10. PREDISPOSITIONS

Prepare the insulated cable ducts for motors and accessories wires (not supplied). Prepare the power plant to the location where you intend to attach the control unit (not necessary in the case of self-powered SOLAR PANEL powered openers) Warning: the power of the high-voltage current must be managed exclusively by a specialized technician. Do not manage yourself the power supply connection 230 / 110V: Danger of Death!

Caution: it is recommended to prepare a disconnection device to be used in case of emergency. Warning: the control unit and activation commands must be installed in a not acessible place and at a height from the ground, not allowing the use by unauthorized persons or children.

11.CONTROL BOX INSTALLATION

Fix the bottom of the control unit to the wall or pillar using apropriates screws and plugs (not supplied).
It is advisable to seal any holes to prevent water infiltration, moisture, dust and insects.
It is recommended to provide appropriate compression sleeves (not supplied)
Small control box KONTROL" Small" see pic.39
Large control box KONTROL"Largel" see pic.40
The control Kontrol "Large" is equipped with a inner protective cover underneath witch are inseted the electronic board and the toroidal transformer.

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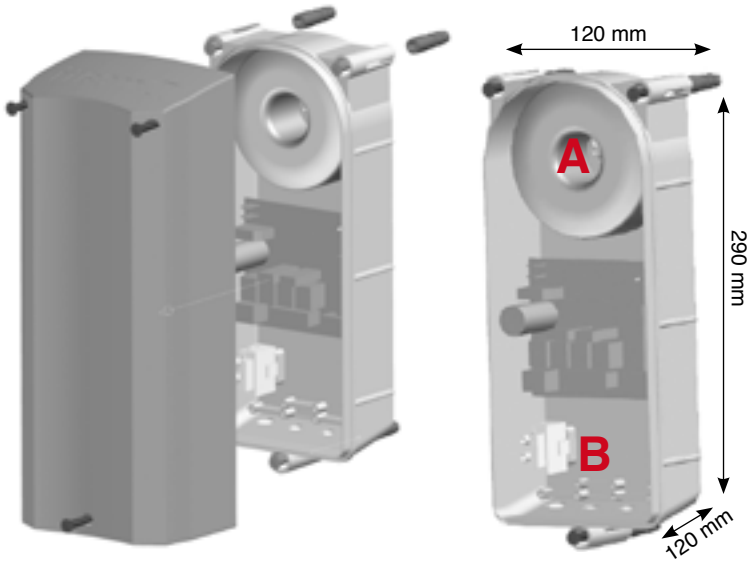
DUCATI Kontrol "small"

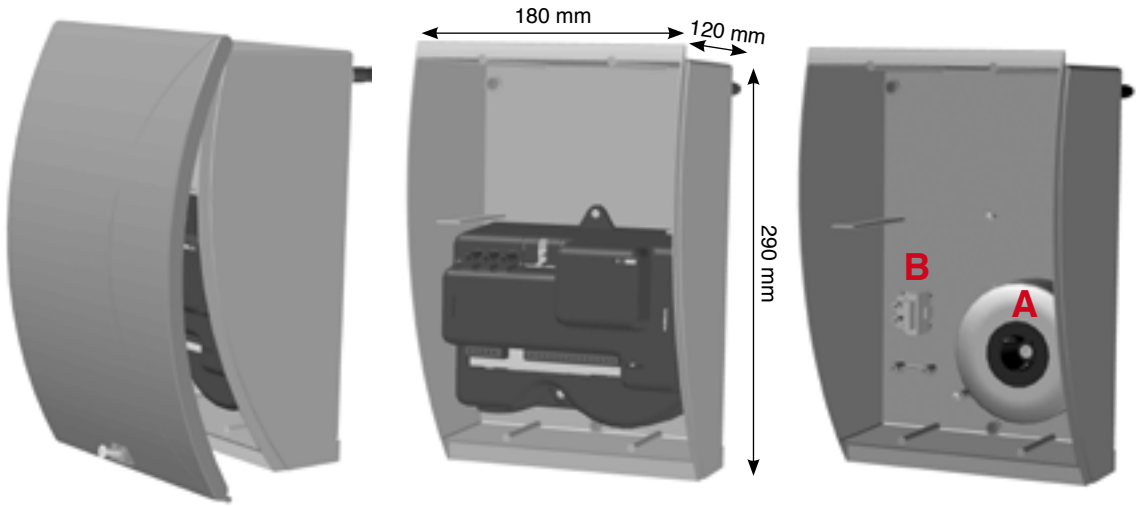
Control Box



40

DUCATI Kontrol "large"

