

# COMMUNICATOR GSM WIRELESS INTERCOM

With **NO RANGE LIMIT**

## Model: GSM18V81V4 Installation & Owners' Manual

**1. Important!** It is a must to read the instructions before installing and programming the unit.

### 2. HOW THE INTERCOM SYSTEM WORKS

When the call button is pressed, the system will announce: *"Please wait and your call will be answered shortly"*.

Then, the unit will dial the FIRST phone number which was programmed in the memory for the number of rings that was programmed in the system. If the call was not answered or in case the line was busy, the unit will hang up and dial the SECOND and THIRD phone numbers which were programmed into the unit's memory. If there was no answer to any of the three phone calls, then the unit will announce: *"Your call was not answered, please try later"*.

When one of the calls is answered by the owner, he can talk with the visitor and open the pedestrian gate by pressing the HASH (#) key or opening the driveway gate by pressing the STAR (\*) key on his phone.

Then, the door station will announce: *"The gate is open. Please come in"*.

The system will hang-up the call automatically after the period of talking time it was set for.

### 3. HOW THE GSM ACCESS CONTROL WORKS

The unit can be programmed with **1000 phone numbers** to become *authorized users* that are able to open the gate with their mobile phone with no cost of a call or range limit. When an authorized user calls the SIM card of the unit, the system will hang-up the call and trigger the relay of the unit to open the gate.

If the person that called was not one of the authorized users, it will just hang up and do nothing.

### 4. The SIM CARD

You would need a MINI size SIM card to be used with this unit. Insert the SIM card into your mobile phone and make sure that you can make a call.

=> Phone the SIM card provider and cancel the Message Bank and all the other services on this SIM card.

