

# Digi-Code

## AUTO LOGIC

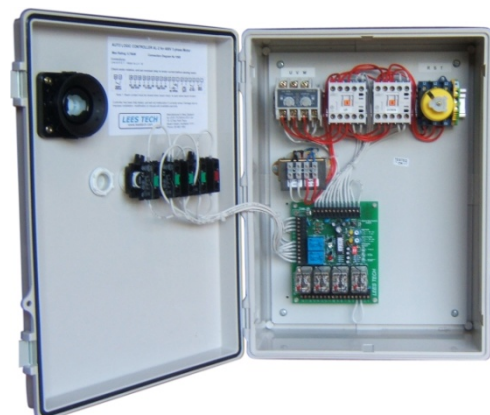
### CONTROLLER AL-2 v.2

**LEES TECH**  
www.leestech.com

Complete stand alone, multi function, automatic Door Controller for three phase motor or with integral VSD for single phase supply and three phase motor, providing soft start, soft stop, and speed control.

Optional Radio Remote Control Receiver.

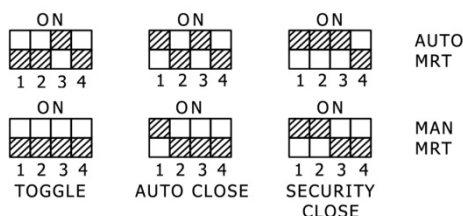
Type	Max Rating	Diagram
3 phase	2.2kW	1068
1/3 phase VSD	1.5kW	1071
1 phase	0.75kW	1069



## OPERATION

Controller is configured to desired function, (Toggle, Auto Close or Security Close), by setting Dip Switch on PCB.

Switch 3 sets MRT mode. ON = AUTO, OFF = MAN



**TOGGLE** DS 1 OFF DS2 OFF (similar to domestic garage operator, with radio remotes)

Door opens on impulse, and stops on UP limit switch.

Next impulse closes door, which stops on DOWN limit.

If impulse received while door is opening, before reaching UP limit switch, it will stop, until a further impulse is received, which will close door.

If impulse received while door is closing, before reaching DOWN limit switch, it will pause, and open fully.

If beam broken during closing, door will pause, and open fully.

**AUTO CLOSE** DS 1 ON, DS 2 OFF

Door opens on impulse, closes after set time delay 3-60 seconds.

Timer starts when UP limit switch operates, i.e. door fully open.

If beam broken during closing, door will stop, and open fully.

If input contact is maintained, door will open and remain open, until input contact is opened.

**SECURITY CLOSE** DS 1 ON, DS 2 ON

Door opens on impulse, closes 1.5 seconds after vehicle passes safety beam, even if not fully open.

If door is opened and no vehicle passes beam, then Auto Close will close door.

If input contact is maintained, door will open and remain open, until input contact is opened.

*Warning:* Security Close may not be suitable if vehicles towing trailer are employed!

## COMMON FEATURES

On power up, door will default to DOWN, unless beam broken.

Door is operated by impulse from input contact, and is stopped by limit switch, at UP or DOWN position.

Door can be opened and closed from "Building Management System" during business hours, and after hours/weekends/holidays, with Access Control Equipment (card reader, key pad, key switch, Prox etc). For AC and SC functions, a maintained contact on terminals 1 & 2 (instead of impulse), will open door, and it will remain open, until terminals opened, when door will close.

Controller is fitted with reversal timers, to ensure a small delay, (1.5 second) before reversing, in case door is reversed, before reaching limit. (This is to prevent mechanical damage to gearbox or chain)

With AUTO / MANUAL key switch in MANUAL position, door will open and close under control of UP & DOWN pushbuttons, until switch moved to AUTO position, when door will close.  
In AUTO position the UP button can be used to open and close door from controller. If this feature is not wanted, remove connections from terminals 19 & 20.

Max Run Timer is provided to stop door if limit switch does not operate

On operation of Max Run timer, door shuts down, next impulse will start door again.

Terminals are provided to allow door to be disabled when security system is armed.

Contacts to provide remote status indication are provided. Beam Status terminals are provided

Pre-wired terminals for mains, motor, limit switches, Radio Receiver, P/E beam etc.

All remotes are 24V AC, enabling adjustment of limit switch, photoelectric beam unit etc by non-electrical staff.

## CONNECTIONS

Line and Motor as wiring diagram. Limit Switches: UP to 7 & 8 DOWN to 7 & 9

Beam SB-3 NC (1 & 2) to 3 & 4, 24VAC supply to 5 & 6  
(contact must be closed when beam is intact)

LRX-1E Radio Receiver: Red wire to 27, black to 28, grey to 25 & 26

Check motor rotation before operating door – to reverse rotation refer to wiring diagram.

## SETTINGS

**Safety Beam:** mount, connect and align as Instructions.  
Contact must be closed when beam is intact, i.e. open when beam is broken.  
It is important to mount the receiver on the side most sheltered from the setting sun.

**Auto Close Timer:** set with Potentiometer on Printed Circuit Board. LED will light when timer operates.

**Max Run Timer:** set mode to Auto or Manual on Dip Switch 3, ON = Auto, OFF = Manual

In AUTO mode run time of door is recorded on each complete cycle, and if this time is exceeded by 5 seconds door will shut down.

In MANUAL mode, set timer to trip after desired over-run time, say 2 seconds.

For quick simple install, use auto MRT - for precise motor time, set with timer in manual MRT mode

The MRT LED will be illuminated while the motor run timer is running. If the limit does not get hit when the timer is running the MRT will flash (error shutdown). If the motor hits the limit the LED will turn off (later) when the MRT time expires. This extra time is the margin you have between the door travel time and the MRT time.

**Overload:** set to motor current.

**Radio Remote Receiver:** Mount and connect receiver and program remotes as instructions.

MAX RUN<sub>(MAN ONLY)</sub>



AUTO CLOSE



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