



Automation Systems
AUSTRALIA

TEKNO 4V

4G VOLTE Intercom System



Specifications

Power: 12V-15V DC

Consumption: <45mA Standby, <130mA Initialisation and calling

IP Rating: Ip54

Sim Card Size: Nano

VOLTE: YES

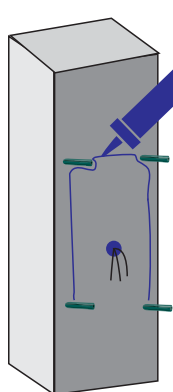
Network: 4G TDD: 2300(B40)>FDD

2100(B1)/1800(B3)/2600(B7)/900(B8)/1900 (B2)/1700(B4)/850 (B5)/700APT(B28)

About

The Tekno 4V is a 4G Volte Compliant intercom and a cutting edge solution for installations that have no access to intercom wiring, an internet connection or any other intercom solution. Using the mobile network allows for unrestricted use of the system providing good mobile network reception is available. The system can work with all telco providers such as Telstra, Optus, Vodafone and any other providers using there networks (Boost, Amaysim, Aldi, Kogan etc)

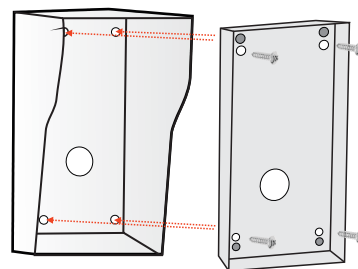
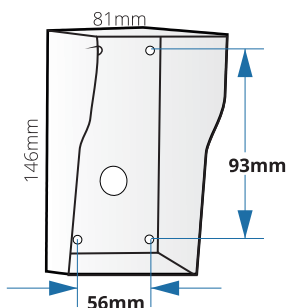
Installation



1. Pre drill 6mm holes if using the supplied wall plugs (93x56mm).

2. Silicone the top, sides and cable hole to prevent ingress from the rear.

Apply directly to wall or backside of the rain hood.

