

Cellular Select Gate Installer Guide

Models SG2CL, SG3DMCL, SG3DMRCL



NOTE: This Product Requires GSM Carrier/SIM with Active Talk (Voice) and Text (SMS) Services For Operation



**Select
Entry
Systems**

A Division of Select Engineered Systems

Hialeah, FL 33016

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“Select, Don’t Settle”

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1 Cellular Select Gate (CSG) Installation

1.1 Safety Warnings / Avertissements de Sécurité

1.1.1 English Language

For your safety please observe the following recommendations when installing Cellular Select Gate series product enclosures:

- ❖ Never install equipment during a lightning storm or other hazardous event
- ❖ Do not bring mains voltage cabling into the product enclosure or attempt to connect mains voltage to any wires leading from the product, or the enclosure housing itself. Only the isolating transformer supplied with the product should be connected to the electrical mains supply by following the installation instructions below
- ❖ In wet locations, only install wiring and cabling rated for wet locations
- ❖ Follow industry-recommended installation practices when installing cables and grounding wires
- ❖ Do not attempt to use the provided isolating transformer to supply other equipment - it is intended solely for the purpose of powering access controllers in the Cellular Select Gate series.

1.1.2 Sécurité Avertissements En français

Pour votre sécurité, observez les recommandations suivantes lors de l'installation des boîtiers pour le produit de la série Cellular Select Gate:

- ❖ N'installez jamais l'équipement pendant un orage ou tout autre événement dangereux
- ❖ Ne connectez aucun câblage de courant du secteur au boîtier du produit. Ne tentez pas de connecter le courant du secteur aux fils sortant du produit ou au boîtier lui-même. Ne connectez au courant du secteur que le transformateur de séparation fourni avec le produit, en suivant les instructions d'installation ci-dessous
- ❖ Dans les emplacements mouillés, installez uniquement des fils et câbles homologués pour les emplacements mouillés
- ❖ Suivez les pratiques d'installation recommandée par l'industrie lors de l'installation des câbles et des fils de mise à la terre
- ❖ Ne tentez pas d'utiliser le transformateur de séparation à l'alimentation électrique d'autres équipements. Il est destiné uniquement à l'alimentation électrique des contrôleurs d'accès de la série Cellular Select Gate.

1.2 Cellular Select Gate (CSG) Installation and Activation

Please read this entire guide before attempting to install this system. This system should only be installed by an authorized installer/dealer.

1.2.1 Site Survey for GSM Reception - Important

The Cellular Select Gate (CSG) will operate anywhere that good GSM network signal is available as long as an active GSM SIM is installed, set up per section 1.2.2. Although AT&T and T-Mobile are the most common GSM network providers in the USA, others may be available in your specific area.

BEFORE INSTALLING THE CSG, it is strongly recommended you perform a site survey to check for a good cellular signal **from the GSM service provider that is to be used by the CSG** in the intended CSG installation location. If signal is poor, please check for surrounding obstructions, try alternate mounting locations, or use antenna extension CELLULAREXTANT to boost signal strength (please contact your dealer or SES supplier for this part). If signal strength cannot be improved after these actions, the CSG may be unsuitable for installing in that location at this time.

1.2.2 SIM Card – Talk and Text Services Must be Available

In order to use the CSG, a GSM network **talk** (voice) and **text** (SMS) SIM card is required, along with a cellular phone service providing both regular talk and text. **DO NOT USE** a data-only SIM, as this type of SIM is only for tablets and will not work with the CSG.

You can use the factory installed SIM provided after activating it per section 1.2.3 below, or you can install your own active GSM SIM per section 1.2.3.

1.2.3 Activation Instructions – Factory Supplied AT&T SIM Card

An **inactive** AT&T SIM Card has been factory mounted inside the Cellular Select Gate in the Board SIM Card Holder (left image below). If you are intending to use this SIM card, please activate it as follows:

1. Locate the AT&T Simple Activation Instructions (right image below) enclosed with the CSG.
2. Call 786-202-0862 to commence activation, **but before calling**, be ready with the SIM number shown on AT&T ID Card (an arrow inside the image next to the SES logo points to the location of the “SIM Card #”). **Please be aware that personal information will be required by the AT&T representative for account activation.**
3. Obtain the CSG cell phone number from the AT& T representative and record it for future reference. Please **double check that you have been provided with both Talk and Text services before completing the activation call.** Please also ensure you understand the type of account you have setup e.g. pay-as-you-go, auto monthly refill etc., as **limited account types can cause your service to stop unexpectedly.** This is outside of SES control.

