

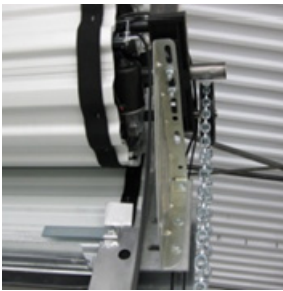
# **Pantheon**

Next Generation Door Automation



**Automatic Commercial Door Operators  
by Roll Up Doors Direct**

Pantheon is a low voltage DC commercial rolling door operator distributed by Roll Up Doors Direct. It is designed to fit neatly inside the torque tube of the rolling door, requiring no additional side room. Pantheon features the latest in electronic technology combined with innovative engineering and a patented design, and electronic limits can not be “lost” or “erased” in the event of a power failure or interruption. Pantheon is manufactured to exceed UL325 and CE requirements.



Pantheon is designed to suit a 12” drum wheel commercial series

The Pantheon commercial operator is comprised of two parts: a logic controller and a drive unit (with manual chain hoist and floor level manual release lever).



DRIVE UNIT AVAILABLE  
WITH SINGLE OR TWIN  
MOTOR TO SUIT DOOR  
SIZE



### Drive Unit Features:

- Low voltage DC motors
- Internal planetary gearing mechanism
- Soft start—soft stop
- Electronic limits
- Floor level—cable operated manual release
- 18:1 reduction chain operation
- Requires no additional side room for fitment

### Integrated Accessories

- Photo electric sensors (photo eyes)
- External radio receivers and transmitters
- Programmable 7 day timer device
- Warning siren/warning light
- Wall switch
- Key switch

# Drive Unit Features

## Low Voltage DC motors

- Thermal overload protection device to UL325
- Single or twin motor drive units to suit door needs
- Quiet, safe and efficient operation

## Internal Planetary Gearing Mechanism

- Gear system that provides for great capacity to operate the rolling door
- Motor runs at optimum efficiency—gear system does the “work”
- Ensures smooth operation and promotes long operator service life—tested to 80,000 cycles

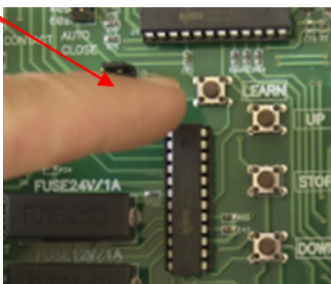
## Soft Start—Soft Stop

- Software designed to reduce, or soften, the load exerted on the motor during the start of the operation and the stop
- Promotes greater operator service life and ensures smooth operation in both directions

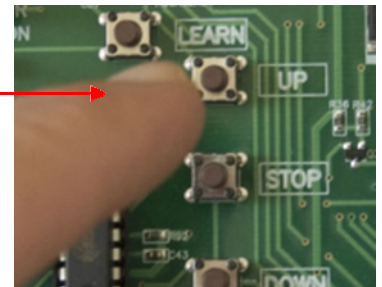
## Electronic Limits

- Unique electronic and mechanical design that enables the required opening and closing positions to be set electronically and retained despite any main power fluctuation or interruption
- Simple three step process—no cams, levers, screws or micro switches

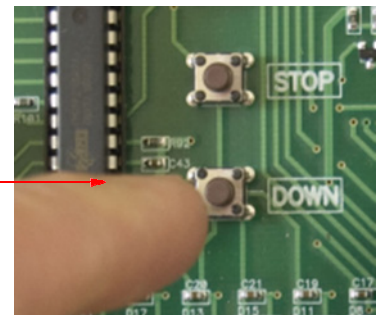
1. Press **Learn** to Commence



2. Press **Up**: Move door to required **open** position—press **learn** to confirm position and commence learning of closed position



3. Press **Down**: Move door to required **closed** position—press **learn** to confirm position and commence automatic check of both settings



