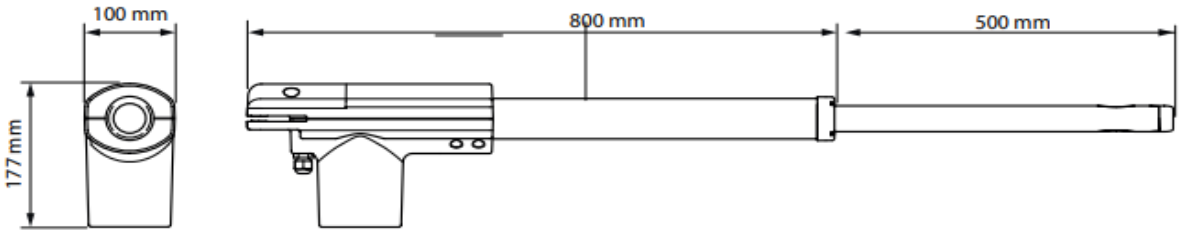
SGA

Skyline Gate Automation
Smart and Secure Access

User Manual (Quick Set-up)
24V DC Swing Gate Motor-V2
(SGA-MOOV500-24V)

- **Motor Stroke & Dimensions:**

UNDER NO CIRCUMSTANCES SHOULD THE EXPANDED STROKE OF THE MOTOR BE USED AS A LIMIT



• Clutch Overide:

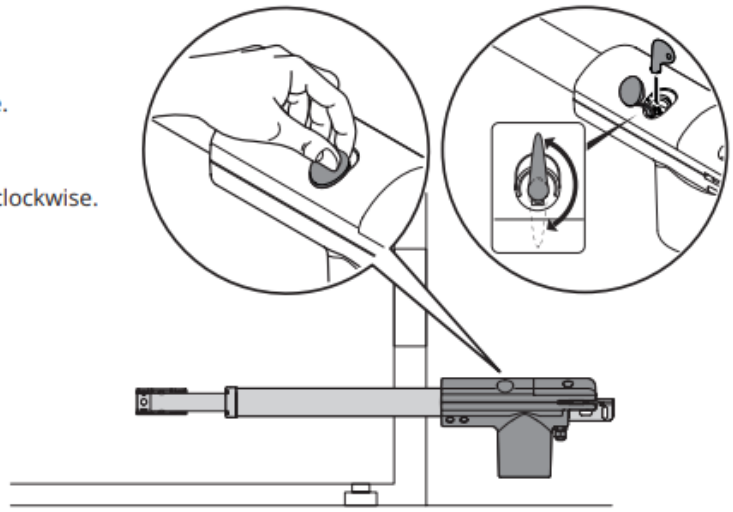
In case of an emergency or requirements during installation the gate can be moved open and close by hand operation if the clutch is disengaged. To disengage the clutch follow the procedure below.

To Disengage

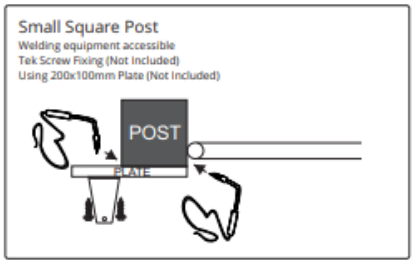
1. Open the dust cover.
2. Insert the allen key and turn by 90° clockwise.

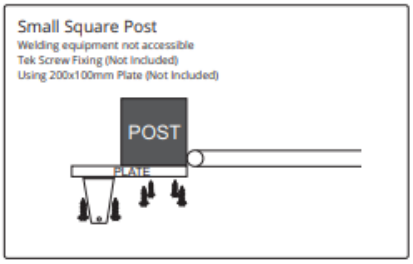
To Engage

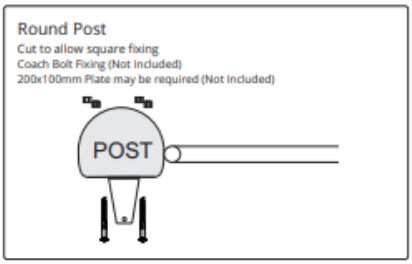
1. Insert the allen key and turn by 90° counter-clockwise.
2. Close the dust cover.



• Post Side Motor Bracket Installation:







• Gate Stop Installation:

Before beginning the installation of the gate motors a physical gate stop must be installed at the closed position.