Control Box



Main AC power supply wiring

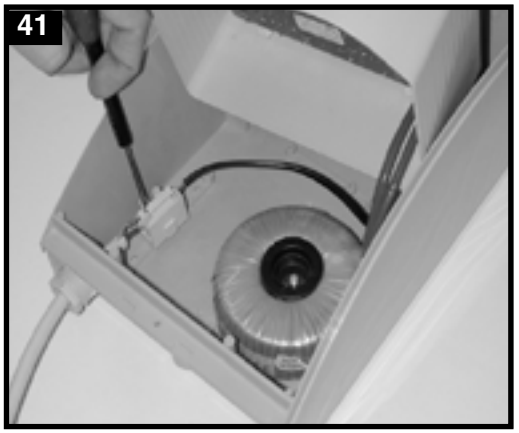
12. MAIN POWER SUPPLY 230V / 110 V

The main power supply high voltage 230V (110V on request) connection must be performed only by a licensed electrician! Warning: danger of death.
The power cable is connected to the terminal block / fuse protection upstream of the toroidal transformer (pic.41)
The transformer is already connected to the PCB. Check for proper connection.
Connect cables from the transformer to the circuit board.

The toroidal transformer has 3 output cables,
Black =0 + Yellow= 12V to be used for 12V electronic boards and motors
Black =0 + Red= 24V to be used for 24V electronic boards and motors

Solar panel powered openers do not require any high voltage connection .Nevertheless, they are always provided with a toroidal transformer and in case of emergency or to recharge the battery the main voltage 230V (110V on demand)can be connected to the terminal block / fuse protection upstream of the toroidal transformer (pic.41)

41



WARNING! To prevent damage during shipment, the transformer could be provided not pre-installed in the control panel. it is supplied with a fixing cone and screw to fix it to the bottom of the the control box.

See pic. 39/ 40: Place the transformer in it's correct position (A) and fix it to the bottom of the control box unit using using the special cone support and crew it.

Fix the power supply 230V / 110V connectors terminals with protection fuse in the position (B) of the bottom of the control bozx unit (see pic. 39-40).

Connect cables from the transformer to the circuit board. Remember:
The transformer has 3 ouput cables, but for 12V motors only balck and yellow cable must be connected. while red cable (24V must be used in stead of yellow cable only for 24V motor versions)
Black =0 + Yellow (could be orange)= 12V to be used for 12V motors
Black =0 + Red= 24V to be used for 24V motors