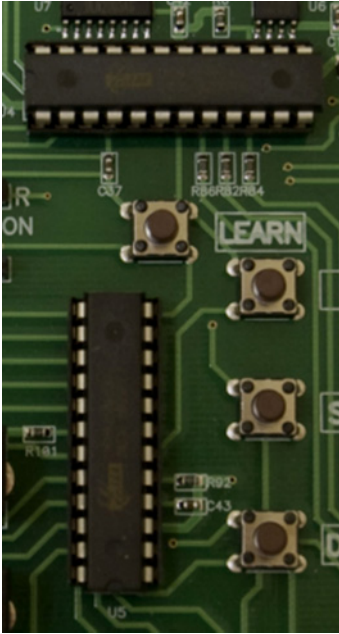
## Floor Level—Cable Operated Manual Release

- No power = no lights!
- No need for a ladder
- Simple activation of the lever will enable the door to be operated manually
- Manual activation disconnects power to motor and is monitored on logic controller status indicator panel

## 18:1 Reduction Chain Operation

- Patented design
- Effortless operation of the rolling door in the manual condition
- Chain wheel can be located to accommodate structure involved

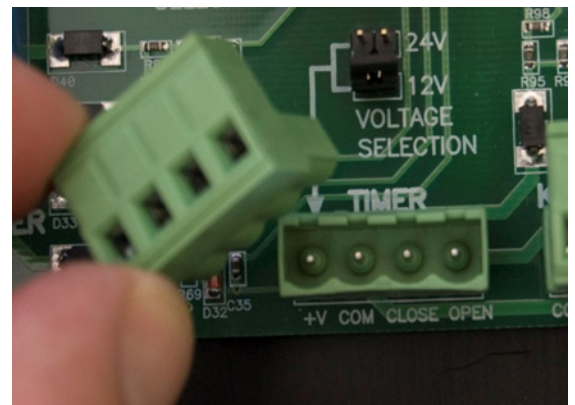
## Twin CPU Processors



- Designed to offer increased operational capacity
- Computing power equivalent to early PCs
- 8 bit processors with 4K x 13 bit OTP ROM
- Processors designed with high speed low power CMOS technology

## Plug in Style Terminal Connectors

- For the simple and reliable connection of all external accessories
- Clearly marked for identification
- Remove
- Connect the appropriate wires
- Replace

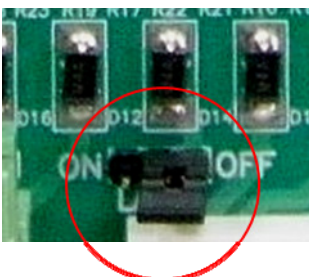
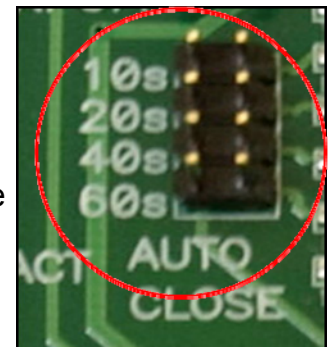


## UP, DOWN, STOP Buttons and Status Indicator Panel

- Flush mounted buttons
- Illuminated LED status indicator panel

## AUTO Close

- Selectable if required for auto closing of the door after a prescribed period of time
- In the event that the closing sequence is interrupted and the door returns to the fully open condition, the timer will reset automatically and commence the countdown process



## Momentary or Constant Contact to Close

- Selectable to suit
- V3 boards onwards
- Enabling momentary contact will convert DOWN or closing button to single contact to operate as opposed to constant or hold to run operation

# Logic Controller Features

## Diagnostic Fault System

- Designed to provide a series of audible “beep” sounds to indicate certain fault conditions
- Simple trouble shooting process intended to quickly identify and resolve fault conditions
- From...No “beep” = check the power is ON
- Right through to Three “beeps” = possible overload condition

## Maximum Run Time

- Software will automatically limit the run time of the operator to 60 seconds
- Generally the operating time will be less than 30 seconds
- This feature is intended to prevent damage to the operator in the event of a mechanical problem with the door or in the unlikely event that the overload or sensitivity software has failed to detect a fault

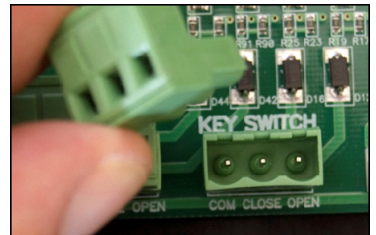
## Alarm

- Plug in terminal connection provides constant 12 V DC signal in the event that an attempted forced entry is detected by the operator
- Simple interface with external alarm device—consult alarm manufacturers for details



