

MANUAL LIMAX 2M v2

Use Top Car Station board to steps A, B.

Use main board to steps C, D, E...

A HOW TO CONFIGURATE THE LIMAX UNIT (New Unit Set UP):

After a new Limax unit installation or replacement, change the Tx time to 10 ms.

1. Turn On the unit.
2. Make C03 = 023, (password)
3. Put the unit into Stop Mode. C00 = 002
4. Change Tx time to 10ms. C00= 004
5. Save it. C00 = 005
6. Put the unit into Operational Mode. C00 = 001

Limax Unit Modes:

- 001 = Operational
- 002 = Stop mode
- 003 = Preoperational
- 004 = Change Tx time to 10 ms
- 005 = Save

B HOW TO CONFIGURATE THE SHAFT INFORMATION (New Shaft Set UP):

- 1 Make C03 = 013, (password).
- 2 C00 = 33 = Learn car lowest point into the shaft. (When overrun)
- 3 C00 = 1 = Learn first floor level.
- 4 C00 = 34 = Learn access Bottom.
- 5 C00 = 2..to (n-1) = Learn intermedium floor levels. n = Max Stops.

- 6 C00 = 35 = Learn Access Top.
- 7 C00 = n = Learn last floor level. n = Max Stops.
- 8 C00 = 36 = Learn car highest point into the shaft. (When overrun)

Limax FAULT CODE:

- 01 = FLOOR NOT PROGRAMMED, ENCODER POSITION = 0X00
- 02 = NEXT FLOOR UP WITH ENCODER LOWER VALUE
- 03 = ENCODER READING BELOW MIN POSITION
- 04 = ENCODER READING ABOVE MAX POSITION
- 05 = STOP SWITCH
- 09 = CONTROLLER COM OFF

Limax STATUS: bXX, XX floor position. Normal operation.

HbT = Sensor Heartbeat.

C PARAMETERS(P):

Into de main board, C03 = 010, (password)

MENU P00, P01...

- 00 CAR NUMBER
- 01 MAX PEOPLE
- 02 SPD COMPENSATION
- 03 STOPS
- 04 DRIVE FAULT
- 05 SAFETY
- 06 TIME OPENING
- 07 TIME CLOSING
- 08 CHOOSE DRIVE
- 09 CHOOSE ACCESS
- 10 PREOPENING
- 11 RELEVELING

- 12 LOWEST FLOOR
- 13 ENCODER ADJUST
- 14 RELOCATE FLOOR
- 15 TIME AXL ON
- 16 TIME AXL OFF
- 17 TIME UP ON
- 18 TIME UP OFF
- 19 TIME DOWN ON
- 20 TIME DOWN OFF
- 21 TIME RVO OFF
- 22 DOOR TIME
- 23 PARQUING FLOOR
- 24 EMERGENCY FLOOR
- 25 FIREMAN FLOOR
- 26 ACCESS FLOOR0
- 27 ACCESS FLOOR1
- 28 ACCESS FLOOR2
- 29 ACCESS FLOOR3
- 30 ACCESS FLOOR4
- 31 ACCESS FLOOR5
- 32 ACCESS FLOOR6
- 33 ACCESS FLOOR7
- 34 ACCESS FLOOR8
- 35 ACCESS FLOOR9
- 36 ACCESS FLOOR10
- 37 ACCESS FLOOR11
- 38 ACCESS FLOOR12
- 39 ACCESS FLOOR13
- 40 ACCESS FLOOR14
- 41 ACCESS FLOOR15
- 42 ACCESS FLOOR16
- 43 ACCESS FLOOR17
- 44 ACCESS FLOOR18
- 45 ACCESS FLOOR19
- 46 ACCESS FLOOR20

- 47 ACCESS FLOOR21
- 48 ACCESS FLOOR22
- 49 ACCESS FLOOR23
- 50 ACCESS FLOOR24
- 51 ACCESS FLOOR25
- 52 ACCESS FLOOR26
- 53 ACCESS FLOOR27
- 54 ACCESS FLOOR28
- 55 ACCESS FLOOR29
- 56 ACCESS FLOOR30
- 57 ACCESS FLOOR31
- 58 CLOSING OPTIONS
- 59 SOUND LEVEL
- 60 AUTOMATIC RESCUE
- 61 TUR
- 62 HS DN DISABLE
- 63 HS UP DISABLE
- 64 ETS ENABLE
- 65 SPEED CHANGE
- 66 STOP ENABLE
- 67 FAN TIMER
- 68 LIGHT TIMER

