

ET1000 Sliding gate operator  
Commercial/industrial 1000kg mass

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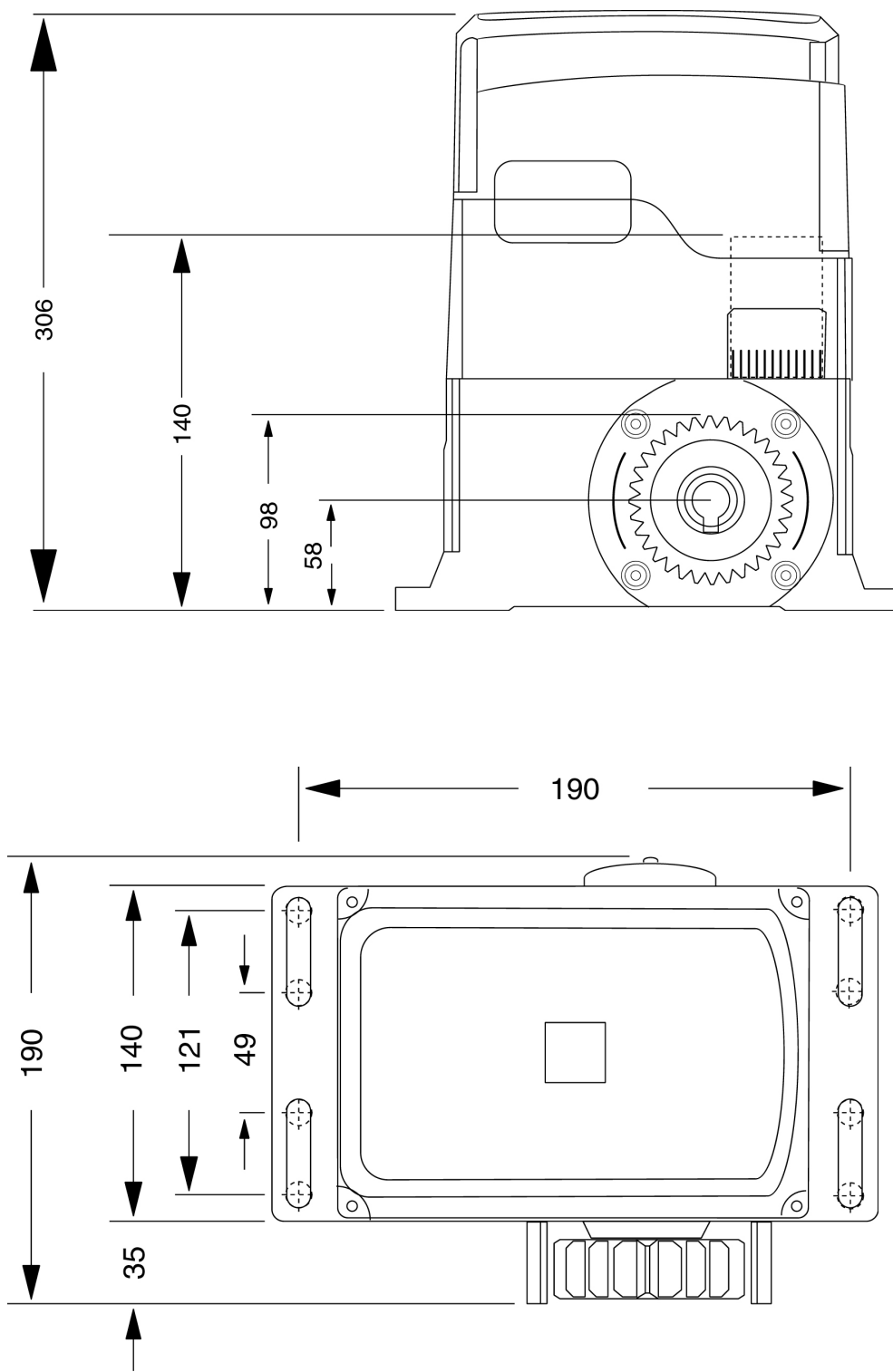
Technical specifications may change without prior notice.  
All goods are subject to the standard factory warranty as laid out on the last page of this  
publication