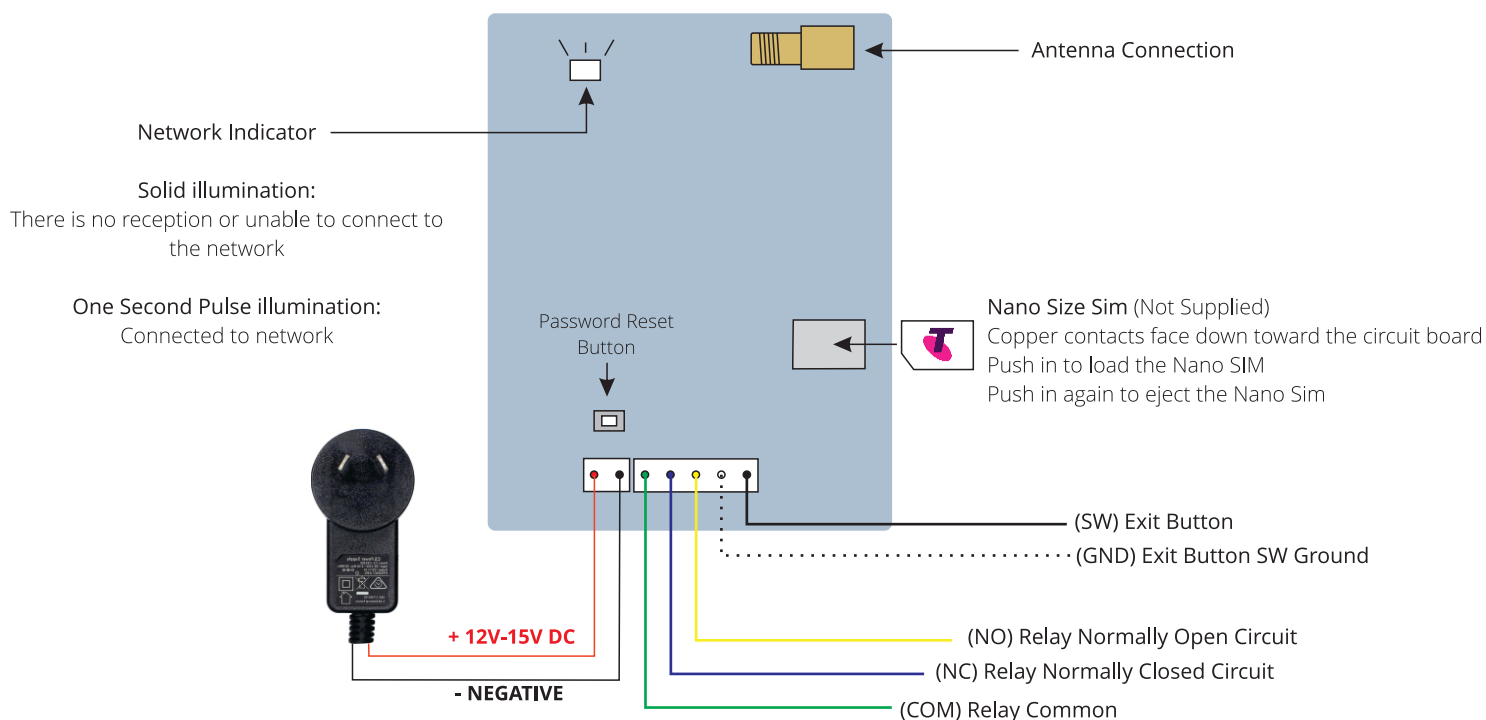


3. Install the rain hood and mounting box together to the wall.



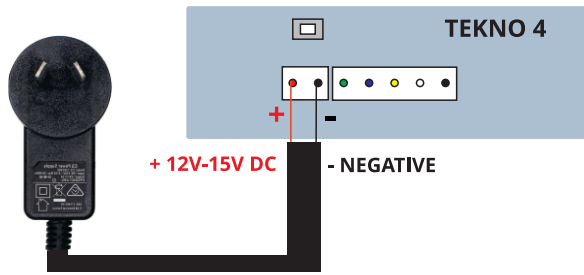
4. Install Tekno 4 when wiring is completed using the supplied security screws.