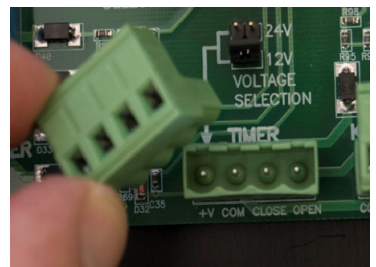
## Key Switch—Connection

- Plug in terminal connection for simple wiring of external key switch device



## Timer Device—Connection

- Plug in terminal connection for simple wiring of external timer device such as may be required to open or close the door automatically during 24 hour (7 day) period
- 12 or 24 V DC power available to suit device

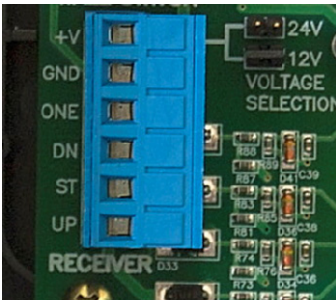
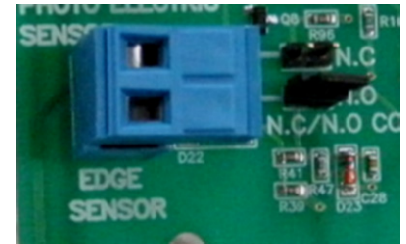


## Photo Electric Sensor—Connection

- Plug in terminal connection for simple wiring of photo electric sensor—external entrapment protection device

## Edge Sensor Device—Connection

- Plug in terminal connection for simple wiring of two wire edge sensor—external entrapment device
- NC or NO contact selection



## External Receive Device—Connection

- Plug in terminal connection for simple wiring of external receiver device
- 12 or 24 V DC power available to suit device

## Electronic Sensitivity

- This feature allows for the characteristics of the door to be effectively learned by the logic controller
- A curtain size setting establishes the basic operating criteria
- Fine tuning can then be performed—for both opening and closing operations, and by careful adjustment to ensure that the operator can accommodate any variance



## Auto Reversing

- An inherent safety feature that, when adjusted correctly in conjunction with the electronic sensitivity, will cause the operator to stop and reverse its downward closing motion if it encounters an obstruction
- In such an event the operator will detect the obstruction and reverse the direction of the closing door, returning it safely to the fully open position
- This feature **does not** replace the requirement for an external entrapment protection device, but is an added inherent safety feature

## Handing Option

- This allows for the drive unit to be fitted to either the LH or the RH side of the door
- Although selectable, this must be specified at the time of ordering so that the door may be manufactured to accommodate the fully concealed fitment of the drive unit within the torque tube assembly of the door

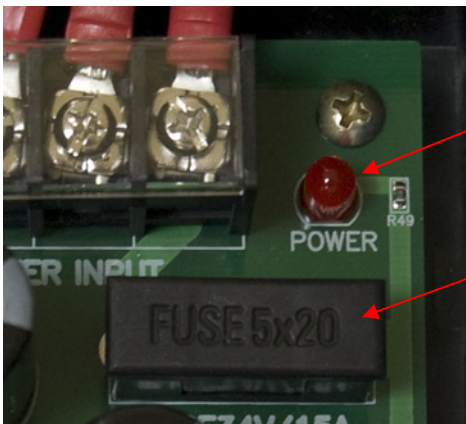


## Fuse Protection

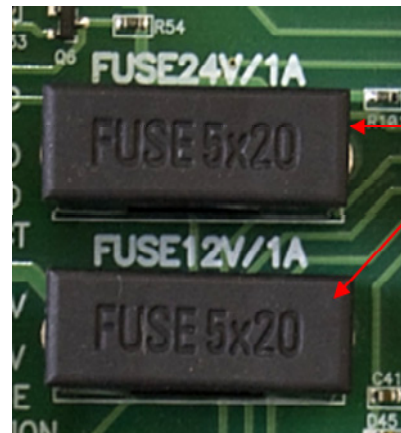
- Replaceable “slow blow” type fuses are fitted where required to provide protection for the circuit board and where external accessories require DC power from the logic controller