Rev: 2008/10/003

## **WARNING TO THE INSTALLER. GENERAL SAFETY OBLIGATIONS.**

- ⚠ Caution! It is important for personal safety to follow all the instructions carefully. Incorrect installation or misuse may cause serious personal harm.
- ⚠ Keep the instructions in a safe place for future reference.
- ⚠ This product was designed and manufactured strictly for the use indicated in this documentation. Any other use not expressly indicated in this documentation, may damage the product and/or be a source of danger.
- ⚠ We accept no responsibility due to improper use of this product.
- ⚠ Care must be taken not to install this product in an unsafe environment. I.e. near inflammable gases and or fumes.
- ⚠ We will not accept responsibility if the principles of good workmanship are disregarded by the installer. The construction of the gate must be sound and automatable. It is the responsibility of the installer to ensure that all mountings to the gate are sufficient to withstand the necessary forces incases of overload.
- ⚠ Before carrying out any work on the product, ensure that the electrical supply is switched off.
- ⚠ It is highly recommended that a set of safety infra red beams be used in conjunction with this product.
- ⚠ We accept no responsibility regarding safety and correct operation of the automation if other manufacturer's equipment is added to this product.
- ⚠ Do not make any modifications or alterations to this product.
- ⚠ It is the responsibility of the installer/ service provider to completely instruct and demonstrate the proper use of this product, especially the emergency override, to the end user. It is also the responsibility of the installer/ service provider to issue all end user documentation, which accompanies this product, to the end user.
- ⚠ Ensure that other persons, especially children are clear of the gate and opener before and during operation.
- ⚠ Keep remote transmitters away from children to prevent accidental activation of the system.
- ⚠ The end user should refrain from attempting to make any repairs or adjustments to the system and should contact professional qualified assistance timorously.
- ⚠ Anything other than expressly provided for in these instructions is not permitted.
- ⚠ The electrical supply to this product must comply with the local electrical code of practice and any electrical work must be carried out by a qualified electrician.
- ⚠ Over and above the recommendation to use safety infra red beams with this product it is mandatory to ensure a set has been installed and is in proper working condition when using the automatic closing feature.