D DISTANCES(d)

The floor heights are learned when shaft learning active, prior to that is necessary to configure the next parameters:

00 FLOOR HEIGHT 0...31(during shaft learning)

32 HIGH SPD DIST (mm)

33 INTER SPD DIST (mm)

34 MAX SPEED (during shaft learning)

35 MIN SPEED (during shaft learning)

36 FLOORS LEARNED (during shaft learning)

37 NORMAL DIST (mm)

38 ETS DIST (mm)

39 TOT TRAVEL TIME (during shaft learning)

WHEN SHORT FLOOR USE: P33 = INTERMEDIUM SPEED CHANGE.

P32 = HIGH SPEED CHANGE.

E SHAFT LEARNING:

WHEN DONE WITH THE LIMAX UNIT AND MAIN BOARD CONFIGURATION, USE THE CONTROLLER KEYPAD TO GO INTO MENU COMMANDS, SHAFT LERNING:

Use Main Board.

- 1 SHAFT LEARNING, C02 = 001
- 2 NTS, NORMAL TESTING, C02 = 002
- 3 ETS, EMERGENCY STOP TESTING, C02 = 003.
- 4 OVER TRAVEL TESTING, ALLOWS CAR TRAVEL UP OR DN AFTER HITS THE NORMAL, C02 = 004.

F FLOOR LEVELS:

In order to adjust the floor levels, use the two options below, the step number one is to get the car into one inch range from level, step number two is for the floor level finest adjustment.

- 1 GROSS FLOORS POSITION ADJUSTMENT:

Go to menu ABS ENCODER and adjust the floor position, if the floor position is low increase de Hex value, if the floor position is high decrease the hex value.

2 FINE FLOORS LEVEL ADJUSTMENT:

Go to menu Levels on the main board and adjust the floor level value, add if the car is short to reach floor level, decrease if the car over run the floor level. Controller has to be on inspection and use parameter C03(password) to grant modifications.

LEVELS(L):

L00 = FLOOR 0 LEVEL UP, VALUE 0 TO 100mm

L01 = FLOOR 0 LEVEL DN, VALUE 0 TO 100mm

L02 = FLOOR 1 LEVEL UP, VALUE 0 TO 100mm

L03 = FLOOR 1 LEVEL DN, VALUE 0 TO 100mm

L04 = FLOOR 2 LEVEL UP, VALUE 0 TO 100mm

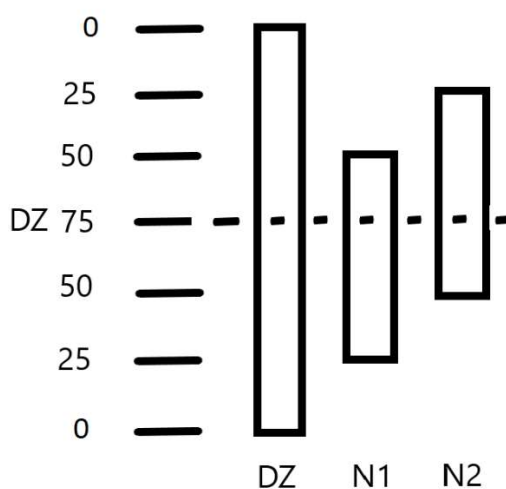
L05 = FLOOR 2 LEVEL DN, VALUE 0 TO 100mm

L06 = FLOOR 3 LEVEL UP, VALUE 0 TO 100mm

L07 = FLOOR 3 LEVEL DN, VALUE 0 TO 100mm

L...

Menu L on Top Car Station allows to visualize the floor level values.



DOOR ZONE = 150mm(+/-75mm)

N1 = 75mm, +/-25mm.

N2 = 75mm, +/-25mm.