Overview



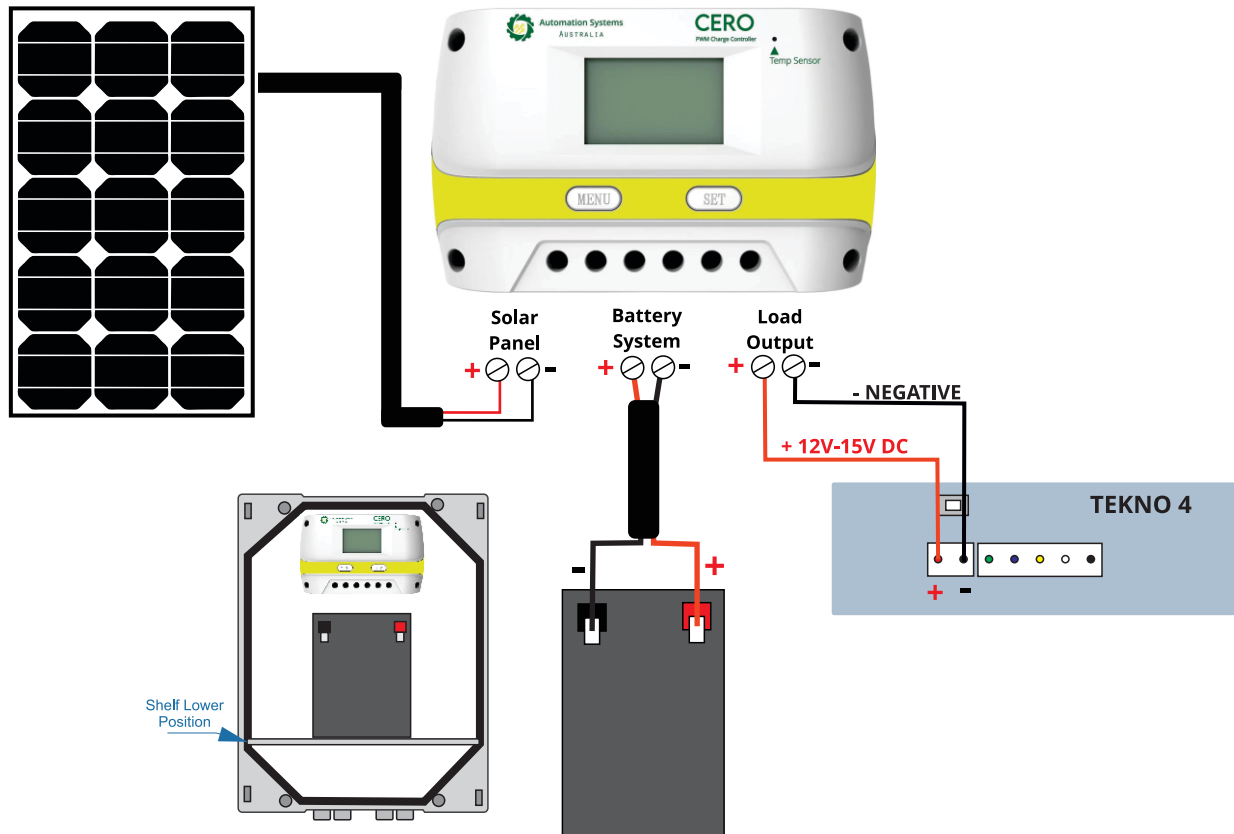
Powered System

Powering by the supplied power adapter in a standard package is a direct plug in to the two pin jack on the back of the Tekno 4.



CERO Standalone Solar System Connection

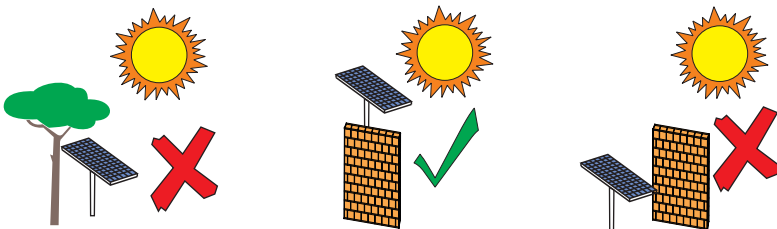
A standalone solar system is a totally off grid solution used for green energy initiatives or simply when its not possible to run power to the system. To conserve power constant power draw devices such as magnetic locks are not to be used.



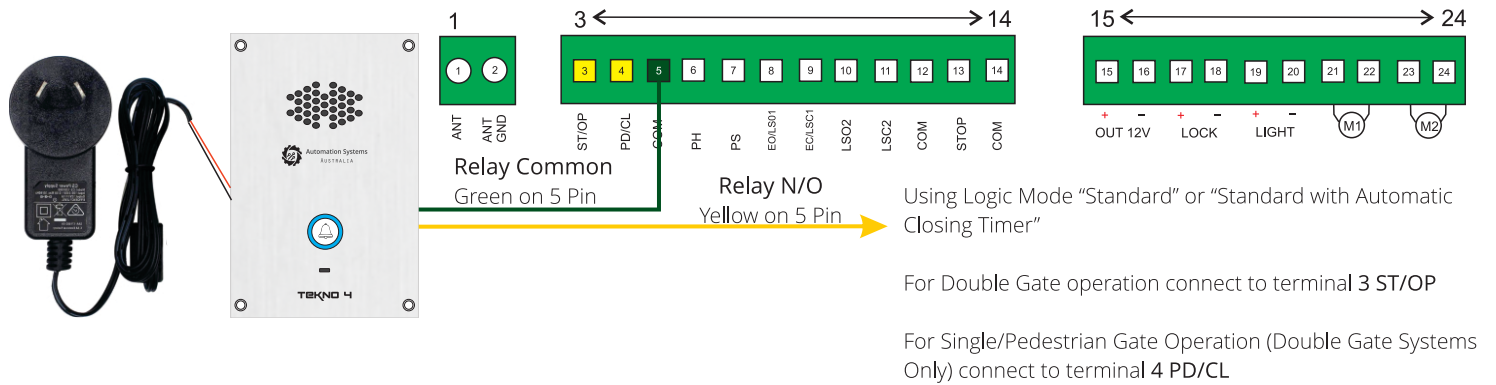
1. A solar panel CANNOT be installed under a tree, it requires sun to charge and maintain the batteries.

