

# Box

Automation for counterweight  
up-and-over doors

ENG



Advanced entrance technology

# Box

## Sturdy, tested and indefatigable

### Ideal for up-and-over doors

Box is the perfect solution to automate your garage door.

Box is sturdy, indefatigable and easy to install, and with either 1 or 2 gearmotors, it can move even very large counterweight up-and-over doors with standard panel or with non-protruding or folding panel.

### Reliable

The Box gearmotor is tested and reliable and its motor is protected by a thermal probe (Box 30-40). The reduction system and relative steel gears work with permanent lubrication and are inserted in sturdy aluminium diecastings.

Box is housed in an ABS carter and is provided with a courtesy lamp diffuser (Box 30-40), which lights up automatically for 180 seconds when the gear motor is powered.

### Easy to release, in the event of power failure

The automation can always be released manually, in the event of power failure, by lock releasing the gear motor from the inside by means of a lever or from the outside by means of a personalized key. Optional metal-cord or rigid-boom systems are also available to be applied to the handle on the door panel.

### Installation without structural changes

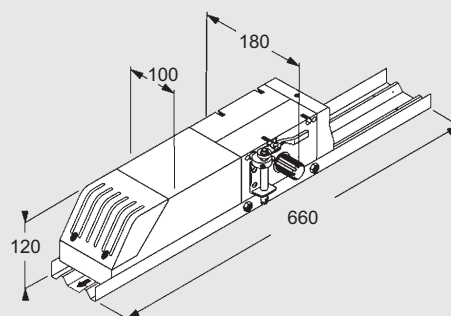
The system has been designed to enable easy and quick mounting, avoiding any structural change of the door.

### Comfort and security




Having your garage door automated is an unquestionable comfort, especially when weather conditions are bad, but it is also a security because it allows you to defend your privacy and all private areas.

Box is provided with a full range of DITEC original control and safety accessories.

### Dimensions






### Products range

	BOX 30	BOX 40	BOX 3EH
Type of use	frequent	frequent	frequent
Motor power supply	 230 V~ / 5 A	 230 V~ / 5 A	 24 V= / 8 A
Operation time	18 s	26 s	15 ÷ 30 s





## Distinctive features and main functions

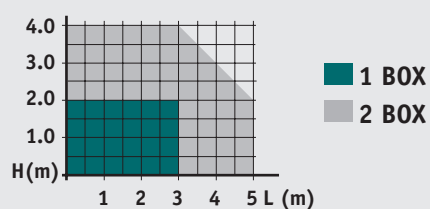
Technical features			
	BOX 30	BOX 40	BOX 3EH
Description: electromechanical actuator	for balancing doors with counterweights	for balancing doors with counterweights	for balancing doors with counterweights
Maximum capacity	7 m <sup>2</sup> (1 Box) - 12 m <sup>2</sup> (2 Box)	7 m <sup>2</sup> (1 Box) - 12 m <sup>2</sup> (2 Box)	7 m <sup>2</sup> (1 Box) - 12 m <sup>2</sup> (2 Box)
Type of use	medium	medium	medium
Intermittent operation	S2 = 15 min - S3 = 25%	S2 = 15 min - S3 = 25%	S2 = 30 min - S3 = 50%
Power supply	 230 V~ / 50 Hz	 230 V~ / 50 Hz	 24 V=
Insulation class	class 1	class 1	class 3
Power input	1.3 A	1.2 A	8 A
Torque	300 Nm	300 Nm	300 Nm
Opening time	18 s	26 s	15 ÷ 30 s
Release system for manual opening	by lever / by key	by lever / by key	by lever / by key
Operating temperature	-20°C / +55°C	-20°C / +55°C	-20°C / +55°C
Protection rating	IP 44 - IP 40 (E1BOX)	IP 44 - IP 40 (E1BOX)	IP 40
Product dimensions (mm)	660x100x120	660x100x120	660x100x120
Control panel	E1BOX	E1BOX	E1HBOX (built in)