G SAVE SHAFT LEARNING INTO THE CONTROLLER:

After done with the adjustments, Put the car into inspection, and make the parameter on the top car station board C03(password)=013, it will save the floor ABS encoder values into the controller.

H DOWNLOAD THE PARAMETERS TO THE TOP CAR STATION:

Put the car into inspection mode, on main board make parameter C03=010 to send the parameters and floor levels information into the top car station board, confirm the information on the top car station board, then make the parameter C03 = 013 to transmit the ABS floor position, confirm the information on the top car station board.

Top Car Station I/O

INPUTS(I):

I00= LIMAX HEARTH BEAT

I04= LIMAX SENSOR STATUS

I12= LIMAX ABS ENCODER POSITION

OUTPUTS(o):

O00[0] = BINARY;

O01[1] = FLAGS;

0X01, DOOR_ZONE

0X02, FLOOR_LEVEL;

0X04, SDU

0X08, SDD

0X10, SPEED_CHANGE_UP

0X20, SPEED_CHANGE_DN

0X40, N1_LEVEL_UP

0X80, N2_LEVEL_DN

O02[2] = FLAG2;

0X01, DOOR_ZONE1

0X02, DOOR_ZONE2

0X04, ACCESS_ZONE

0X08, LTR

0X10, NM1//TOP

0X20, NM2//BOTTOM

0X40, ETS

0X80, EBS

O03[3] = CAR_SPEED;

O04[4] = PPOUT;

0X01, OUTCAN1

0X02, OUTCAN2

0X04, OUTCAN3

0X08, OUTFAULT

0X10, OUTLEVEL1

0X20, OUTLEVEL2

0X40, OUTPFS

0X80, OUTPFB

O05[5] = PPI2;

O06[6] = OUTPUTS1;

BIN0

BIN1

BIN2

BIN3

0X10, FDW

0X20, FUP

0X40, LIGHT

0X80, FAN

O07[7] = OUTPUTS2;

0X01, RFL

0X02, RDOOR_ZONE

0X04, RCD_L2

0X08, RCD_L1

0X10, RCD2

0X20, ROD2

0X40, RCD1

0X80, ROD1

O08[8] = KEYS;

0X01, ODP1

0X02, CDP1

0X04, PH2

0X08, DH

0X10, INDP

0X20, ACCESS

0X40, ODP2

0X80, CDP2

O09[9] = LIMITS;

0X01, OPEN_LIMIT1

0X02, CLOSE_LIMIT1

0X04, OPEN_LIMIT2

0X08, CLOSE_LIMIT2

0X10, OBSTRUCTION1

0X20, OBSTRUCTION2

0X40, PHOTOCCELL1

0X80, PHOTOCCELL2

O10[10] = CAR;

0X01, EMPTY

0X02, FULL
0X03, OVERLOAD
0X04, INSPECTION
0X10, INSP_UP
0X20, INSP_DN
0X40, INSP_OPEN
0X80, INSP_CLOSE

O11[11] = From Controller(SENALES3);

0X01 CP1
0X02 AP1
0X04 CP2
0X08 AP2
0X10 OUT_LLAVIN
0X20 ELECTROGENO
0X40 CIERRE_L1
0X80 CIERRE_L2

PARAMETERS(P):

MENU P00, P01...

00 = STOPS (INSTALLATION FLOORS)
01 = ACCESS FLOOR1, 0= FIRST, 1 = SEC, 2 = BOTH
02 = ACCESS FLOOR2, 0= FIRST, 1 = SEC, 2 = BOTH
03 = ACCESS FLOOR3, 0= FIRST, 1 = SEC, 2 = BOTH
04 = ACCESS FLOOR4, 0= FIRST, 1 = SEC, 2 = BOTH
05 = ACCESS FLOOR5, 0= FIRST, 1 = SEC, 2 = BOTH
06 = ACCESS FLOOR6, 0= FIRST, 1 = SEC, 2 = BOTH