For Single gate systems the gate stop can be installed in two different methods.
1. On the driveway itself at the furthest point from the hinge as illustrated in the diagram below (Fig 1).
2. On the post that the gate will close too (Fig 2).
NOTE: For Push to Open Installations both the open and close stops are required

For Double gate systems the gate stop must be installed in the center of the driveway stopping both gates (Fig 3).

When installing on the driveway itself it is recommended to use a rubber floor stop to prevent damage to vehicle entering and exiting.
When installing on the post for single gate installations a 90° angle can be used with a rubber padding to dampen or soften the close and prevent damage to the gate.

Single Gate Installation

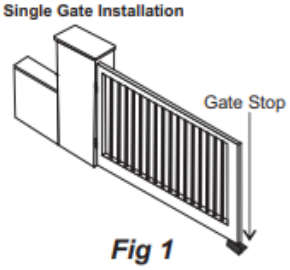


Fig 1

Single Gate Installation

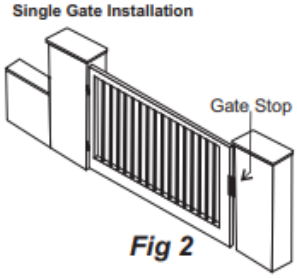


Fig 2

Double Gate Installation

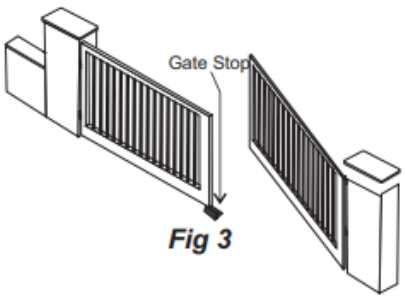
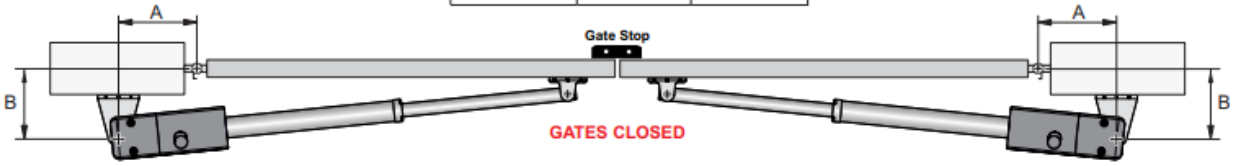


Fig 3

UNDER NO CIRCUMSTANCES SHOULD THE EXPANDED STROKE OF THE MOTOR BE USED AS A LIMIT

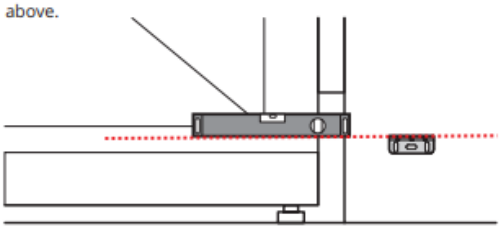
- **Pull To Open Installation (Gate Swings In Towards The Property):**

	A	B
90°	200mm	250mm
110°	170mm	170mm



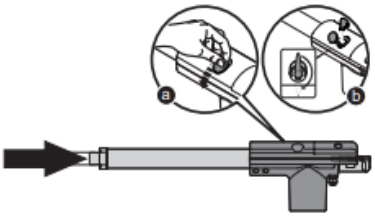
1

Install the center of the post bracket inline with the center of your gates horizontal rail using the supplied geometry above.



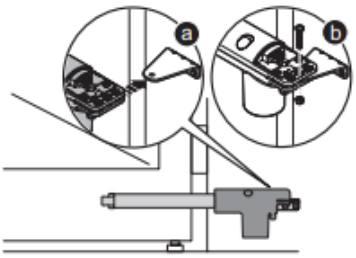
2

Using the Manual Override disengage the clutch and push the actuators piston in till it is fully retracted.



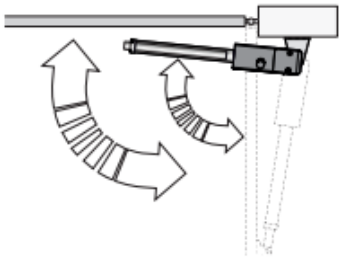
3

Install the RETRACTED actuator on the post bracket ONLY.



4

Open the Gate to the desired open angle swinging the actuator along with the gate.