2. A solar system is often maintenance free BUT the batteries may require a external charge in the winter months due to lack of sun (rare).

3. Constantly powered accessories such as wired keypads will increase the standby current draw, solar panel or battery upgrades may be required if insufficient sun collection is not achieved.



Premier SW 24 Swing Gate System

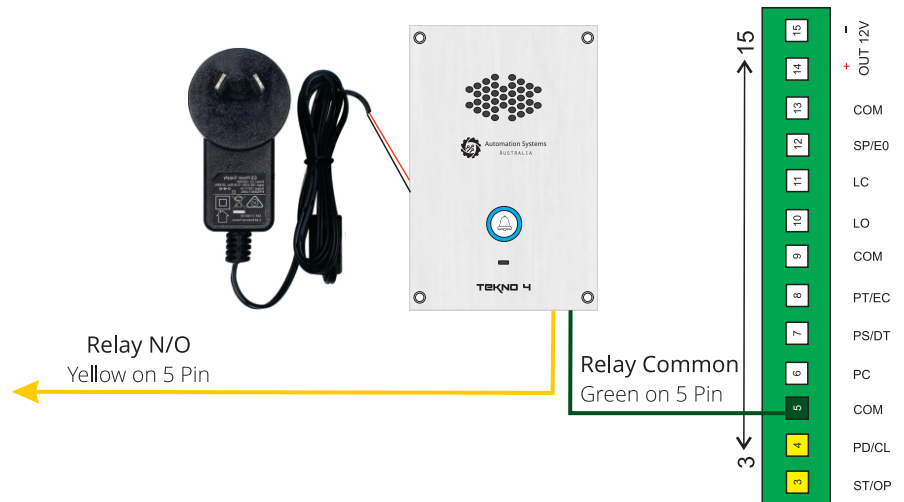


Premier SL 24 Sliding Gate System

Using Logic Mode "Standard" or "Standard with Automatic Closing Timer"