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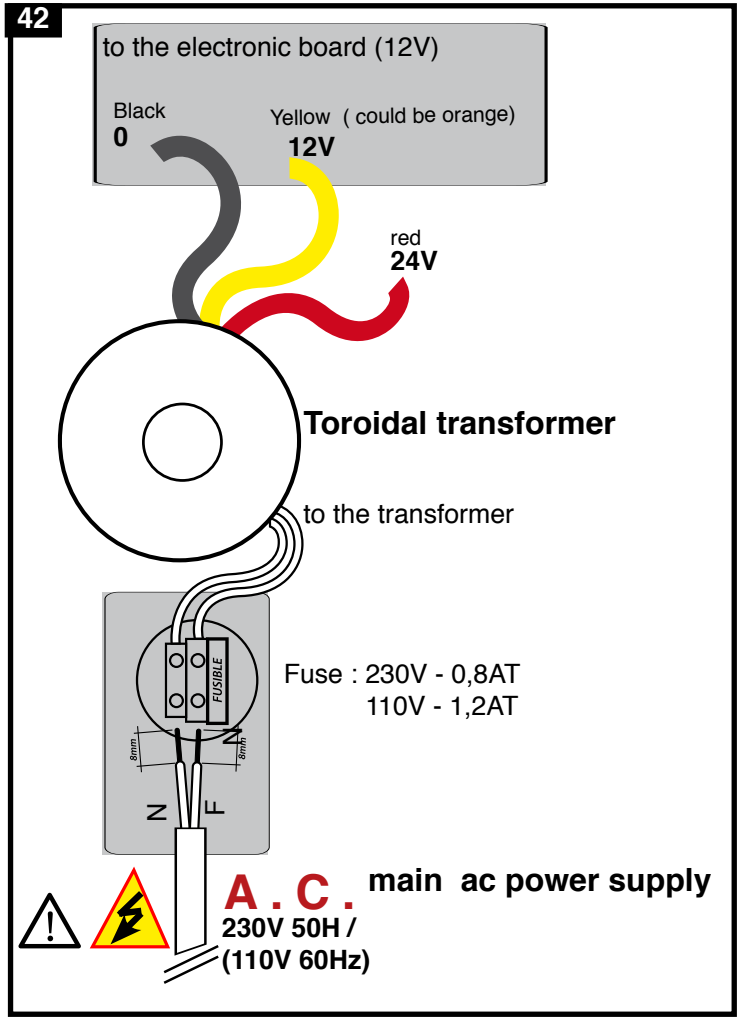
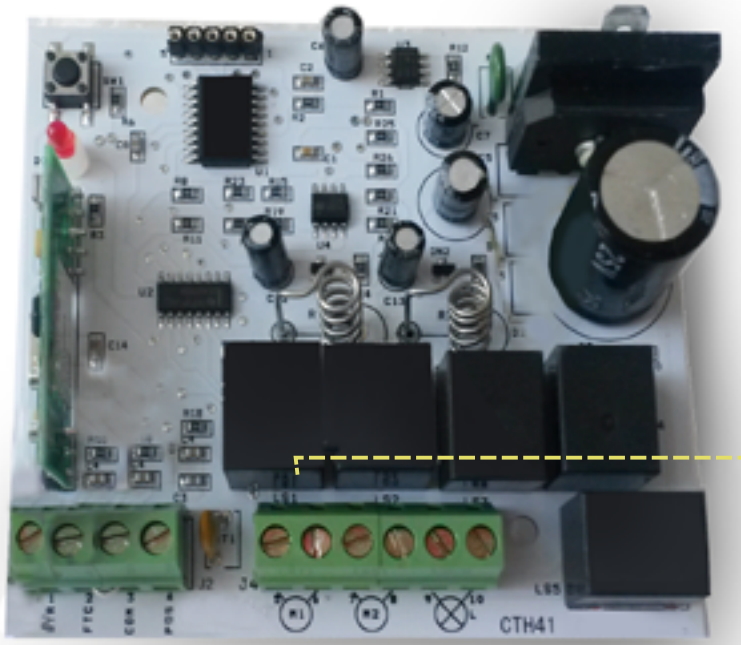


Electronic board model CTH41 (entry level)