# 1. INTRODUCTION.

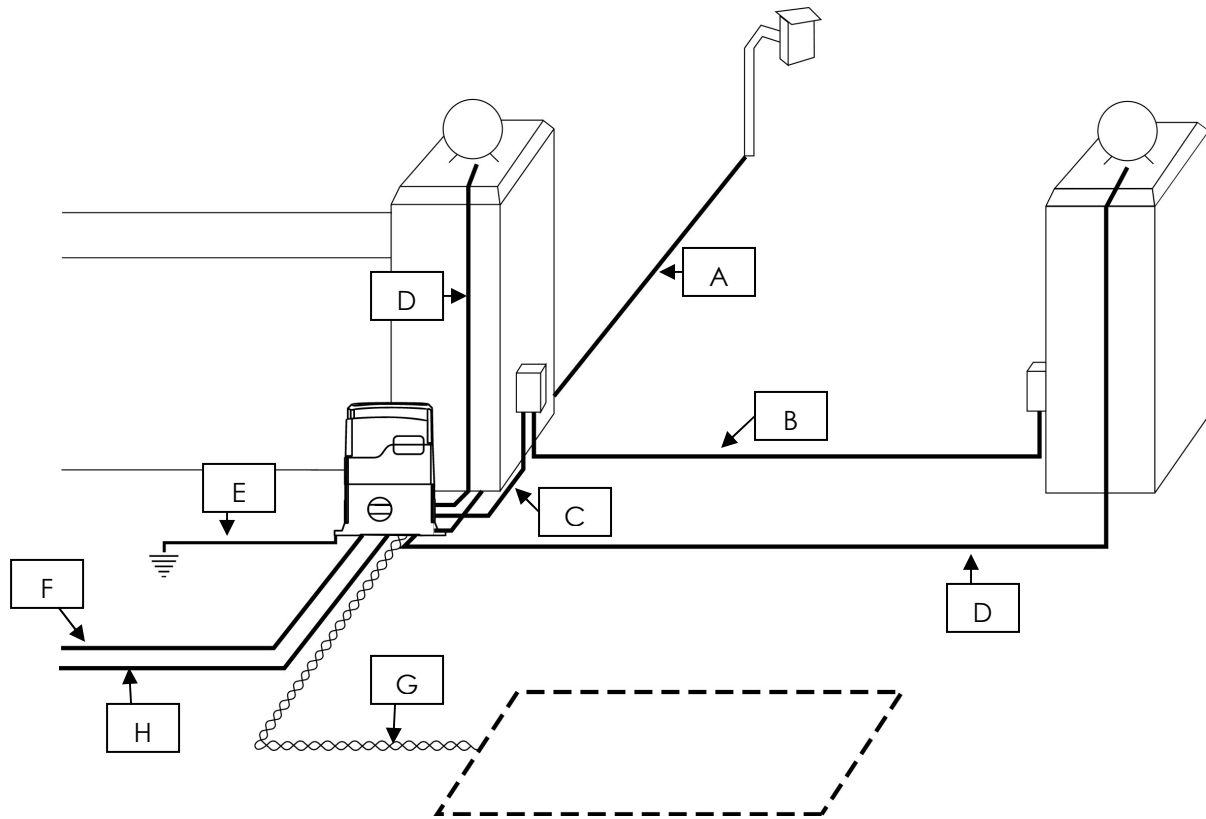


## 1.2. Technical specifications.

Model	ET 1000
Power supply	220Vac +/- 10% 50Hz
Motor power	370W
Absorbed Current	3A
Motor revolutions	1400 r/min
Motor thermal protection	120° C
Ambient temperature	20°C to 55°C
Maximum gate weight	1000kg
Maximum gate travel resistance	15KgF
Duty cycle	60 cycles per hour
Linear speed (Max)	12m/min