For Full Gate operation connect to terminal 3 ST/OP

For Pedestrian Gate Operation connect to terminal 4 PD/CL



Premier SL 240AC Sliding Gate System

For Full Gate operation OPEN and CLOSE connect to terminal START 19

For OPEN Gate Operation ONLY connect to terminal OPEN 21

For CLOSE Gate Operation ONLY connect to terminal CLOSE 20



Sentry B24 Boom Gate System

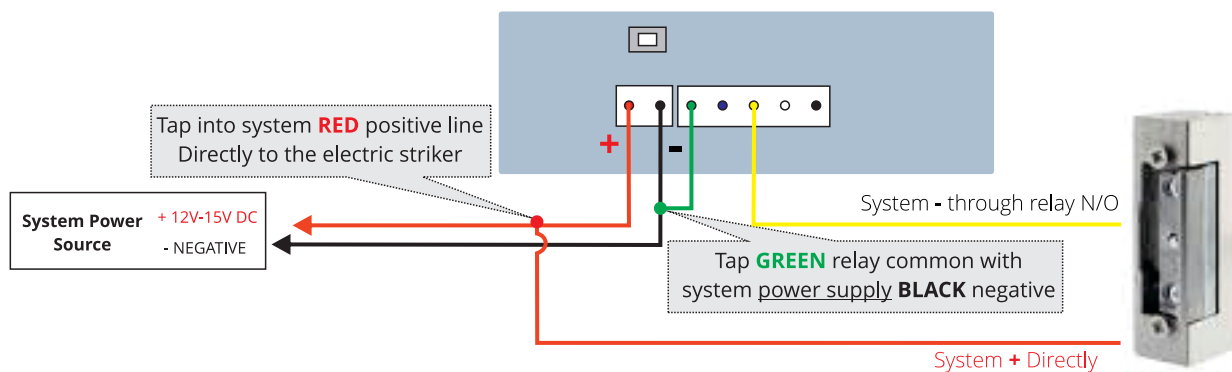
For OPEN/UP Gate Operation ONLY connect to terminal UP

For CLOSE/DOWN Gate Operation ONLY connect to terminal DOWN



Electric Striker (N/O Fail Secure Type)

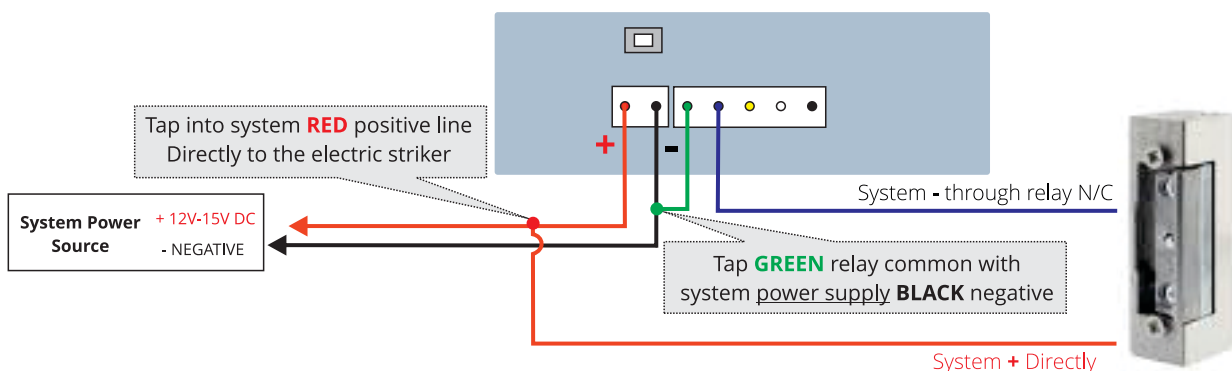
Fail Secure Type electric striker (Unlocked when powered).



Electric Striker (N/C Fail Safe Type)