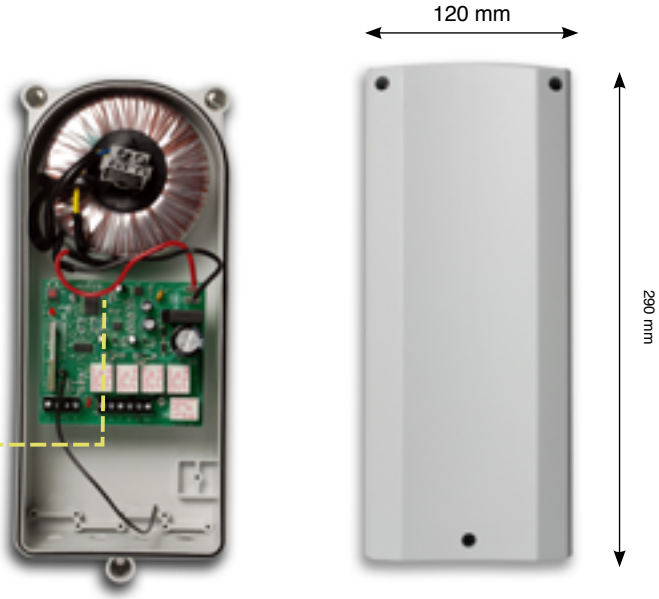
VIDEO MANUAL

product page www

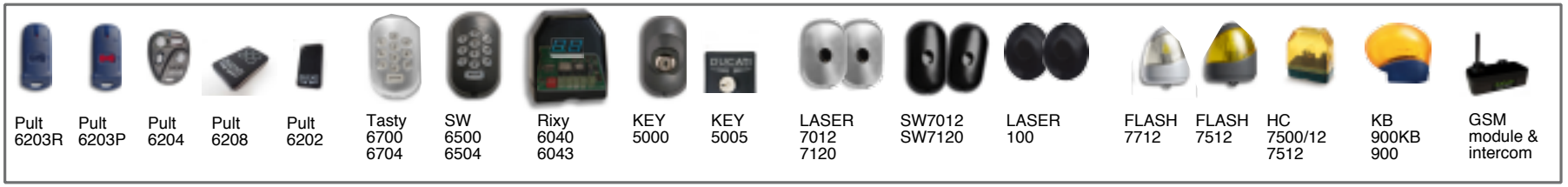
CTH41
Electronic board



KONTROL 7851
Complete control box with toroidal transformer and electronic board CTH41

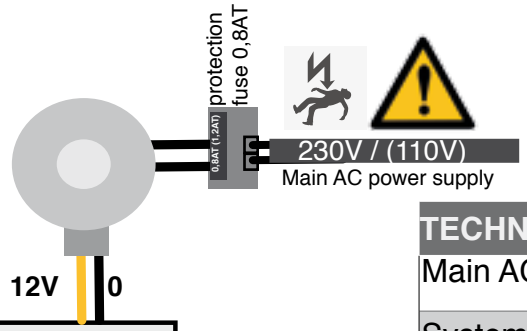


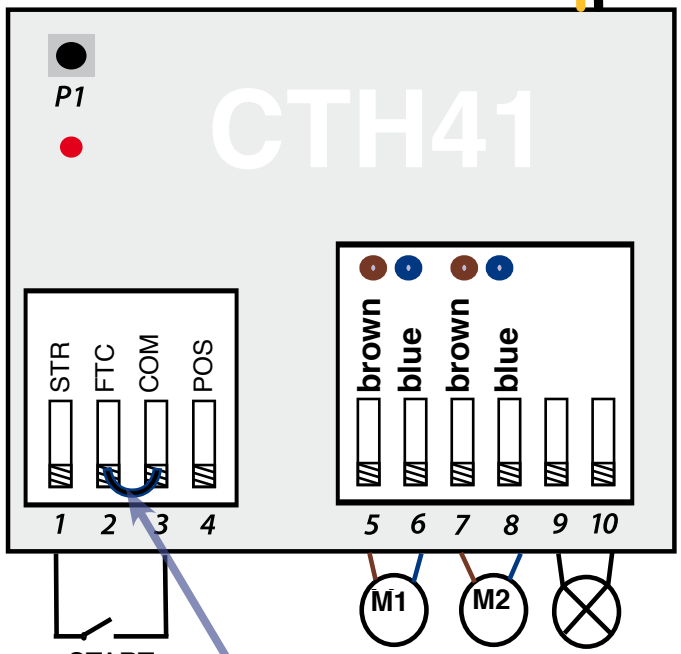
Compatible accessories



Electronic control board model CTH41 (entry level)

Toroidal transformer
wiring to connectors (backside of CTH41)
without polarity to be respected.
yellow /orange cable = 12V
black cable = 0





START
full cycle

NO contact to command full opening by a wired command (key-switch or intercom button)

Photocells bridge
Warning: If you do not connect any photocell (infrared safety sensor) keep the contact closed with the supplied electric bridge placed on connectors **2 & 3**
(NC= Normally closed contac).
If the contact gets open and no photocells are wired the gate opener will open but not close until the contact get closed again.

Warning
M1 = Motor installed on the wing that opens first
M2 = Motor installed on the wing that opens as second

VIDEO - MANUAL

WARNING:
the electronic board is made to stop the motors by amperometrical obstacle detection: it is required that the gate is featured with mechanical end limits fixed on the floor (where the motors do not include integrated end limits).
Once the gate reaches the limit end, the ampere absorption increase will be detected by the electronic board that will stop the motors.