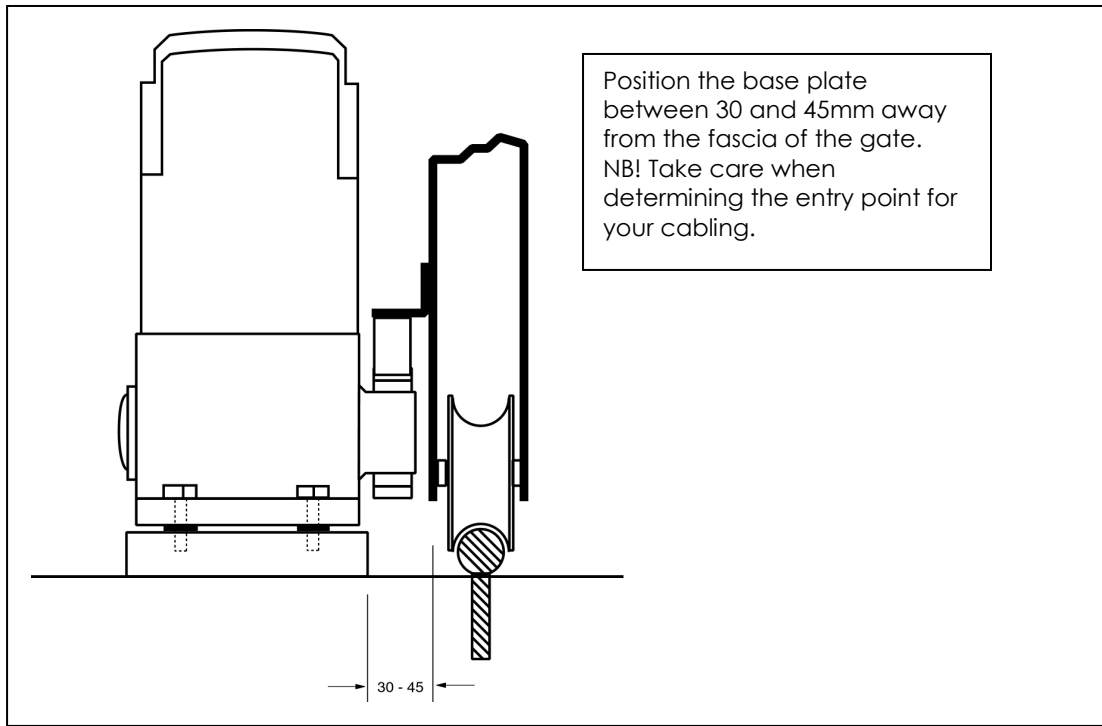
## 2. Installation

### 2.1 Cable requirements.

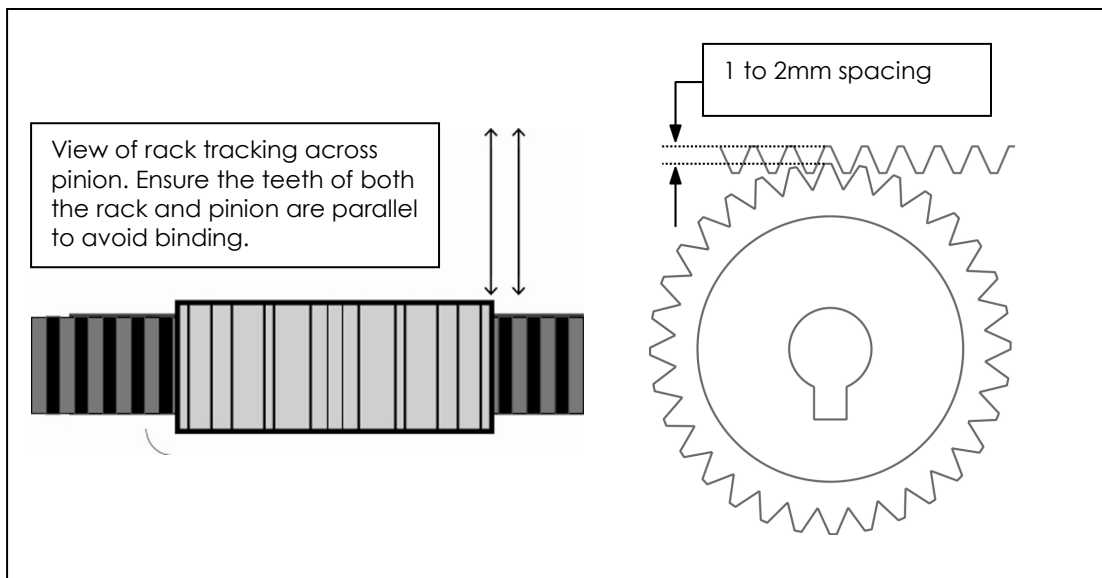


A	Intercom cable. As per manufacturer's spec.
B	Safety infra red beams transmitter cable (0,5mm x 2)
C	Safety infra red beams receiver cable (0,5mm x 4)
D	Courtesy light cables 220Vac (1,5mm x 3)
E	Earth spike cable (2,5mm x 1)
F	Electrical supply 220Vac (2,5mm x 3)
G	Loop detector feeder (1,5mm x 1 looped)
H	Intercom cable. (As per manufacturer's spec. plus 0,5mm x 2 for push button trigger)

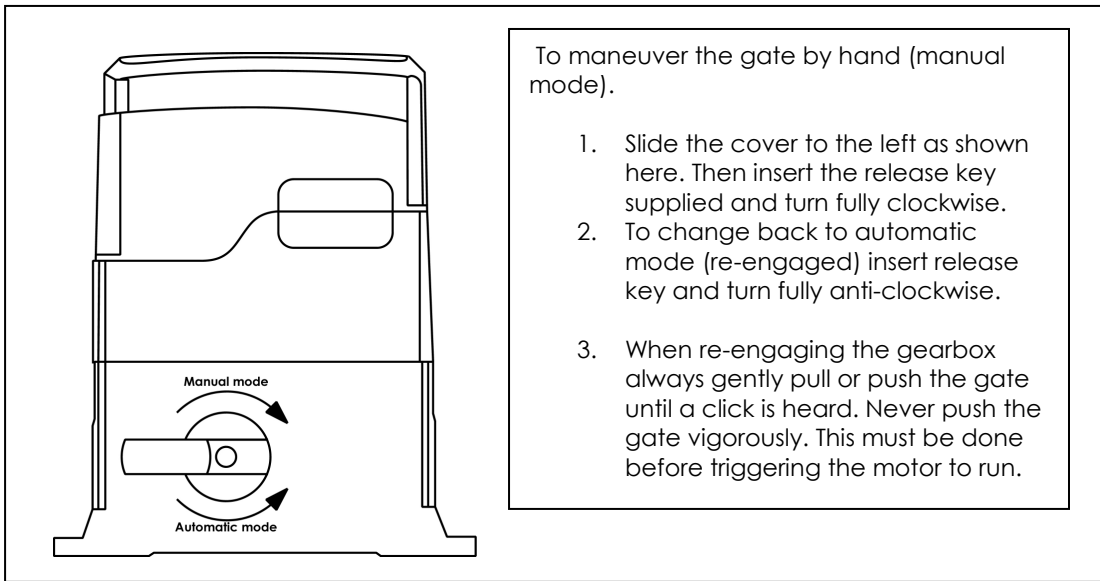
## 2.2 Installation and adjustment.