NOT SUITABLE FOR SOLAR

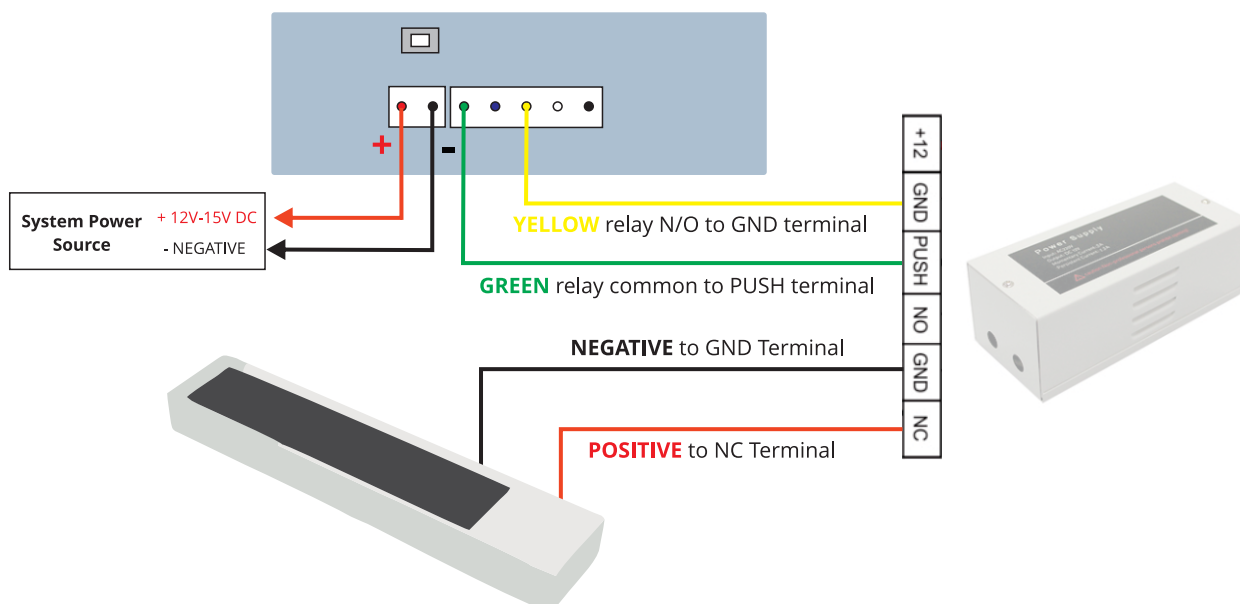
Fail Safe Type electric striker (Locked when powered).



Magnetic Lock (though lock power supply)

NOT SUITABLE FOR SOLAR

Fail Safe Magnetic Lock (Locked when powered). Powered through dedicated lock control power supply due to higher consumption.



Magnetic locks ARE polarity sensitive and voltage sensitive items, ensure correct wiring prior to connection

Installation Steps

1. Install the Tekno 4 to your post or wall, ensure you silicone seal the back side of the rain hood, top and sides only, leave the bottom unsealed.
2. Seal the cable hole in your post, pier or wall.
3. Wire in the Door/Gate release if applicable.
4. Before installing the SIM card into the unit test it in a mobile phone first to ensure the line is active, it can receive incoming and outgoing calls as well as send and receive SMS messages. **DO NOT SKIP THIS STEP**
5. Install Sim card into the Tekno 4
6. Fit the unit into the enclosure, tighten all four cover screws evenly
7. Power on the system
8. Add the system Administrator
9. Add users 1,2 & 3
10. Testing
 - Test the calling sequence for the correct telephone numbers and order
 - Test it does not connect to a voice mail on unanswered calls (adjust calling time)
 - Test the door/gate release function (if used)
 - ONLY if necessary adjust the microphone and speaker gains

Invalid SMS return Messages

Do not have permission!

The message was sent from a non-administrator or administrator is not programmed.

Wrong password!

The wrong password was used.
(Default is 1234)

Invalid message!

The command is either incorrectly formatted or unrecognized.

Adding the system administrator

An administrator is required to begin the programming procedure, the administrator is the only authorised person that can make programming changes to the system. An administrator can ALSO be a user in the sequential call list. Send the following SMS

Send the following SMS commands from the nominated administrator to the GSM Intercoms mobile number.

1 2 3 4 # 0 0 * # 3 3 4 4 5 5
System Password

Set manager success!

Successful return SMS

Adding the systems sequential call list

The call list is the listed telephone numbers to be called in sequence when a guest presses the doorbell. The FIRST number is called, if no answer then the SECOND number is called, Once again if no answer the THIRD number is called. If any of the users answer then it will not call the next user in sequence. Once a call has been answered the user and guest can speak with one another and the user can release the door or gate.

Send the following SMS commands from the nominated administrator to the GSM Intercoms mobile number.

