

GSM Master Lift Access Control Interface / ECA Model MLI-320

General Information

This smart access control system allows achieving a high security in residential buildings with lifts, to prevent from unwelcomed visitors to gain access to all floor levels of the building and limit the visitors to access **ONLY** to the floor levels that they came to visit.

This is achieved by connecting an access control system to the lift's logic control system which is located in the control room on top of the building.

The ECA Master Lift Interface (MLI) is a GSM receiver with 20 relay outputs that are connected to the lift's logic control system. The lift's control system has a special input for each floor level in the building and the number of the inputs is the same as the number of floor levels in the building.

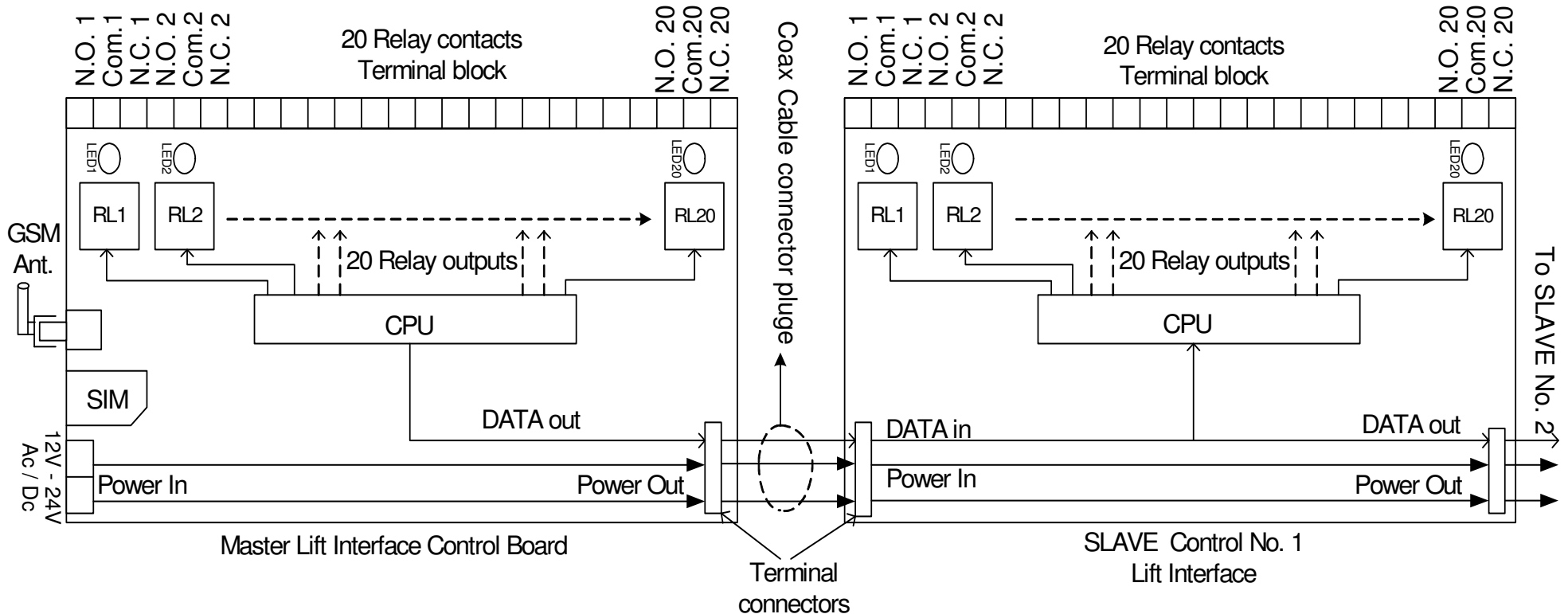
When a specific input of the lift control system is triggered by one of the relays' outputs of the MLI, the lift control system allows access **ONLY** to the floor level that its input was triggered. This will allow the visitor to press only the button of the specific floor level he visits.

It is possible to extend the MLI to control up to 120 floor levels by adding additional *Slave Lift Interface* (ECA Model: SLI-20).