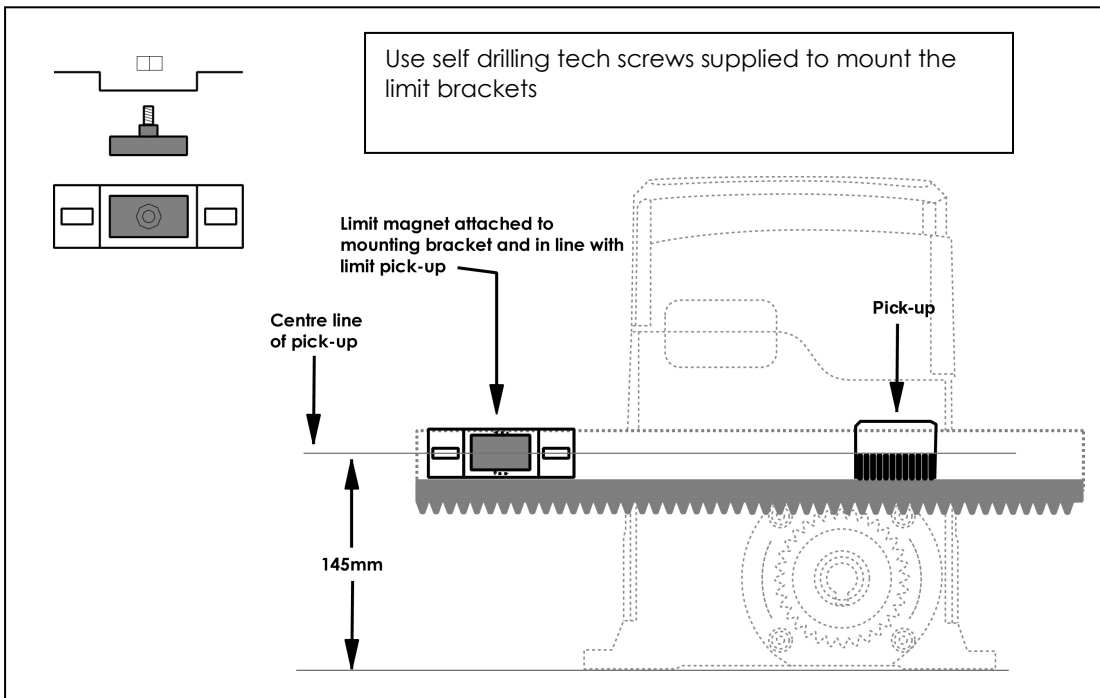
**2.2.2 Installing the rack.** (Ensure the rack tracks straight and true across the pinion gear. Where necessary make use of feathering spacers between the rack and gate fascia to compensate for bowed gates).



Before installing the limit actuators on the rack, the gearbox must be released into manual mode.

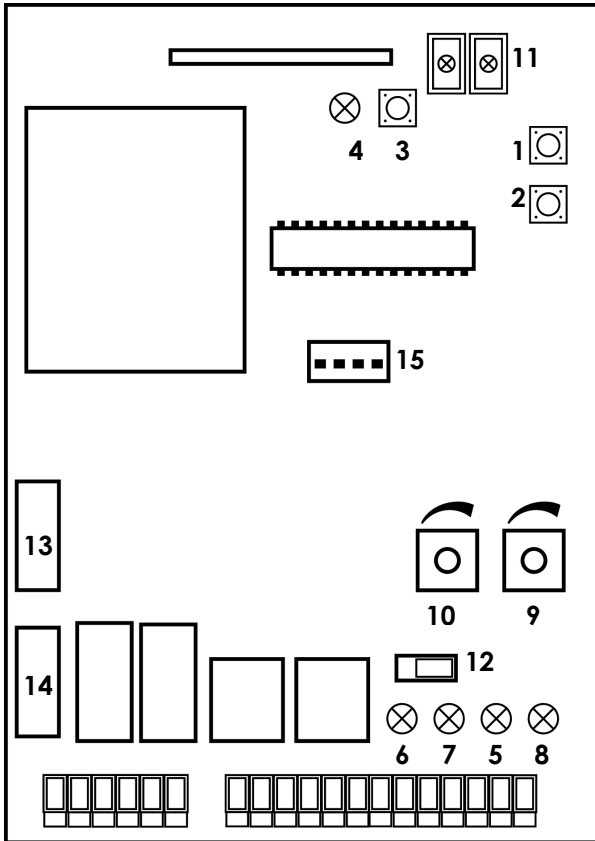


1. Move the gate into the full **CLOSED POSITION**. Attach the **RED MAGNETIC ACTUATOR** to the rack, within 10 – 20mm of the operator and inline with the pickup. (If the control card is powered up, the closed limit LED must be off with the magnet in place)
2. Move the gate to the full **OPEN POSITION**. Attach the **BLUE MAGNETIC ACTUATOR** to the rack, within 10 – 20mm of the operator and inline with the pick up. (If the control card is powered up, the closed limit LED must be off with magnet in place)