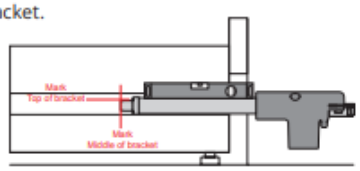


5

Once the gate is in the FULL open position push the retracted actuator against the gate:

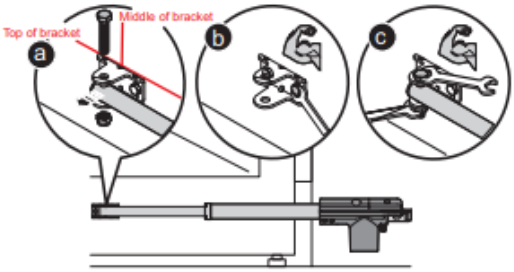
1. make a vertical mark at the end of the piston, this will be the centerline for the gate bracket.

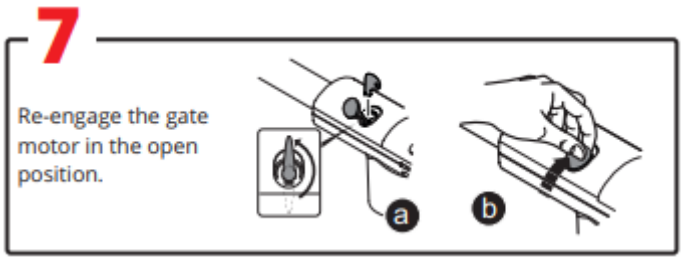
2. Make a horizontal line with the actuator level, this will be the top of bracket.



6

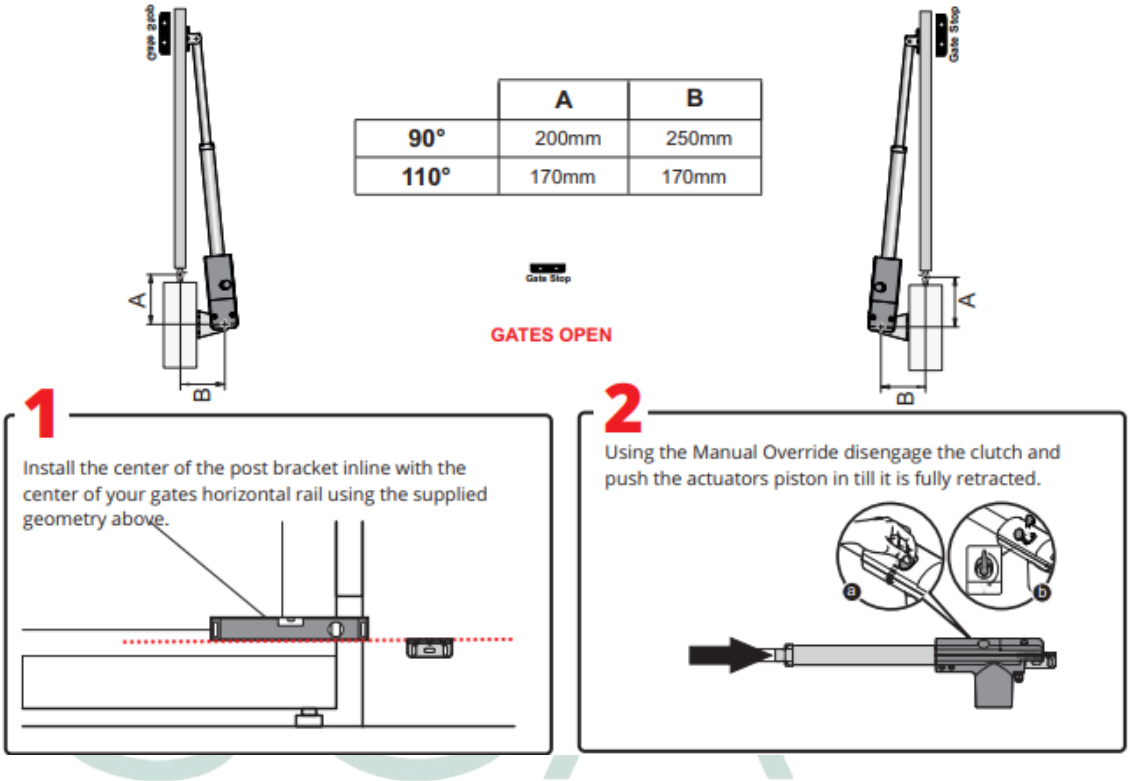
Install the gate bracket to the gate then to the actuator.
Ensure the nylon washers are installed above and below the piston.