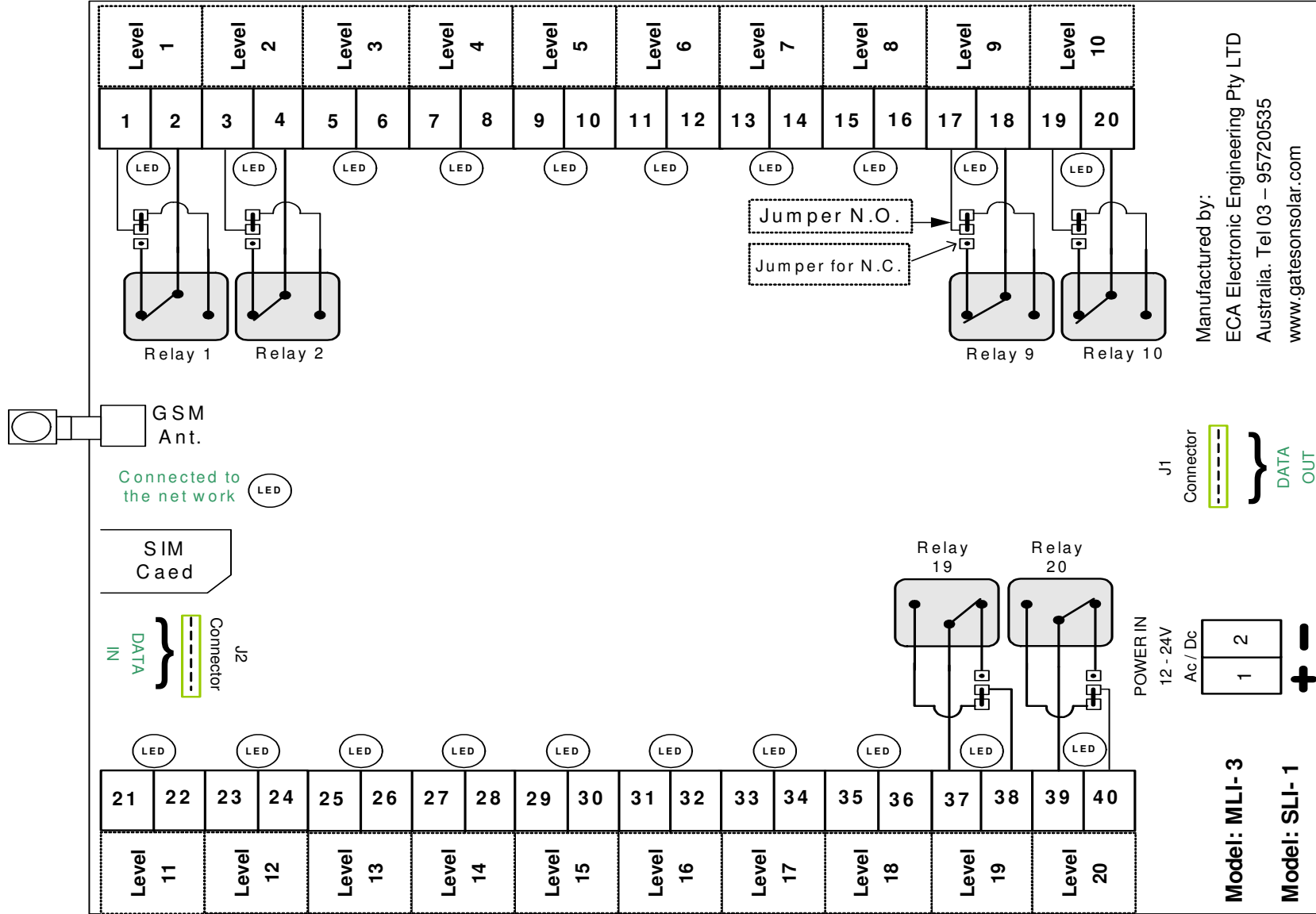
Schematic Diagram

MASTER LIFT INTERFACE

SLAVE LIFT INTERFACE



Connection Diagram



How the MLI unit works

The **Master Lift Interface (MLI)** designed to control lifts up to 120 floor levels. This is done by the 20 relays on the MLI unit and additional units of **Slave Lift Interfaces (SLI-20)** can be connected to the MLI as much as required by the data inputs / outputs.

The MLI is receives SMS command messages from the MCI3000V4 intercom units each time one of the tenants answers a call from the intercom and allows access to his visitor. All the SMS commands that the intercom system sends to the MLI, start with 4-digit password of the LMI followed by the command required.

The following SMS example send from the intercom system to the MLI is to allow access to visitors of apartment No. 950:

1234UNIT950#

The 4-gigits “**1234**” is the password that was set into the **Slave Lift Interface**

The number “**950**” is the apartment number that answered the call and opened the door.

The “**#**” meaning end of command.

Each time the MLI receives such a SMS command, it activates **the relays** that were programmed for the apartment No. 950

Installation:

1. Insert the SIM card.
2. Connect the GSM antenna. Do not cut or shorten the antenna’s cable. Extension for the Ant. cable is available if required.
3. Do not stick the antenna on to any metal surface or posts, unless it has a magnetic base.
4. Stick the antenna as high as possible to any brick wall or wooden fence or post.
5. Use 13V AC/ DC to power supply (Min 2Amp) and connect power terminals.
6. Use the relay outputs according to the number of floor levels is required in the building.
7. There are jumpers on the MLI control board next to each relay to select Normally Open or Normally Close contacts of the relay as required.
The default jumper position is N.O.
8. Program the system as required according to the owner’s manual below.