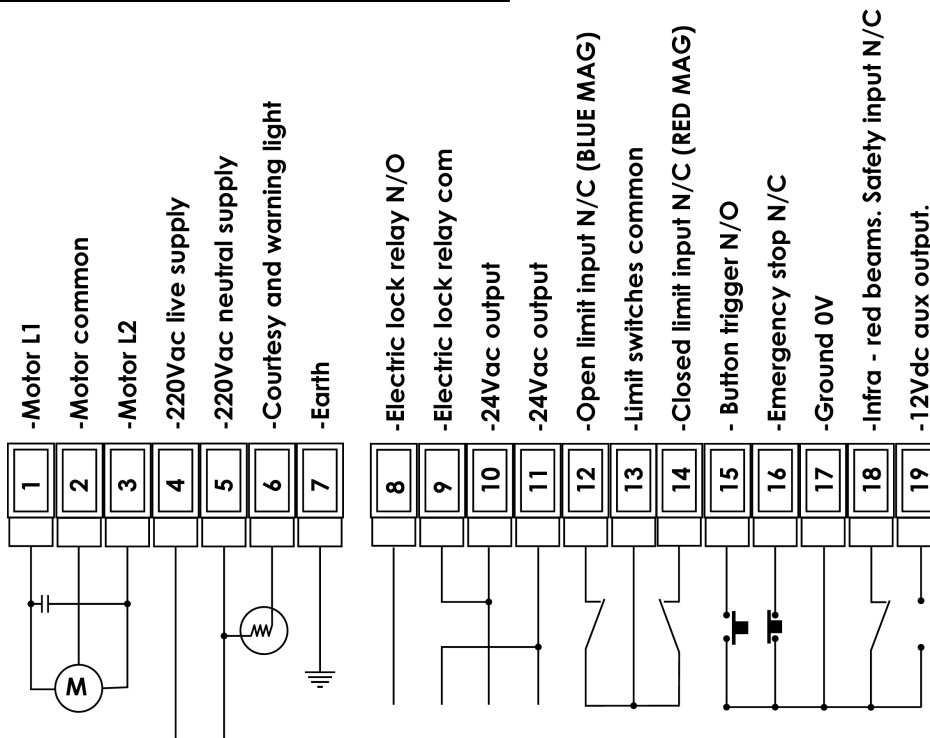


**NB! PHYSICAL STOPPERS MUST BE INSTALLED AT BOTH THE OPEN AND CLOSED POSITION!  
THESE MUST BE SUFFICIENT TO STOP THE GATE.**

### 3. Control card.

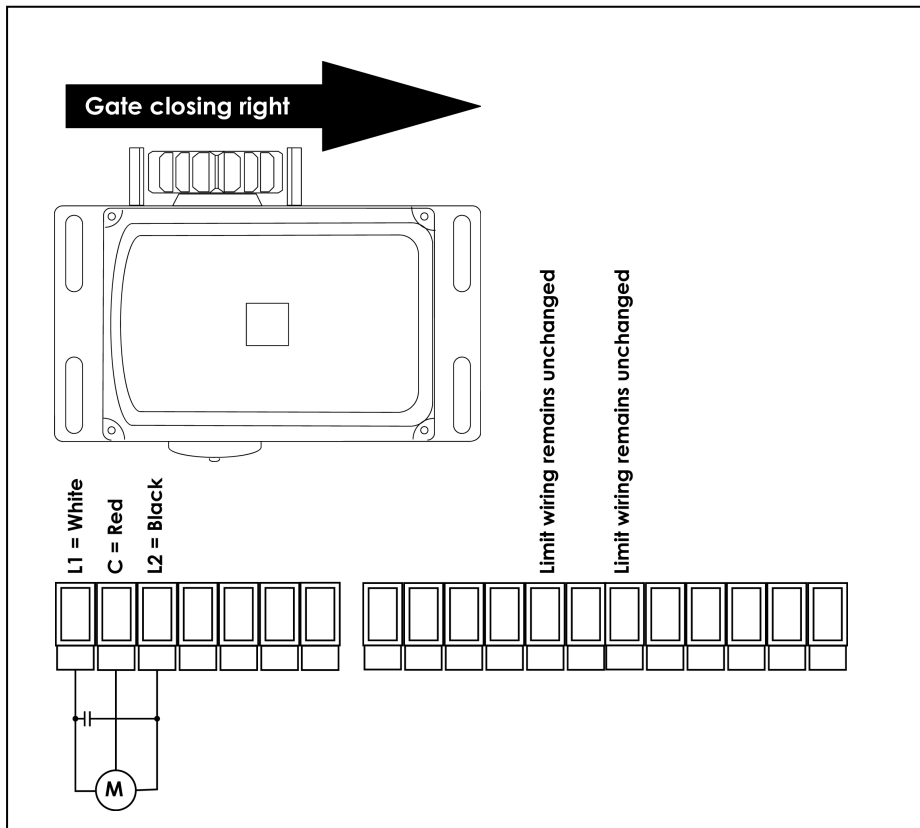
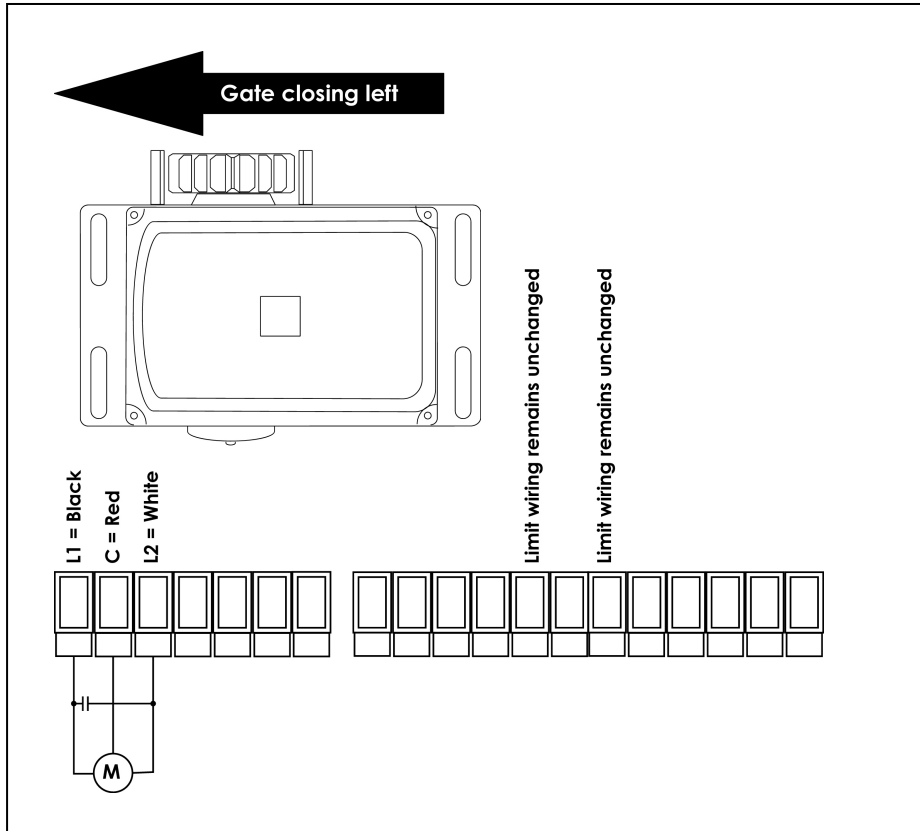