1 2 3 4 # 0 1 * # X X X X X X X X X X
System Password User 1 Mobile Number or Landline Number with Area Code

1 2 3 4 # 0 2 * # X X X X X X X X X X
System Password User 2 Mobile Number or Landline Number with Area Code

1 2 3 4 # 0 3 * # X X X X X X X X X X
System Password User 3 Mobile Number or Landline Number with Area Code

Set first number success!

Successful return SMS

Set second number success!

Successful return SMS

Set third number success!

Successful return SMS

Notes:

The administrator can also be added as a user.

The same user number can be used multiple times (effectively multiple attempts to call the same mobile/landline number)

Adjusting the Unlock Relay Time

The systems unlock time can be set from 01 to 99 seconds, alternatively if required a latching circuit ON/OFF using 00 as the time

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	0	9	*	#	X	X	00 First call/SMS enables the relay, Next call/SMS disables the relay (Rarely Used)
Current System Password										Unlock Time	01-02 Is typically used for Automatic Gate Systems
											05-10 is typically used for electric strikers

Set the lock delay success!

Successful return SMS

LED Button Illumination

The system allows for the LED illumination to be enabled or disabled based on your requirement.

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

LED ON

1	2	3	4	#	L	E	D	#	O	N	#
Current System Password											

OK!

Successful return SMS

LED OFF

1	2	3	4	#	L	E	D	#	O	F	F	#
Current System Password												

OK!

Successful return SMS

Adjusting the Calling Time

The systems calling time can be set from **01 to 99 seconds**, usually adjusted to avoid voice mails after excessive ringing. Best results are normally 15-20 seconds. The system will begin the countdown from when it dials the number (before the ringing actually occurs).

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	R	I	N	G	#	X	X	#
Current System Password										Ring Time	01-99	

OK!

Successful return SMS

Adjusting the Maximum call Duration

The systems call duration time can be set from **01 to 999** seconds, usually adjusted incase the user forgets to hang up after the call (or a voice mail is reached), the system will automatically hang up the call. The system will begin the countdown from when the call is answered/voice mail answers.

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	C	A	L	L	#	X	X	X	#
Current System Password										Max Call Time	01-999		

OK!

Successful return SMS

Status Details

If you want to check the current system settings and receive a report send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	S	T	A	T	U	S	#
Current Password											

SIGNAL: 18/31 (4G)
LED: ON
SPK: 3
MIC: 6
RING: 15s
CALL: 030s
UNLOCK: 02s
ADMIN: +61404xxxxxx
U1: 039xxxxxx
U2: NUL
U3: NUL

Example successful return SMS

Check the Reception (Signal Strength)

The systems mobile reception/signal strength can be checked by the administrator, the range to be reported back will be between 1-31. Any number below 10 is considered a weaker signal which may affect the voice quality and system stability. Any number above 20 is considered excellent

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	0	8	*	#
Current System Password								

11
Example successful return SMS

In a case where instability is seen or the system network is reporting a weak signal consider changing to a different service provider, typically Telstra provides the best network coverage but its always best to check against the coverage maps of the major telcos.

Adjusting the Speaker Volume

The speaker volume can be adjusted in a range of 1 to 5, 1 is the lowest and 5 is the highest. This adjustment should be made in increments and tested after each adjustment, if the volume is set to high whilst the microphone gains are also set high at a high number a high pitched feedback will be heard.

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	S	P	#	X	#
Current System Password									

Speaker Volume

1 Low Speaker Volume
2-3 Average Speaker Volume
4-5 High Speaker Volume

OK!
Successful return SMS

Adjusting the Microphone Gains

The microphone gains can be adjusted in a range of 1 to 8, 1 is the lowest and 8 is the highest. This adjustment should be made in increments and tested after each adjustment, if the volume is set to high whilst the speaker volume is also set high at a high number a high pitched feedback will be heard.