**Note!** *Make sure that you always insert or remove the SIM card only when the unit is disconnected from the Power.*

## **INSTALLATION MANUAL**

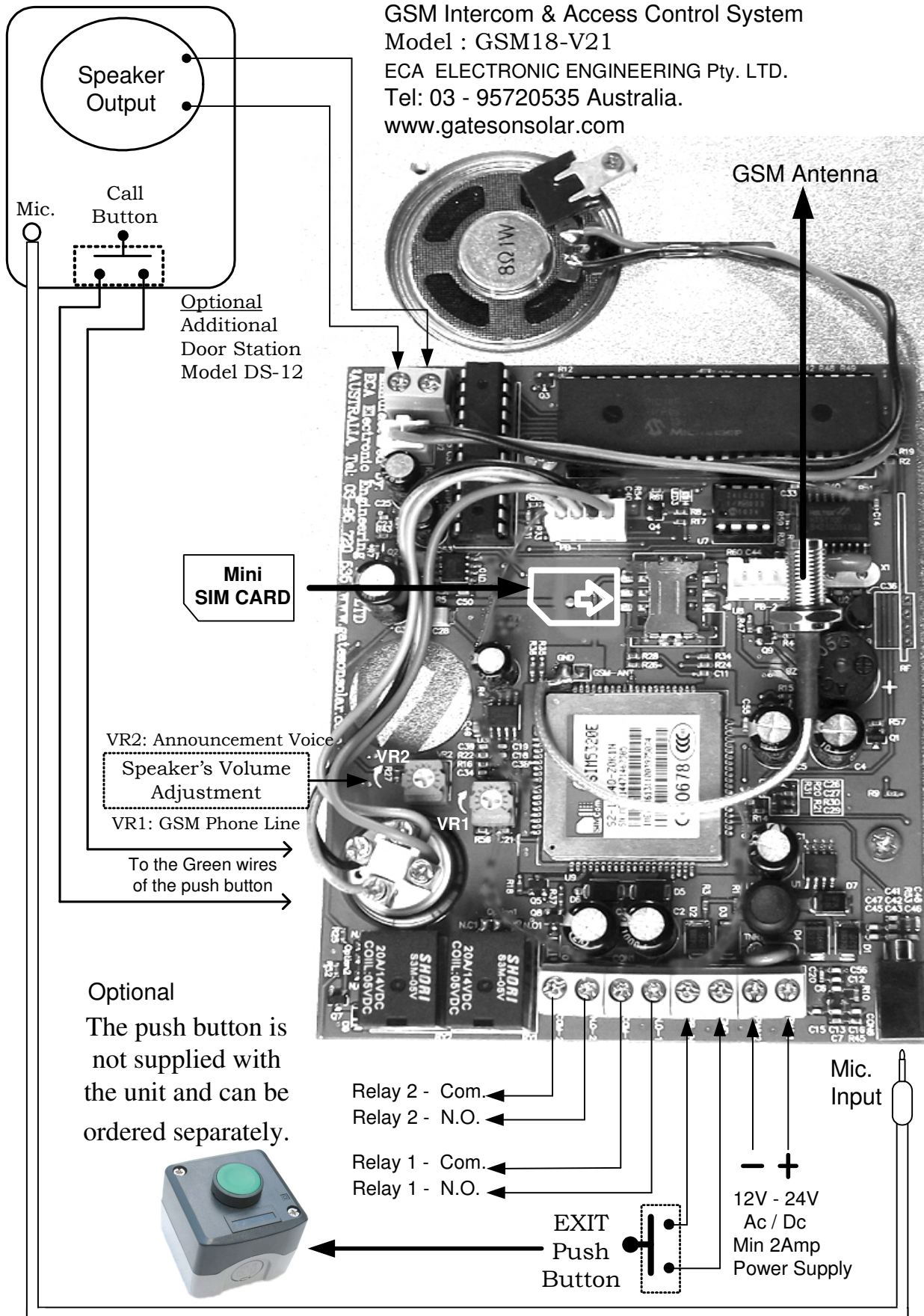
1. Insert the SIM card.
2. Connect the GSM antenna. Do not cut or shorten the antenna's cable. Install the antenna as high as possible and do not cut or solder its cable. Note! Do not attach the antenna to any metal surface. Stick it as high as possible to any brick wall or wooden fence. You can order a special antenna that is designed to be attached on a metal surface if needed.
3. The unit has two relay outputs, Relay-1 is related to the GSM access control and Relay-2 is related to the intercom system. Use the Relay-1 outputs (Com.1 and N.O.1) for any electric lock/latch to open the pedestrian gate and use Relay-2 outputs (Com.2 and N.O.2) to trigger any control panel's input, to open the driveway gate.
4. Connect 12V - 24V Dc or Ac power supply (Min 2Amp) on terminals PWN1 and PWN2 – no polarity required. A long BEEP sound will indicate POWER connection. Wait for one minute for the system to register to the network. If the SIM card is good and active, then the system will announce *"The unit is connected to the network"*. If the SIM card fails to log to the GSM network, the unit will announce: *"The unit could not connect to the network"*. In such a case, turn the power off, remove the SIM card and insert it to your mobile phone and check if you can make a call.
5. Program the system as required according to the following owner's manual.

### Important!

**SEAL WITH SLICON ALL THE BACK HOLES OF THE DOOR STATION TO PROTECT THE UNIT.**

# Connection Diagram

GSM Intercom & Access Control System  
 Model : GSM18-V21  
 ECA ELECTRONIC ENGINEERING Pty. LTD.  
 Tel: 03 - 95720535 Australia.  
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# PROGRAMMING MANUAL

## 1. Programming the phone numbers into the system.

The first three phone numbers in the system are the numbers which the unit will dial when the Call Button is pressed which are also the first three users of the GSM access control to be able to open the gate with their mobile phone with no cost of a call. All the programming and settings of this unit is done by any mobile phone using SMS messages.

### ADDING USER'S PHONE NUMBERS BY SMS COMMAND

Use the following format of SMS message to add or change user's phone numbers in the system:

**P P P P A U U U \* N N N . . . N N N #**

- The first four letters represent the **P**assword ( P P P P ). The factory default Password is 9 9 9 9
- Followed by the letter " A " that represents **A**dding (or changing) the user's phone number.
- Then ( U U U ) represent the user's memory location number, **from 001 to 999** followed by the star ( \* ) symbol.
- And then ( N N N .... N N N ) represent the phone number followed by the hash ( # ) symbol.