Repeat the above steps for the second gate motor if applicable

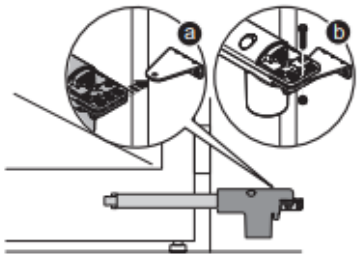
- **Push To Open Installation (Gate Swings Out Towards The Street):**



	A	B
90°	200mm	250mm
110°	170mm	170mm

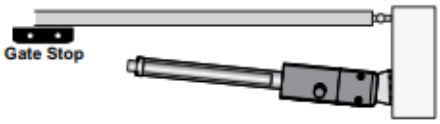
3

Install the RETRACTED actuator on the post bracket ONLY.



4

Close the Gate against the gate stop swinging the actuator along with the gate.

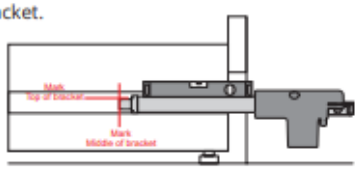


5

Once the gate is in the FULL closed position push the retracted actuator against the gate:

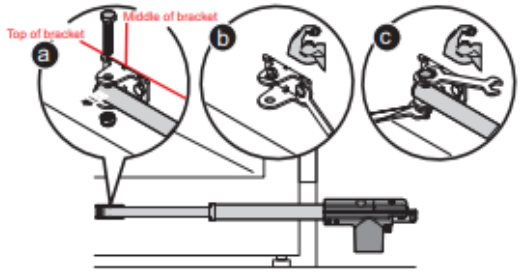
1. make a vertical mark at the end of the piston, this will be the centerline for the gate bracket.

2. Make a horizontal line with the actuator level, this will be the top of bracket.



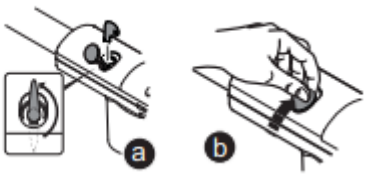
6

Install the gate bracket to the gate then to the actuator.
Ensure the nylon washers are installed above and below the piston.



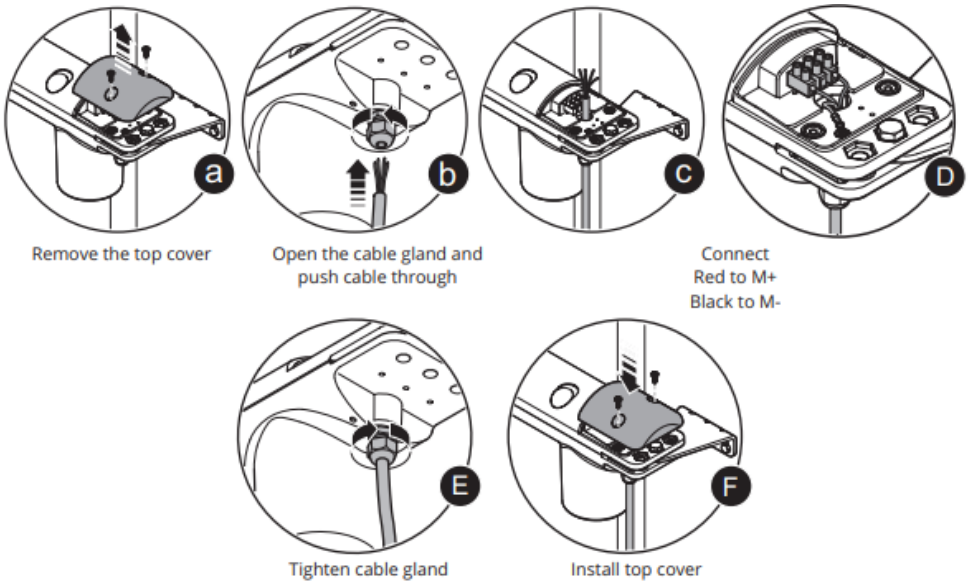
7

Re-engage the gate motor in the open position.