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	M	I	C	#	X	#
Current System Password										

MIC Gain

1-3 Low Microphone Gains
4-6 Average Microphone Gains
7-8 High Microphone Gains

OK!
Successful return SMS

Modifying the System Password

The password can be changed at anytime by the administrator.

Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

1	2	3	4	#	P	W	D	#	X	X	X	X	#
Current Password									NEW 4 Digit Password				

OK!
Successful return SMS

Unlocking by SMS Command

The systems can operate the connected gate or door without having to receive a call from a guest.

Send the following SMS command from the nominated administrator or any of the USERS to the GSM Intercoms mobile number.

1	2	3	4	#	0	4	*	#
Current System Password								

OK!
Successful return SMS

Reset system setting to Factory Default

If you do not know your systems password a password reset must be performed first.
Send the following SMS command from the nominated administrator to the GSM Intercoms mobile number.

ALL DATA WILL BE DELETED

1234

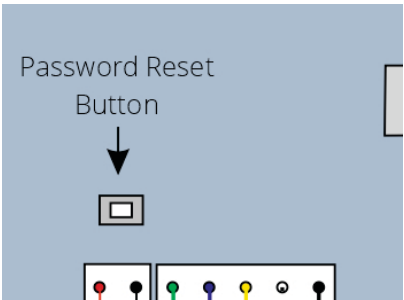
#REST#

Current Password

Default Settings
SIGNAL: Based on your signal strength
LED: ON
SPK: 3
MIC: 6
RING: 20s
CALL: 060s
UNLOCK: 05s
ADMIN: NUL
U1: NUL
U2: NUL
U3: NUL

Reset the System Password

Whilst the system is powered press and hold the RESET key located above the power connector, HOLD for 5 seconds, if successful 5 consecutive beeps will be heard. The RESET button can now be released.



Warranty Terms and Conditions

The product is warranted for a period of twelve months (one year) from the date of purchase, unless expressly specified as extended warranty (extension to the warranty period). The product is to be installed for its intended purpose and for normal use as outlined within the installation manual, the product warranty is exclusively for defects in manufacturing and manufacturing workmanship. It does not cover out of guidelines use, natural or other disasters, abnormal weather conditions, damage incurred in shipping or handling, damage caused by disaster such as fire, flood, wind, earthquake, lightning, excessive voltage, mechanical shock, water damage, damage caused by unauthorized attachment, alterations, modifications, or foreign objects, damage caused by peripherals (unless such peripherals were supplied by Automation Systems Australia), defects caused by failure to provide a suitable installation environment for the products, damage caused by usage of the products for purpose other than those for which it was designed, damage from improper maintenance, damage arising out of any other abuse, mishandling, and improper application of the products.

At its discretion Automation Systems Australia will require the item determined by the support staff to be returned to base in its original unmodified condition for a warranty inspection if within the warranty period. A return authorization "RA" number will be provided to be enclosed with the product in question. The warranty will not cover freight fees to base, customs fees or any labour costs at the installation site but will cover repair or replacement of the product as seen fit. Automation Systems Australia will cover the freight of the returned item to the original address if deemed as a warranty repair or replacement item. Any warranty repairs or replacements continue to carry through the remaining warranty period and do not extend or restart the period.

Under no circumstances shall Automation Systems Australia be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose). And of all other obligations or purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

Automation Systems Australia will at its option repair or replace out-of-warranty products at a determined cost which are returned to its base according to the following conditions. Anyone returning goods to Automation Systems Australia must first obtain an authorization number. Automation Systems Australia will not accept any shipment whatsoever for which prior authorization has not been obtained. Products which Automation Systems Australia determines to be repairable will be repaired and returned. A set fee which Automation Systems Australia has been predetermined and which may be revised from time to time will be charged for each unit repaired. Products which Automation Systems Australia determines not repairable will be replaced by the nearest equivalent product available at that time. The current market price for the replacement product will be charged for each replacement unit.