Example of SMS message programming the first user's phone number which is 0395720535

**9999A001\*0395720535#**

**Please Note:** The system is sensitive to **cases** and **space** between the letters.

**The system will confirm the SMS command by sending SMS message to the sender to confirm.**

#### Please note!

You can send one SMS message with multiple commands (more than one and limited to max 5 phone numbers) to add or delete users as the following format.

=> The following example is to add the first three phone numbers and delete the fourth one:

**9999A001\*0395720535#,A002\*0395720555#,A003\*0395720535#,D004#**

=> The system will confirm by SMS message to the sender as follows:

**A001\*0395720535#,A002\*0395720555#,A003\*0395720535#,D004#CONFIRMED**

## 2. Deleting users' phone numbers in the system.

You can program a new phone number instead of an old one, by simply programming a new phone number for the same memory location. The system will automatically delete the old number and replace it with the new user's phone number for the same memory location.

### ⇒ Deleting the users' phone numbers by SMS command.

Use the following format of SMS message to delete user's phone numbers in the system:

**P P P P D U U U #**

- The first four letters represent the **P**assword ( P P P P ). The factory default Password is 9 9 9 9
- Followed by the letter " D " that represents **D**eleting a user phone number.
- Then ( U U U ) represent the user's memory location number, **from 001 to 999** followed by the hash ( # ) symbol.

Example of SMS message DELETING the first phone number in the memory which is 0395720535

**9999D001#**

**=> Please Note:** The system is sensitive to **cases** and **space** between the letters.

⇒ **How to Delete ALL the users' phone numbers**

You can delete all the users' phone numbers by sending SMS command as follows:

**P P P P \* \* 0 7 #**

PPPP represent the four digits password.

The unit will reply by SMS that says: **“THIS IS A WARNING. Do you wish to DELETE all phone numbers?”**

If you wish to proceed, confirm it by sending SMS saying: **YES**

The unit will send back SMS that say: **“All phone numbers were deleted”**.

=> Please NOTE

Ignoring the warning message and not confirming it by “YES” message within two minutes, will cause the system to disregard the last command and the phone numbers would be saved and not be deleted.

**3. Confirmation SMS service by the unit**

The unit will reply by SMS message to each SMS command that was received to inform **the sender** if the command SMS message that was received was **Confirmed** or **Failed**. This service can be cancelled so that the unit does not send any SMS messages **EXCEPT for SMS command of Deleting all phone numbers**. The factory default setting is to send SMS reply to the sender which would be, repeating the SMS message command sent, followed by the word CONFIRMED or FAILED at the end of the message.

**How to Cancel or Activate the SMS service in the unit**

You can **Cancel** or **Activate** the SMS service of the unit by sending SMS command to the unit as follows:

The letters PPPP represent the four digits Password.

To cancel; send SMS **P P P P \* \* 0 8 #**

To Activate; send SMS **P P P P \* \* 0 9 #**

The unit will send confirmation SMS to the sender accordingly.

**4. How to choose the number of Rings for the first three phone numbers**

You can select the number of rings (from 1 to 9 rings) that the unit would wait for an answer, before it hangs up and dials the 2<sup>nd</sup> and the 3<sup>rd</sup> phone numbers.

**The factory default is 5 Rings (about 15 seconds) for each one of the first three phone numbers.**

**How to change the number of Rings by SMS command**

You can change the number of Rings by SMS command for each of the three phone number in the system as follows:

**P P P P \* \* 1 0 \* N R #**

The letters “PPPP” represent the 4 digit PASSWORD.

The letter “N” represents the number 1, 2, or 3 for the first, second and third phone number in the memory.

The letter “R” represents the numbers of Rings from 1 to 9. The factory default is 5.