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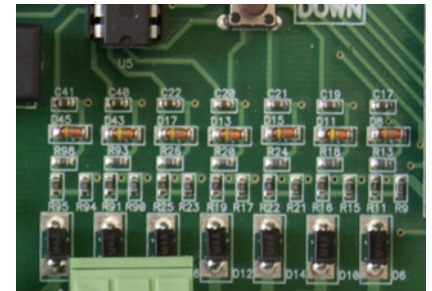
CIRCUIT BOARD  
POWER INDICA-  
TOR LED LIGHT  
AND PROTECTION  
FUZE



DC OUTPUT POWER  
PROTECTION FUZE FOR  
EXTERNAL ACCESSO-  
RIES

## External Wiring Protection Array

- A specifically designed array of diodes and current limiting resistors intended to limit the effects of poor or incorrect site wiring to external devices
- In the unintentional event of incorrect wiring connections, the operator will not function



## External Entrapment Protection—Monitoring

- Effective as of August, 2010, UL325 will deem that where an external entrapment device is connected as required, it shall be monitored by the software
- The logic controller will not permit the operator to function to close if the entrapment device is faulty unless the DOWN button is activated by constant contact

## Toroidal Transformer

- Superior performance and consistent power supply
- More efficient than traditional “iron block” style
- Manufactured to exceed UL specifications



## Main Power Fuse and Isolation Switch

- Designed to allow the qualified technician to switch the main power when making external connections to the circuit board
- Fuse protection for main supply 110V AC

The new Pantheon electric door operator from Roll Up Doors Direct is a unique new technology designed to make installation as easy as 1-2-3.

The Pantheon Operator is a stronger and easier to install DC motor operator for today's door industry, featuring a simple floor level manual release system, soft start and soft stop operation. The electronic limits of the operator can be controlled in three easy steps:

Once in the learn mode -

- Press a "learn" button to move the door to the open position... then
- Press a "learn" button to move the door to the closed position
- Press the "learn" button a final time... and that's it!

There's no moving switches or adjusting cams to get the door to open and close to the required position. Setting the limits on the operator is easier than programming a cell phone, and user friendly for anyone to operate. In the event of a power failure – once the power comes back on the door does not have to be reprogrammed – the logic control retains the memory and will operate seamlessly.

### Key Features and Benefits:

- Pantheon operators use low voltage DC motors, which are more quiet and efficient than standard AC motors.
- In the event that the door needs to be operated in the manual condition, the operator can be converted to manual operation with the simple movement of a lever. The door is then operated with minimal effort with a 18:1 chain reduction hoist.
- The operator is controlled by a logic control which offers a soft start – soft stop feature, ensuring that the motors are not subjected to undue stress during the starting and stopping sequence. The door will come to rest gently and smoothly, helping to prolong the motor life.
- The logic control has individually-controlled opening and closing force adjustments to compensate for small operational imbalances, which ensures that the door is operating at its optimal level.
- Connections of external devices are simple and easy to complete with removable plug sockets, which allow the wiring to be done away from the logic controller and then simply plugged into the required position.
- A specifically-designed receiver unit and radio transmitter can be connected if required to enable the operator to be controlled by remote control.
- Electronic limits can not be "lost" or "erased" in the event of a power failure or interruption.
- The logic controller has a front panel, which features a simple LED indicator that provides essential status information as well as UP, DOWN and STOP operation.
- The logic controller has been designed with software and features to ensure that it complies with the new UL325 standard, effective in 2010.
- Increased strength – the internal reduction gear system enables the motor to lift the door easily, which reduces stress and prolongs the motor's life.
- Easier to install – electronic limits help save the installer time and effort
- Floor level manual release – a simple cable device enables the door to easily be switched to manual operation from ground level.
- Warranty – operators come with a 1 year warranty against defects and workmanship.
- Also available in Mini (a single motor, 9 ½" version) and HD (a dual motor 12" version)



Pantheon operators are distributed by:  
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