TECHNNICAL DATA	CTH41	CTH41 MONO
Main AC power supply	230V (110V version available) by included toroidal transformer	
System operating voltage	12V	
Compatible with swing gate	2 wings	1 wing
Transformer protection fuse	√ 0,8A T (1,2A T)	
Protection fuse	√ automatic	
Toroidal transformer	105W	
Outputs power connectors	12V	
Stand-by energy consumption	0,008A	
Radio receiver	1 channel to command the full opening cycle	
Remote control codes storage capacity	up to 10	
Radio transmission protocol	DUCATI rolling code 433MHz	
Remote controls automatic learning	√	
On board antenna cable	√	
Automatic closure working mode	√ with pause time 30 sec. (not adjustable)	
Step by step working mode	√ push to open-push to close	
Anti-crushing safety system in compliance to the EU Norms EN13241 / EN12453	√ amperometrical obstacle detection system	
Input connectors for infrared safety photocells	√ (NC contact) by closing will reverse if something interrupting safety infrared light (prevent contact)	
Input connectors for a full cycle opening wired command	√ (NO contact)	

CTH41-MONO is a specific version to be used use on single wing gate: only connect M1. Other connections remain the same. Warning: CTH41 with standard dual wing software cannot be used on single wing gate.

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

Attention! Visual warning of the state of the gate:
By closed gate the RED LED is OFF. By open gate the RED LED ist on by step by step working mode, or blinks by automatic closure working mode.

CTH41 Wiring instructions

1 (STR) START NO (normally open)contact for full cycle command
2 (FTC) NC (normally closed) contact for infrared photocells contact FTC
3 (COM) ground / common (for START and/or Photocells)
also Photocells negative power output
4 (POS) + Photocells positive power output
5 M1 motor cable brown
6 M1 motor cable blue
7 M2 motor cable brown
8 M2 motor cable blue
9-10 blinking loght 12V max 10W (no polarity to be respected)

VIDEO - MANUAL

Warning: If you do not connect any photocell (infrared safety sensor) keep the contact closed with the supplied electric bridge placed on connectors **2 & 3 (NC= Normally closed contac).**
If the contact gets open and no photocells are wired the gate opener will open but not close until the contact get closed again.

Warning

M1 = Motor installed on the wing that opens first
M2 = Motor installed on the wing that opens as second
The phase shift between the 2 wings is automatically set and can not be modified. M1 motor will open first and M2 will follow opening after about 3-4 seconds and vice versa in closing.
P1 Push button to store and delate remote controls

LED-light warnings:

red LED is on after pushing P1 button = remote control learning mode.
red LED is on by open gate **=** The gate is open in “step-by-step” working mode
red LED blinks by open gate **=** The gate is open in “automatic closure” working mode. the LED will blink until countdown (30 sec) ends and gate automatically close.

REMOTE CONTROLS (FOB)

Warning: control board model CTH41 can storage up to 10 ducati rolling coded remote controls buttons. In case you need to use more than 10 remote controls, you can purchase an extra (optional) Ducati radio receiver (RIXY6040 or RIXY 6043).

A) How to memorize a remote control button in the control board memory
Warning: Gate must be closed and idle.
1) on the main electronic board press push button **P1**
- the red LED will switch on (to confirm you entered the learning mode)
2) release **P1**
3) Press the remote control button you want to use to operate your gate. Hold the remote control button pressed for at least 3-4 seconds
- once the main electronic board has stored the remote control the main control’s board red LED will blink shortly to confirm remote control button has been memorized.
- wait for the main board’s red LED to switch off.
4) You can now use the stored remote control’s button to command your gate manoeuver. (Same remote control’s button will operate both opening and closing of your gate). Repeat this operation for all desired remote controls.

B) How to delate all remote contols from the memory of your control board
In case where the electronic board’s memory is full or if a remote control is lost, it is possible to erase the stored remotes controls form the memory of the electronic baord (attention this process leads to a total loss of memory). Thereafter, the remote controls must be must be re-stored on the board.
Warning: Gate must be closed and idle.
1) on the main electronic board press push button **P1** and hold it pushed for about 30 seconds until the red LED blinks to confirm all memory has been delated
2) release **P1**
Memorize again the remaining remotes you want to use by following instructions as in point A) here above. repeat the procedure for each remote control

Working mode:

2 working mode are availbales:
A) STEP BY STEP = you push to command the opening of the gate and you will need to push again to command the closure of the gate.
B) AUTOMATIC CLOSURE = you push to command the opening of the gate, the gate will remain open for a pause time of 30 seconds then will clode automatically, no further command will be accepted while the gate is counting-down pause time**.**
The board is delivered in standard working mode “step by step” automatic closing: proceed as follows:
1- switch off main AC power supply
2- wait at least 5 seconds
3- pesss and keep pressed P1
4-keeping pressed P1, feeds the electronicboard again
The red LED goes on. Operation performed.
The same procedure can be used to return to “step by step” mode.