Example:

The following SMS example shows how to program 7 Ring tones for the 3<sup>rd</sup> phone number in the memory:

**9 9 9 9 \* \* 1 0 \* 3 7 #**

The unit will send confirmation SMS to confirm accordingly.

## 5. How to select the Relay for the PUSH BUTTON input.

The *Push Button Input* can activate Relay-1 or Relay-2 according to the function that was chosen for the relay. The factory default setting for the Push Button Input is to activate RELAY-1 according to the function chosen. You can change this setting by SMS command as follows:

**P P P P \* \* 0 1 \* N #**

The letters "PPPP" represent the 4 digit PASSWORD.

The letter "N" represents the numbers 1 or 2 for Relay-1 or Relay-2 accordingly.

The unit will send confirmation SMS to confirm.

## 6. How to choose the Relays' function; Pulse or Latch

For each one of the relays 1 and 2 you can choose one of the following two functions;

MOMENTARY (PULSE) or LATCH function (ON / OFF).

The factory default setting for both the relays is a MOMENTARY function (with a 4 second PULSE).

You can change the sending the SMS command as follows:

**P P P P \* \* 0 2 \* N F #**

The letters "PPPP" represent the 4 digit PASSWORD.

The letter "N" represents the Number 1 or 2 for Relay-1 or Relay-2.

The letter "F" represents the FUNCTION, 1 for Momentary or 2 for Latch.

The unit will confirm by SMS message to the sender accordingly.

## 7. How to set the Relays' PULSE time interval

For each one of the relays 1 or 2 you can choose the time interval of the pulse, for the momentary function.

The factory default setting for both the relays is a 4 second PULSE.

You can choose the TIME interval for each one of the relays by SMS command as follows:

**P P P P \* \* 0 5 \* N T #**

The letters "PPPP" represent the 4 digit PASSWORD.

The letter "N" represents the Number 1 or 2 for Relay-1 or Relay-2.

The letter "T" represents the PULSE time:

Enter: **0** => for ½ a second pulse time.

Enter: **1** => for 1 second pulse time. (Factory Default for Relay 2).

Enter: **2** => for 2 second pulse time.

Enter: **3** => for 3 second pulse time.

Enter: **4** => for 4 second pulse time. (Factory Default for Relay 1).

Enter: **5** => for 5 second pulse time.

Enter: **6** => for 6 second pulse time.

Enter: **7** => for 7 second pulse time.

Enter: **8** => for **10** second pulse time.

Enter: **9** => for **15** second pulse time.

The unit will send confirmation SMS to confirm accordingly.

## 8. To Lock & Unlock the unit;

The unit can be LOCKED so that it will not operate or make any calls and announce "wrong command" for any attempt to make a call or open the gate.

To LOCK or UNLOCK the unit send the following SMS command:

**P P P P \* \* 0 6 \* N #**

The letters "PPPP" represent the 4 digit PASSWORD.

The letter "N" represent "1" for LOCK and "2" for UNLOCK.

The unit will confirm by SMS to the sender that says: "The system is locked" or "The system is unlocked" accordingly.

## 9. HOLD Command

The user can send SMS command and overtake control of a relay and keep it active (ON) until cancellation command is received for each one of the two relays.

When the relay is in HOLD mode, it will not function to any other command until a cancellation command is received. Instead of activating the relay, the unit will send SMS to the user that says “**Hold Command is Active**” if the user tried to open the gate with his mobile phone.

=> The user can send SMS of HOLD COMMAND to overtake control of any one of the two relays as follows:

To send HOLD command by SMS

**P P P P \* \* 0 3 \* N 1 #**

To Cancel the HOLD command by SMS

**P P P P \* \* 0 3 \* N 2 #**

PPPP represent the 4 digit PASSWORD.

The letter “ N ” represents relay 1 or relay 2.