1	P1	Set run time
2	P2	Set auto-close time
3	S1	Remote transmitter programming button
4	LED 1	Set transmitter LED
5	LED 2	Running state LED
6	LED 3	Open limit LED
7	LED 4	Close limit LED
8	LED 5	Power LED
9	VR1	Adjust load sensing for crawl speed
10	VR2	Adjust load sensing for running speed
11	J3	Antenna terminals
12	J4	Load sensing. <b>DO NOT REMOVE!</b> (ON = Active)
13	F1	Transformer fuse (2A)
14	F2	Motor fuse (10A)
15	S4	Function choice dipswitches





### 3.2 Motor wiring.



### 3.3 SETTING THE RUN TIME.

After installing and completing the wiring, (Swap motor wires L1 and L2 if motor runs in the wrong direction).

1. Power up
2. Press and hold **P1** for 3 sec.
  - a. Gate will begin running OPEN
  - b. On reaching the OPEN (Blue) limit the gate will begin running CLOSED
  - c. On reaching the CLOSED (Red) limit the run time programming is complete.

**3.4 SETTING THE AUTO-CLOSE TIME** (NB! This only programs the required time. Remember to activate auto-close option by selecting Dipswitch 1 ON to activate Auto-close).

1. When the operator is not running, press and hold **P2** for 3 sec.
2. **LED 2** will illuminate indicating the timer has commenced,
3. At required auto-close time press and release **P2** once again.
4. **LED 2** will extinguish.
5. The auto-close time is set.

### 3.5 ADJUSTING THE OBSTRUCTION SENSITIVITY

**(J4) OBSTRUCTION LOAD SENSING! DO NOT REMOVE THIS JUMPER FROM THE ON POSITION.**

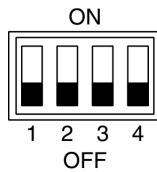
On - Obstruction load sensing is active. **THIS JUMPER SHOULD ALWAYS BE ON!**

Off - All obstruction sensing is de-activated.  
**THIS CAN RESULT IN SERIOUS PERSONAL OR EQUIPMENT DAMAGE IF LEFT IN THE OFF POSITION!!!!!!**

1. To make the unit more sensitive to obstructions in soft start/soft stop stages of travel, turn **VR1** anti-clockwise.
2. To ignore slight binding or heavier to start gates, turn **VR1** clockwise.
3. To make the unit more sensitive to obstructions in the normal running speed stage of travel, turn **VR2** anti-clockwise.
4. To ignore slight binding or heavier to run gates, turn **VR2** clockwise.