Repeat the above steps for the second gate motor if applicable

- **Motor Wiring:**



Remove the top cover

Open the cable gland and push cable through

Connect
Red to M+
Black to M-

Tighten cable gland

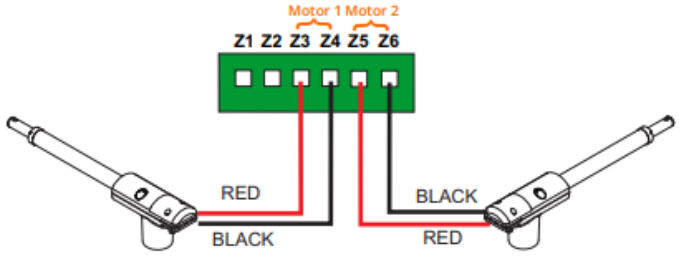
Install top cover

- **V2 Control Board (CITY2+) Connection :**

Pull-To-Open

Motor will be pulling the gate towards it for OPENING.
Gates (Left and Right) are based on observation of the gates from the same side the motors will be installed on.

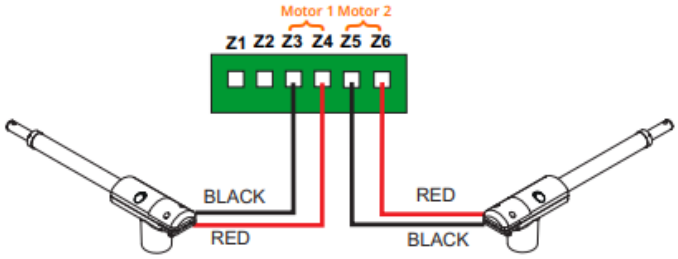
Pull-To-Open
Motor 1 Opens FIRST
Motor 2 Opens SECOND



Push-To-Open

Motor will be pulling the gate towards it for CLOSING.
Gates (Left and Right) are based on observation of the gates from the same side the motors will be installed on.

Push-To-Open
Motor 1 Opens FIRST
Motor 2 Opens SECOND



- **V2 Control Board (CITY2+) Terminals:**

Operational Inputs
L3. Start (Full Operation) Command (N/O)
L4. Start P. (Pedestrian Operation) Command (N/O)
L5. Stop Command (N/C)
L6. Common Ground

Safety Inputs
L7. Photocell Input 1 ((N/C)
L8. Photocell Input 2 (N/C)
L9. Safety Edge Input 1 (N/C)
L10. Safety Edge Input 2 (N/C)
L11. Common Ground

Accessories Power
K6. Constant +V DC Output
K8. +V DC Output Only when in an operating cycle
K7. Common

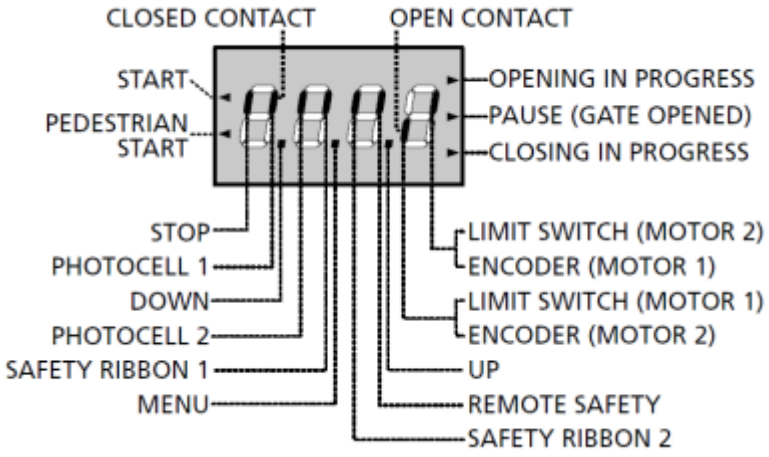
Lamp Output 24V
Z1. Lamp Output + (24V DC Max 3W)
Z2. Lamp Output - (24V DC Max 3W)

Antenna
L1. Antenna Shield (applicable with external antenna)
L2. Antenna Core

Light Output
B1. Pole 1
B2. Pole 2

Motor Output
Z3& Z4. Motor 1
Z5 & Z6. Motor 2

- **LCD Interface:**



➢ Quick Parameters Settings:

- **Configuration According To Motor Type (Parameter FC.En Must Be Set To NO):**

Each motor type uses a different configuration based on the expectation of the controllers anticipation for end of stroke. See examples below.