Programming the Master Lift Interface (MLI)

Password

The default password of the MLI units should be: 1234

You can change the password by sending the following SMS to the unit: **1234PWaaaa*bbbb#**

1234 : is the current password of the unit

PW : is the command to change the password of the unit

aaaa : is the old password

bbbb : is the new password

: is for end of command.

⇒ **The unit will confirm by sending SMS to the sender: The new password is: _ _ _ _**

1. Setting the Relays' pulse time interval

The default setting of the MLI is a pulse of 1 second for all the relays.

The MLI will activate the designated relays by a PULSE interval of one second, each time it gets a SMS command.

How to change the **Pulse Time Interval** of a **specific relay** by SMS message: **1234RLnnn*mmm#**

1234 : is the current password of the unit

RL : is the command to change the Pulse time interval of a **specific relay** in the unit

nnn : is the relay number (can be from 001 to 120)

mmm : is the time interval in Seconds (can be from 001 second to 999 seconds).

⇒ **The unit will reply by SMS to the sender: The pulse time was set to _ _ _ _ seconds**

How to change the **Pulse Time Interval** of **ALL the relays** by SMS message: **1234RTmmm#**

1234 : is the current password of the unit

RT : is the command to change the Pulse time interval of all the **relays** in the unit

mmm : is the time interval in Seconds (can be from 001 second to 999 seconds).

⇒ **The unit will reply by SMS to the sender: The pulse time was set for all the relays to _ _ _ seconds**

2. Checking the Local Time Clock in the unit

The unit will automatically check and set its internal TIME from the local network on Rest.

To check the internal TIME Clock of the unit send SMS as follows: **1234LT#**

⇒ **The unit should reply to the sender: The Time is __ : __ (this will be in 24 hour digit numbers from 00:01 to 23:59)**

3. SMS command messages send by the intercom to allow access to the visitor

The following format of SMS messages will be send by the intercom unit MCI3000V5E to the MLI:

1234UNITxxx#

The 4-gigits “**1234**” is the password of the **Lift Master Interface** that will receive the SMS command.

The “**UNIT**” represent the apartment / unit that answered the call.

The “**xxx**” represent the unit number that answered the call of the intercom and opened the door.

Example: SMS message that was send by the MCI3000V5E to the LMI: **1234UNIT950#**

The 4-gigits “**1234**” is the password that was set into the **Lift Master Interface**

The number “**950**” is the unit’s number that answered the call and allowed access to the visitor.

A) How to program the MLI to allow access to specific floors for each apartment number

The following format of SMS messages should be send for programming the “apartment unit number” to a relevant relay numbers:

1234UNxxx*fff,f,ff,.....,fff#

The 4-gigits “**1234**” is the password of the **Lift Master Interface** that received the SMS command

The “**UN**” represents the command to link the unit number to the relevant relay numbers (which are the floor levels).

The “**xxx**” represent the unit number

The “**ff,f,fff**” are the relay numbers that can be from 1 to 120 (up to 40 numbers) separated by the comma “ , “ sign.

⇒ **The unit should reply by SMS to the sender: Unit xxx is allowed access to levels: f, ff and fff**

Example: The SMS is an example for programming access to floors 2nd, 5th, 18th and 101st for apartment No. 3:

1234UN003*2,5,18,101#

⇒ **The unit should reply by SMS to the sender: Unit 3 is allowed access to levels: 2, 5, 18 and 101.**

B) How to program access to all floor for a specific unit number

The following SMS messages will command the MLI to allow access to all floors for a specific unit number:

1234UNxxx*ALL#

⇒ The unit should reply by SMS to the sender: **Unit xxx is allowed access to all levels.**

C) How to prevent access to all floors for a specific unit number

The following SMS messages will clear to all floors for a specific unit:

1234UNxxx*CLEAR#

⇒ The unit should reply by SMS to the sender: **Unit xxx is not allowed access to all levels.**

The “xxx” represent the unit number.

D) How to check which floor levels are allowed access for a specific apartment number

Send the following SMS messages to the MLI to check which floors are accessible for a specific unit:

1234UNxxx*CHECK#

⇒ The unit will reply by SMS to the sender: **Unit xxx is allowed access to levels: f, ff and fff**

Or

⇒ The unit will reply by SMS to the sender: **Unit xxx is allowed access to all levels.**

Or

⇒ The unit will reply by SMS to the sender: **Unit xxx is not allowed access to all levels.**

4. Test Mode

All the relays of the MLI can be tested with the following SMS message command:

1234TEST#

⇒ The unit will activate all the relays in the unit for 2 Seconds when the above SMS command is received.

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