Example of SMS HOLD command for relay 2: 9999\*\*03\*21#

The unit will send SMS to the sender to confirm Hold Command as follows: “**Confirming Relay 2 is Active ON**”

Example of SMS canceling HOLD command for relay 2: 9999\*\*03\*22#

SMS confirming t of cancelling Hold Command will be received as follows: “**Confirming Relay 2 is no longer Hold Active**”

⇒ You can send one SMS to cancel both Hold commands for both the relays as follows: 9999\*\*03\*12#, \*\*03\*22#

⇒ You can send one SMS to cancel both Hold commands for both the relays as follows: 9999\*\*03\*12#, \*\*03\*22#

## 10. How to limit the Talking Time

You can select and limit the talking time with the visitor by SMS command.

The factory default limit time is 59 second (before the next flag fall).

The system will end up each call (after the chosen “Talking Time”) by an announcement: “**END OF CALL**” .

To change the talking time by SMS command, send the SMS as follows:

**P P P P \* \* 0 4 \* T T #**

The letters “ PPPP ” represent the 4 digit PASSWORD.

The letters “ T T ” represent the time in seconds according to the table below:

Enter: **0 0** => for Zero talking time

Enter: **3 0** => for 30 seconds talking time

Enter: **5 9** => for 59 seconds talking time (**Default**)

Enter: **6 1** => for 1 Minute talking time

Enter: **6 2** => for 2 Minutes talking time

Enter: **6 3** => for 3 Minutes talking time

Enter: **6 9** => for 9 Minutes talking time

Enter: **7 0** => for 10 Minutes talking time

Enter: **9 9** => for unlimited talking time. (Not recommended).

The unit will confirm by sending SMS message to the sender as follows: “**Confirming the talking time was changed**”

## 11. How to check the next available empty memory cell in the system

In order to get the next available empty memory position in the system by SMS command, send SMS as follows:

**P P P P \* \* 1 1 \* #**

PPPP represent the 4 digit PASSWORD.

The unit will send SMS reply to the sender that says: “**The nest available position is X X X**”

The letters X X X represent three digit number (such as 055) to indicate the empty memory position.

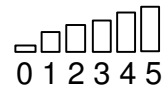
## 12. How to CHECK the GSM reception level in the area by SMS command

The unit will send SMS replay with the GSM reception level of the unit in the area by the following SMS command:

**P P P P \* \* 1 2 \* #**

The unit will reply to the sender with SMS message: "The reception level is X "

The letter "X" represents a number from "0" to "5".



## 13. OPEN TO ALL command

The unit can be programmed so that it will open the gate to ANY incoming call (without checking if the caller is authorized user). You can activate or cancel this function by SMS command as follows:

**P P P P \* \* 1 3 \* N #**

PPPP represent the 4 digit PASSWORD.

The letter N represent the numbers "1" to Activate or the number "2" to Cancel the command.

The unit will reply by the following SMS to the sender:

When the OPEN TO ALL is activated (9999\*\*13\*1#) the system will send SMS saying: [Open to all is activated.](#)

When the OPEN TO ALL is cancelled (9999\*\*13\*2#) the system will send SMS saying: [Open to all is cancelled.](#)

## 14. How to change the PASSWORD

The factory default password is 9999.

You can change the password by sending the following SMS message:

**P P P P \* \* 1 4 \* W W W W #**

The letters P P P P represent the old password

The letters W W W W represent the new password.

The unit will confirm by SMS replay: "The new password is X X X X"

The letters X X X represent the new password.

## 15. How to set the system to factory default settings.

To set the unit to "Factory Default Settings" means the unit will delete all the phone numbers, reset all the functions to factory default parameters as was supplied initially.

To do set the unit to Factory Default you need to send the following SMS command:

**P P P P \* \* 0 0 \* #**

PPPP represent the four digits password.

The unit will reply by SMS back that says: "THIS IS A WARNING. Do you wish to DEFAULT the system? "

You should confirm within 2 minutes by sending SMS message that says YES if you wish to proceed, otherwise, the system will ignore this command and do nothing.

If confirmed, then the unit will send back SMS that says: "The unit was set to ECA Factory Default".

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