Press and hold the **OK** button for about two seconds til the screen displays PRG then immediately release

Use the UP/Down keys to cycle to FC.En then press **OK**

Use the ▲▼ keys to adjust.

no for overcurrent motors (no limits)

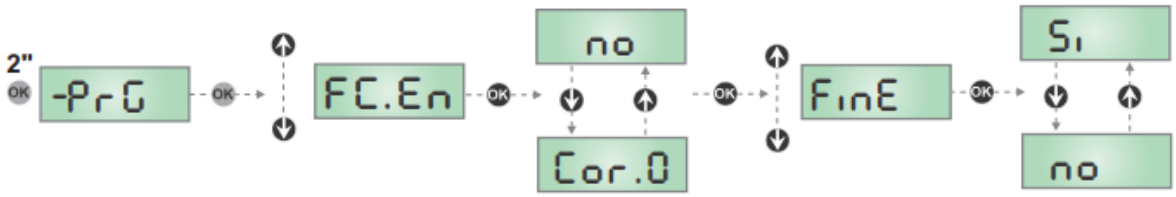
L.SW for motor with limits direct to control board

Cor.0 for motor with limits controller built in

Now press **OK**

Use the ▲▼ keys to cycle to FinE then press **OK**

Cycle to Si then press **OK** to Save.
Or
Cycle to no and **OK** to cancel any changes



- **Enable or Disable the Photobeam Sensor (Parameter FOT2 Must be Set To NO if Sensor is not connected Or Before Running The Set Up Cycle):**

Press and hold the **OK** button for about two seconds til the screen displays PRG then immediately release

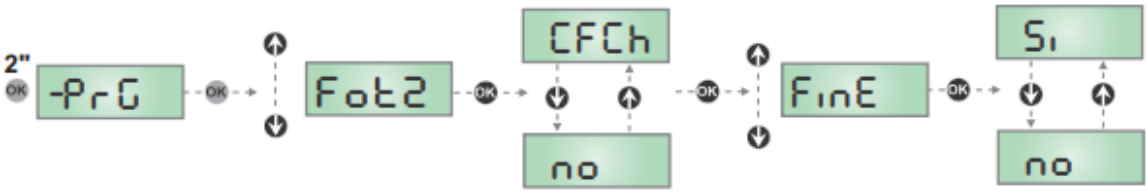
Use the UP/Down keys to cycle to Fot2 then press **OK**

Use the ▲▼ keys to cycle to the required logic based on the above options.
CFCh **Closing direction + check before motion of starting the close cycle**
Ch Closing direction only
no Disabled

Now press **OK**

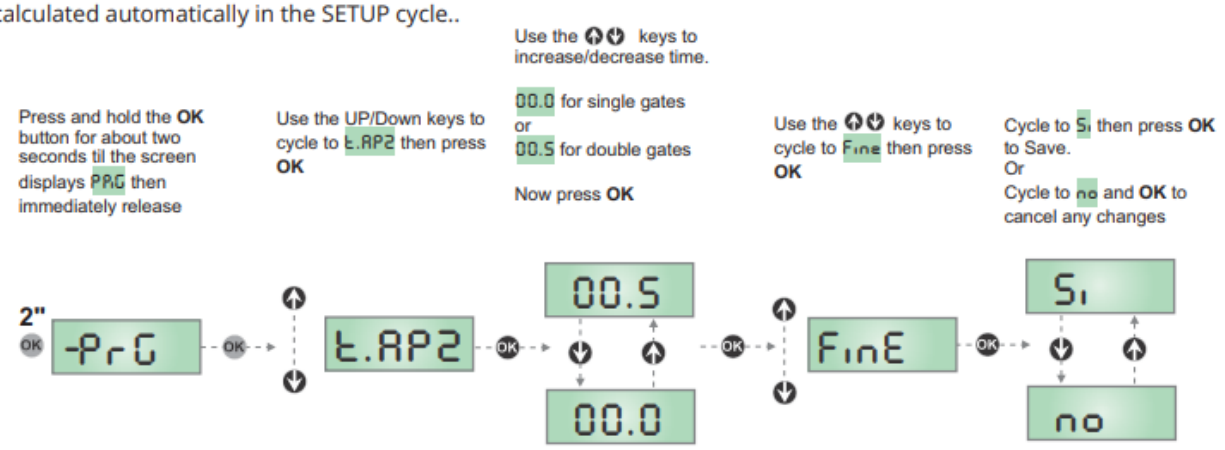
Use the ▲▼ keys to cycle to FinE then press **OK**

Cycle to Si then press **OK** to Save.
Or
Cycle to no and **OK** to cancel any changes