NB! The correct adjustment to the obstruction sensitivity is vital to the safety of the installation. Failure to test and adjust this can cause physical harm and damage to both the system and the user. (It is advisable to install Infra red safety beams as an added safety measure)  
If the unit still responds as though it is encountering an obstruction even though there is no obvious object in the way of the gate travel when the sensing adjustments have been adjusted to the full clockwise positions, the gate is in poor running condition. Correct the gate travel first before continuing.

### 3.6 DIPSWITCH SELECTION.



Dip	Function
1	Autoclose
2	Condo/loop
3	Soft Stop
4	Soft start

**Dipswitch 1 (Auto-close)** Use safety infra Red Beams when activating this function!

- On – Automatic closing active. (See 3.4 above to program required Auto-close time).
- Off – Automatic closing not active.

**Dipswitch 2 (Condominium/loop detector mode)** **Must be used when connecting a loop detector.**

Use safety infra Red Beams when activating this function!

- On – When gate is running closed, any trigger via push button input or remote transmitter will result in the gate stopping and returning to the open position.  
Any trigger while gate is opening is ignored and gate will continue opening.  
The gate will only close once the auto-close time has elapsed and the safety beam and button trigger inputs are cleared.

**(NB! Dipswitch 1 must also be set to ON when using Condo/loop option).**

- Off - Step by step mode. When gate is traveling in either direction any trigger via push button input or remote transmitter will result in the gate stopping. The next trigger will cause the gate to travel in the opposite direction.

**Dipswitch 3 (Soft stop)**

- On – Gate will slow down on approach of end of travel. Both open and closed.
- Off - Gate will travel at full speed up to the end of travel. Both open and closed.

**Dipswitch 4 (Soft start)**

- On - Gate will start slowly and gradually increase to full running speed.
- Off - Gate begins traveling at full running speed.

### 3.7 PROGRAMMING OF THE ONBOARD RECEIVER (31 User memory)

**3.7.1 Master erase/defaulting.** (It is recommended that this be done on installation).

1. Power down
2. Press and hold **S1**,
3. While holding **S1**, power up again.
4. **LED 1** begins flashing on and off,
5. **LED 1** extinguishes,
6. **LED1** illuminates permanently.
7. Release **S1** and remove power,
8. Return power without holding **S1**.  
All previously programmed remote transmitters are now erased.

**3.7.2 Programming a remote transmitter into memory.** (Hold the remote transmitters +/- 500mm away from the receiver antenna when programming).

1. Begin by selecting a button on the remote transmitter,
2. Start transmitting (FIRST) by pressing and holding the remote transmitter button required,
3. Press **S1**,
4. **LED 1** will flash confirmation.

LED1 Flashes	Meaning
x 1	Successful - first user programmed. <b>Master remote transmitter.</b>
x 2	Successful - There is still memory available.
Multiple rapid flashes	Unsuccessful - Memory is full (Add a RXCONDO receiver)
No flashes	Unsuccessful - Either a non - ETBLUE remote transmitter is being used or there is another remote transmitter active on 433.92MHz and it is blocking the signal.

**3.7.3 Erasing an incorrectly programmed remote transmitter.** (For example if the neighbour's remote transmitter was accidentally memorized while programming).

1. Begin by pressing and holding the master remote transmitter (User 1 remote transmitter) button until **LED 1** illuminates.
2. Release the **Master remote transmitter** button.
3. Within 10 sec. press and hold the incorrectly programmed remote transmitter button.
4. **LED 1** will begin flashing confirmation of successful erase.
5. Release the now erased remote transmitter button.

**WARRANTY:** All goods manufactured by G&C Electronics cc T/A ET Systems carry a 12 month factory warranty from date of invoice. All goods are warranted to be free of faulty components and manufacturing defects. Faulty goods will be repaired or replaced at the sole discretion of ET Systems free of charge. This warranty is subject to the goods being returned to the premises of ET Systems. The carriage of goods is for the customers account. This warranty is only valid if the correct installation and application of goods, as laid out in the applicable documentation accompanying said goods, is adhered to. All warranty claims must be accompanied by the original invoice. All claims made by the end user must be directed to their respective service provider/installer.

The following conditions will disqualify this product from the warranty as laid out above. These conditions are non-negotiable.

- Any unauthorized non-manufacturer modifications to the product or components thereof.