### Distinctive features

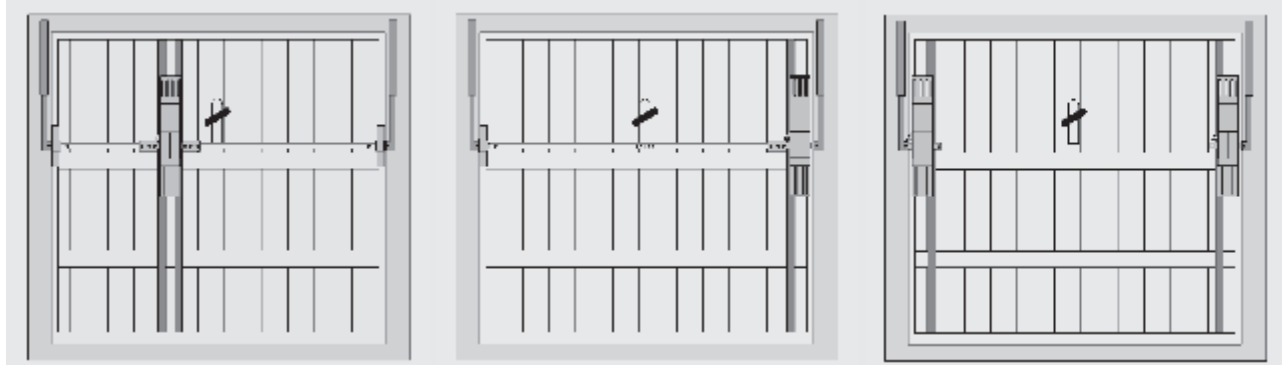
- CE marked
- ABS external cover
- Internal standard lock release by lever or external by key.  
Optional rod or cord solutions
- Motor self protected by internal thermal probe
- Operation possible even at low temperatures
- Full range of installation accessories
- Full range of control and safety accessories



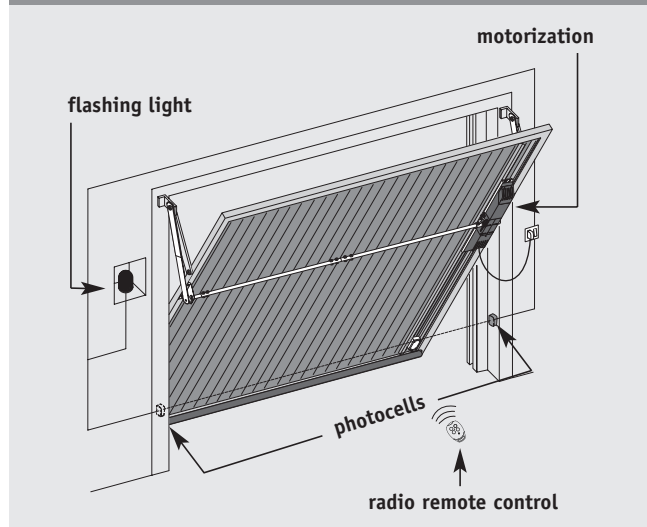
### Diagram of use



### Examples of installation



## Standard installation



## Accessories



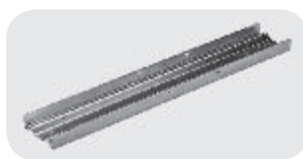
### BOX AV1

Accessories for the screw-fastening of the BOX base onto wood



### BOX SL

Motor fastening base, length 2.5 m



### BOX LUO

Motor fastening base, length 650 mm



### BOX FC1

Limit switch group



### BOX BUG

Grooved bush with dowel



### BOX SBC

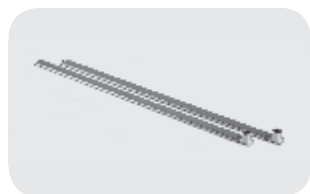
Cord-operated release system for connection to handle