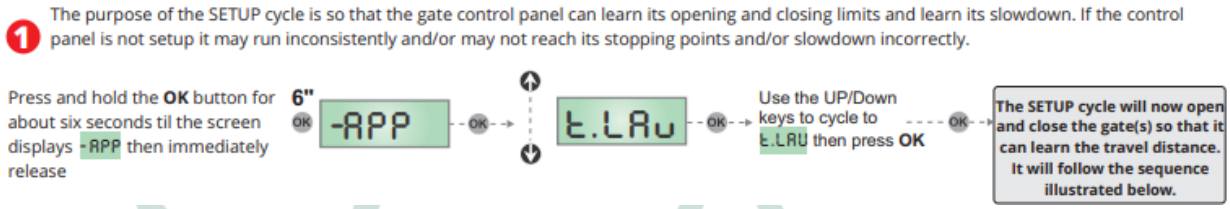


- **Setting The System For SINGLE/ DOUBLE GATE (Parameter t.AP2 Must Be Set to Zero(0) For Single Swing Gate – Don't Do Any Changes If Its Double Swing Gate):**

In the case where the system is a single swinging gate the time for motor 2 output which is not used should be set to 00.0. In the case where the installation is double gate the time can be set to greater than 00.0 (ex. 00.5)as this will be calculated automatically in the SETUP cycle..



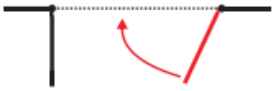
- **Set Up Cycle (Set The Gates Half-Open Using Manual Override Keys Before Running The Set Up Cycle):**



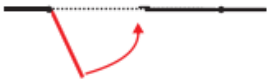
2 Double Gate Procedure

Both gates are set by clutch override to mid way then locked in place.

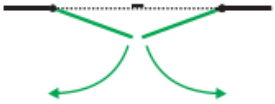
M1
Partially/Completly Opens



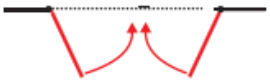
M2
Partially/Completly Closes



M1
Partially/Completly Closes



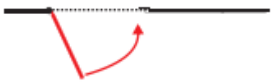
M1 & M2 Open
Completely Open
(With M2 Open Delay time if set)



M1 & M2 Open
Completely Close
(With M2 Open Delay time if set)

2 Single Gate Procedure

Gates is set by clutch override to mid way then locked in place.



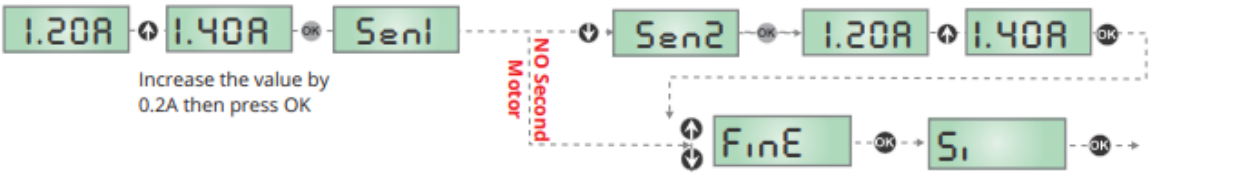
M1
Partially/Completly Closes

M1
Partially/Completly Opens

M1
Completly Closes

• Final Setting & Saving:

At the end of the procedure it will immediately display current value for M1 Sen1



Increase the value by 0.2A then press OK

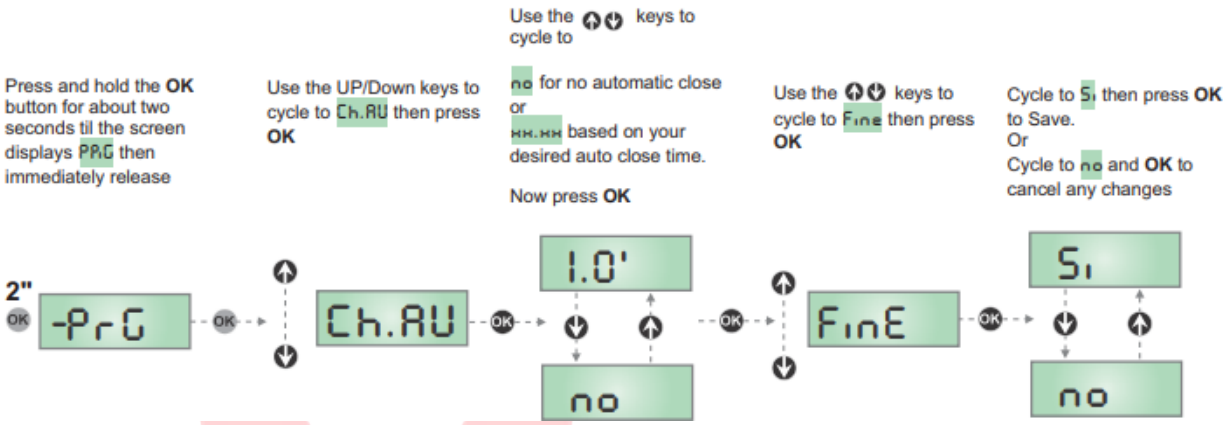
SECOND MOTOR (M2) Cycle to Sen2 and also increase by 0.2A