- 07 = ACCESS FLOOR7, 0= FIRST, 1 = SEC, 2 = BOTH
- 08 = ACCESS FLOOR8, 0= FIRST, 1 = SEC, 2 = BOTH
- 09 = ACCESS FLOOR9, 0= FIRST, 1 = SEC, 2 = BOTH
- 10 = ACCESS FLOOR10, 0= FIRST, 1 = SEC, 2 = BOTH
- 11 = ACCESS FLOOR11, 0= FIRST, 1 = SEC, 2 = BOTH
- 12 = ACCESS FLOOR12, 0= FIRST, 1 = SEC, 2 = BOTH
- 13 = ACCESS FLOOR13, 0= FIRST, 1 = SEC, 2 = BOTH
- 14 = ACCESS FLOOR14, 0= FIRST, 1 = SEC, 2 = BOTH
- 15 = ACCESS FLOOR15, 0= FIRST, 1 = SEC, 2 = BOTH
- 16 = ACCESS FLOOR16, 0= FIRST, 1 = SEC, 2 = BOTH
- 17 = ACCESS FLOOR17, 0= FIRST, 1 = SEC, 2 = BOTH
- 18 = ACCESS FLOOR18, 0= FIRST, 1 = SEC, 2 = BOTH
- 19 = ACCESS FLOOR19, 0= FIRST, 1 = SEC, 2 = BOTH
- 20 = ACCESS FLOOR20, 0= FIRST, 1 = SEC, 2 = BOTH
- 21 = ACCESS FLOOR21, 0= FIRST, 1 = SEC, 2 = BOTH
- 22 = ACCESS FLOOR22, 0= FIRST, 1 = SEC, 2 = BOTH
- 23 = ACCESS FLOOR23, 0= FIRST, 1 = SEC, 2 = BOTH
- 24 = ACCESS FLOOR24, 0= FIRST, 1 = SEC, 2 = BOTH
- 25 = ACCESS FLOOR25, 0= FIRST, 1 = SEC, 2 = BOTH
- 26 = ACCESS FLOOR26, 0= FIRST, 1 = SEC, 2 = BOTH
- 27 = ACCESS FLOOR27, 0= FIRST, 1 = SEC, 2 = BOTH
- 28 = ACCESS FLOOR28, 0= FIRST, 1 = SEC, 2 = BOTH
- 29 = ACCESS FLOOR29, 0= FIRST, 1 = SEC, 2 = BOTH
- 30 = ACCESS FLOOR30, 0= FIRST, 1 = SEC, 2 = BOTH
- 31 = ACCESS FLOOR31, 0= FIRST, 1 = SEC, 2 = BOTH
- 32 = ACCESS FLOOR32, 0= FIRST, 1 = SEC, 2 = BOTH

- 51 = HIGH SPEED DN DISABLE(INSPECTION): 1 = DN LOW SPEED
- 52 = HIGH SPEED UP DISABLE(INSPECTION): 1 = UP LOW SPEED
- 53 = ETS ENABLE: 1 = ETS ENABLE
- 54 = SPEED FLAGS OR ENCODER ENABLE: 0=ENCODER/ 1=1F, 2=2F
- 55 = STOP ENABLE: 1 = STOP ENABLE
- 56 = FAN TIMER, X 1SEC

- 57 = LIGHT TIMER, X 1SEC
- 58 = NORMAL DISTANCE (mm)
- 59 = SPEED FLAGS DISTANCE/10(mm)
- 60 = ETS DISTANCE/10(mm)
- 61 = SLOW DN DISTANCE/10(mm)

LEVELS(L):

- L00 = FLOOR 0 LEVEL UP, VALUE 0 TO 100mm
- L01 = FLOOR 0 LEVEL DN, VALUE 0 TO 100mm
- L02 = FLOOR 1 LEVEL UP, VALUE 0 TO 100mm
- L03 = FLOOR 1 LEVEL DN, VALUE 0 TO 100mm
- L04 = FLOOR 2 LEVEL UP, VALUE 0 TO 100mm
- L05 = FLOOR 2 LEVEL DN, VALUE 0 TO 100mm
- L06 = FLOOR 3 LEVEL UP, VALUE 0 TO 100mm
- L07 = FLOOR 3 LEVEL DN, VALUE 0 TO 100mm
- L...