### BOX SBI

Pull-operated release system for connection to handle

## Specific accessories



### BOX B2D

Straight arm pair



### BOX B2C

Curved arm pair



### BOX RL

Accessory kit for lateral mounting






### BOX RCG

Accessory kit for central mounting

### BOX 2P

B2D and B2C extension pair

## System functions

	BOX 30 - BOX 40	BOX 3EH
Control panel	E1BOX	E1HBOX
Description	for 1 230 V~ motor (or 2 parallel motors) with built in radio	for 1 or 2 24 V= motors
Mains power supply	 230 V~ / 50 Hz	 230 V~ / 50 Hz
Batteries ensure gate operation in the event of power cuts		■
Energy saving 	energy saving when in stand-by	energy saving when in use
Motor power supply	230 V~ / 5 A	24 V= / 8 A
Accessories power supply	24 V= / 0.5 A	24 V= / 0.3 A
Flashing light - gives 3 seconds warning before automatically closing the gate	230 V	24 V
Gate open warning light	from limit switch	analogue
Courtesy light	■	■
Limit switch provision	■	■
Encoder to control speed and deceleration		■
Force adjustment control	electronic	
ODS - Obstruction detection system (causes the gate to stop or reverses operation when an obstruction is detected)	■	■
Speed adjustment - allows the speed to be adjusted to ensure best operation		■
Braking/slowing down - ensures best approach		■
Operation time adjustment	■	■
Open control	■ (with dip-switch)	■ (with dip-switch)
Partly open control	■ (with radio only)	
Close control	■	■
Automatic timed close control	■	■
Inching control	■	■
Hold-to-run control	■	■
Emergency stop	■	■
Emergency reverse	■	■
Operating temperature	-20°C / +55°C	-20°C / +55°C



## Accessories

The wide range of DITEC accessories offers access system fitted with several types of control and monitoring devices.



### GOL 4 transmitters

Featuring four channels and fixed code and cloning option, or rolling code. Certified and compliant with current standards. Transmitter mountings: smartly designed, they can be fitted on any type of surface: from the car dashboard to a wall in the garage or in the house. The remote control can be stored in its practical housing and is always ready for use.



### Xel 2 and Lab 3 infrared sensors

These sensors allow the automation to be operated with the highest levels of safety. Can be mounted directly on a wall or on its own mounting. Modulated infrared beam. The sensors are also suitable for applications where space is at a premium.



### Xel 5 key operated selector switch

Fitted with a tamper proof or vandal resistant device. Can be mounted directly on a wall or on its own mounting.



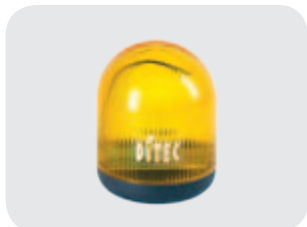
### Sof safety edges

These are fitted to all entrance control systems to ensure maximum safety during opening and closing operations.



### Lan 4 digital combination systems

With digital vandal resistant combination keyboard. Up to 8 digit PIN number.



### Lamp H

24 V flashing light with flashing operation controlled from the control panel.



### GOL 4M keyboard operated transmitters, with digital combination

Coded four-channel control. Allows radio controlled motorised gates to be opened by entering a code. Wall mounted.



### Lan 7 control system with proximity control

Remotely operated identification system featuring TRANSPONDER technology. Allows identification without the need for a touch-controlled device.

When building the system, only use DITEC accessories and safety devices.

DITEC automations all feature CE marking and are designed and built in compliance with the safety requirements of the Machinery Directive (2006/42/EC), of the Electromagnetic Compatibility Directive (2004/108/EC) and of the Low Voltage Directive (2006/95/EC) and of other Directives, laws, specific standards for special products and situations.

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The pictures shown in this leaflet were taken with the consent of those concerned or in public locations.

Further information can be found in the Technical Manuals available at the website: [www.ditec.it](http://www.ditec.it)



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