Use the ▲▼ keys to cycle to FinE then press **OK**

Cycle to S1 then press **OK** to Save.
Or
Cycle to no and **OK** to cancel any changes

➢ More Parameters Settings:

• To Enable Automatic Closing:

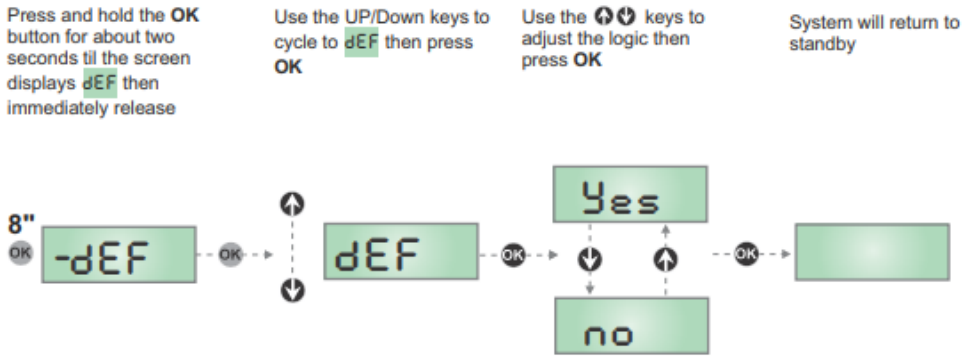


• Settings for Loop Detectors & Gate Timers:

Strt should be set to oroL to enable the function of full timer mode
StoP should be set to no, Stop input will be ignored
St.AP should be set to no, this will ignore commands whilst opening
St.CH should be set to APEr, this will revert the gate to open if a command is given during closure
St.PA should be set to PAUS to reset the automatic closing time when a command is given

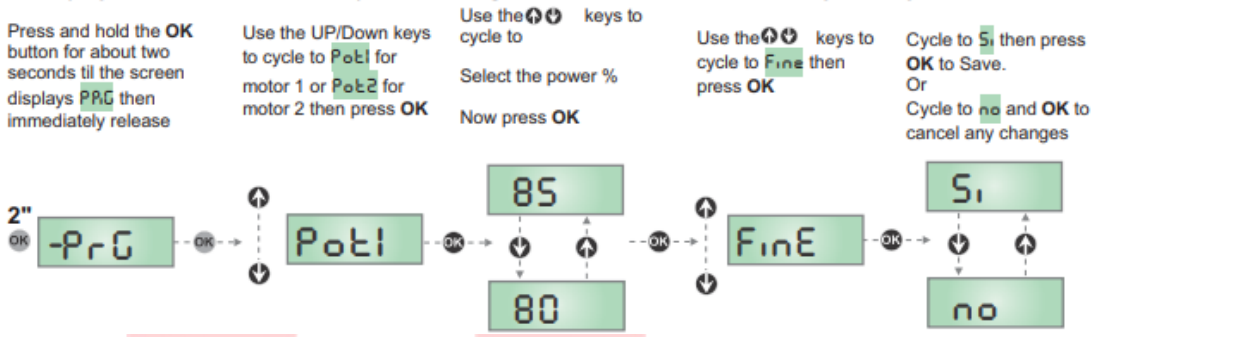
• Reset to Factory Default:

This will set all parameters to default, any changes made to the settings will be lost however remote's and other wireless equipment will remian.



- **To Adjust Motor Power During Normal Speed (Default Value is 80):**

The displayed value is the current power setting for each individual motor, they are adjustable from 30(%) to 100(%).



- **To Adjust Motor Power During Slowdown Speed (Default Value is 50):**

The displayed value is the current power setting for each individual motor, they are adjustable from 0(%) to 70(%).