contact, it will keep the gate opened
4: ON positioned= connectors 17/18 becomes output for garden/courtesy light
OFF positioned= connectors 17/18 becomes output for gate status light indicator

USE ON SINGLE WING GATE

Connect the motor as M1

LED LIGHTS

Red LED:
- indicate the procedure to memorize/delete remote ontrols codes
- while gate is open: it blinks if the automatic closure has been activated
- while gate is open: it stays steady if the “step by step” mode is activated
- flashes if voltage is lower than 10.5V when powered by battery

Green LED
- if steady on = 230/110V powered
- if flashes slowly = battery powered

Yellow LED
- flashes if voltage is lower than 11,5V

Blue LED
Switches on during slow motion phase
indicates leaf phase shift procedure in closing:
- get’s on by pushing P3,
- The blue LED switches on by pressing P3 indicates decrease/increases of the phase shift (0.5sec. every pulse).

POTENTIOMETERS

WORKING MODE: STEP BY STEP or AUTOMATIC

Trimmer 1 (TIME)= potentiometer to set the “step by step” mode of use or automatic closure
The potentiometer completely turned counterclockwise(position = 0) to use the standard setting “step by step” mode of use. with this setting a pulse controls the opening and a second impulse closes the gate. By rotating the potentiometer clockwise, you wil set the automatic closure function.Turning the knob increases the time. Maximum pause time = 100 seconds with potentiometer fully clockwise.

MOTOR SENSITIVITY ON OBSTACLE DETECTION ADJUSTMENT

Trimmer 2 (SENS) = Adjust the level of sensitivity in the event of impact on an obstacle during the slow speed phase (SOFT STOP).
trimmer completely rotated counterclockwise = high level of sensitivity in case of impact on obstacle.
Turning the trimmer clockwise decreases sensitivity.
It is recommended to reduce the sensitivity in the presence of wind.

SOFT STOP / ASR auto reversal system ADJUSTMENT

Trimmer 3 (SLOW) = Set the start time of the deceleration phase (SOFT STOP) and the point where auto reversal system turns to stop function.
Turn the trimmer clockwise to increase the duration of the race at the standard speed (thus to delay the start of the slow speed) Warning: during the first phase the gate will reverse mouvement if detects an obstacle, while in the second phase will stop. In case the gate inverse when reaching the limit stops, you have to rotate potentiometer anticlockwise.

PUSH BUTTONS P1; P2; P3

P1 = **FULL CYCLE** push button to store or cancel the radio transmitters codes on the electronic board. This button is used to set complete opening cycles. Red LED visual indicator.
P2 = **PEDESTRIAN ACCESS** push button to store or cancel the radio transmitters codes on the electronic board. This button is used to set pedestrian opening cycles (partially activates only the door corresponding to the motor M1 only). Visual indicator: red LED visual indicator.+ yellow LED, then only red LED.
P3 =LEAF PHASE DISPLACEMENT push button to adjust the time lag delay displacement between M1 and M2.

HOW TO MEMORIZE/ DELETE REMOTE CONTROL CODE IN THE ELECTRONIC BOARD (see also remote control chapter)

Remote controls setting: to syncronize a remote control channel:
On the main board Press P1 to memorize a remote control Channel for compleete opening cycle (or press P2 for pedestrian opening cycle).

As the red LED turns on, push the selected radio remote control button. After the red LED blinks, wait until the red LED turns off. Operation completed.
Maximal storage capacity: 20 channels
To delete the stored channels press P1 for about 30 sec. until the red LED turns off. All remote control codes will be delated.

LEAF PHASE DISPLACEMENT

The displacement between wings is automatically settled. In opening cycle, M2 follows M1 after about 3 sec. and vice versa during closing. In case the opening angle of the 2 wings is different (for. example if one wing opens 90° and the second wing opens 110°) it can be required a leaf phase adjustmentto to avoid the Leafs overlap during closure.
How to adjust the displacement time between the 2 wings:
P3 =push button to adjust the time lag delay displacement between M1 and M2.
M1 = motor on wing gate that opens first
M2 = motor on wing gate that opens as second one.
To change the time lag:
- Press P3,
- the blue LED switches on
- Within 5 seconds, press P1 to reduce the time lag or P2 to increase the time lag

Pressing on P1 the green LED switches on. Pressing P2 LED the yellow LED switches on. Each pulse corresponds to a variation of 0.5 seconds. If the red LED lights, it means that it has exceeded the limit.
Wait 5 seconds without pressing any key to confirm the choice.
Warning: the phase shift programmed is valid for the closing operation only, while the phase shift in the opening is determined by the software and is not editable.

SOLAR PANEL BACK-UP BATTERY POWER SUPPLY

CTH48 do not requires any additional module to manage a back-up battery or solar panel power supply.
For autonomous use in case of power failure - black-out connect directly to the board the back-up battery 12V 7A is recommaded and guarantees about days of autonomous use. battery Connecting cables are ready on board. respect the polarity. red cable = positive; blue or black cable = negative)
F**or 100% autonomous use by solar panel power supply** connect a 12V 7A battery and a solar panel 10W 12V (if extra autonomy is required connect a 12V 12A battery with a 12V 20W solar panel)
Respect the polarity. terminal 11= negative; terminal 12 = positive. The solar panel must be positioned facing South (also see solar module chapter)
The herunder table shows the autonomous use guaranteed in worst winter weather by use of a 12V 10W standard solar module & 12V 7A battery. the autonomy capacity higly increase by use of a 12V 12A battery combined with a 20W 12V solar module (this version is recomanded in case of condominium use or in case of double par of photocells 7120 are installed)

control board consumption table	MOTOR	stand-by con-sumption/ (A/h)	daily stand-by con-sumption (A)	Full cycle (open + close) con-sumption (A)	hypothesis: daily full cycles	total daily con-sumption (A)	10W solar panel average-recharge capa-city (A/h)	hypotheses: daylight hours daily in the worst con-ditions	total daily re-charge capacity (A)	energy surplus accumulated and not used during the day (A)
electonic board CTH44 or CTH48	1 wing gate	0,007	0,16	0,012	60	0,88	0,3	5	1,5	+ 0,62
	2 wings gate			0,024	50	1,24				+ 0,26