Once activated, please start the CSG per section 1.2.5.

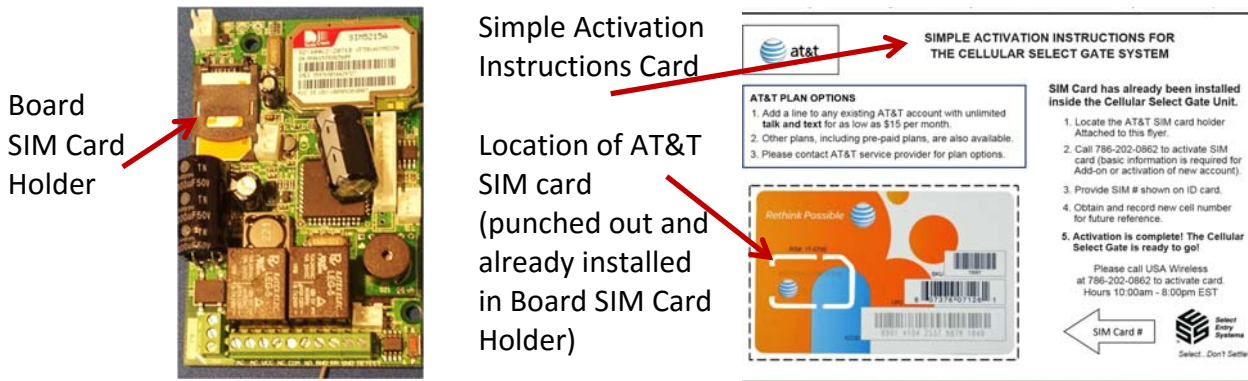


Figure 1: (Left) Location of Board SIM Card Holder and (Right) Simple Activation Instructions Card

1.2.4 Installing an Alternate GSM SIM Card – Talk and Text Services

NOTE: MUST BE ACTIVE GSM NETWORK SIM

You may use any **active** GSM network SIM if preferred, but please ask your service provider to confirm GSM SIM compatibility with your existing service before proceeding and that the service will provide Talk and Text services. To install your SIM card, please:

1. Make certain that the power to the Cellular Select Gate is OFF.
2. Slide the SIM card holder in the open direction, and carefully open the door. Do NOT force it.
3. Remove the existing AT&T SIM from the open SIM card holder, and store it safely with the AT&T Simple Activation Instructions (see right image above).
4. Carefully insert your SIM card into the SIM card holder and gently slide the holder closed.

1.2.5 Starting up the Cellular Select Gate (CSG)

Having performed the site survey (section 1.2.1), and creating an active SIM account (section 1.2.2):

1. Power-up the CSG and wait 20—30 seconds for initialization and network connection. During this time you may hear a series of beeps, which stop once connected. If the beeps continue (see section 4.3), the CSG is unable to connect to a cellular network, so it will be necessary to review the steps in sections 1.2.1 and 1.2.2.
2. CSG text (SMS) operation can be confirmed by sending the signal strength SMS text message *20# to the Cellular Select Gate phone number. The CSG will respond with a text message showing signal strength in the range 1 to 31 (larger values mean better signal strength). Reliable operation is usually experienced when signal strength is 14 or above, but if signal strength is low, it will be necessary to review the steps in sections 1.2.1 and 1.2.2.

Note: This unit is GSM unit, requiring a GSM compatible network.

1.2.6 CSG Power and Supplied Transformer

The CSG is supplied with a 16.5 volt 20 VA AC transformer power supply, which should be wired to the CSG with 18 gauge wire not exceeding 50 feet in length. The transformer should not be used to supply other equipment. Current draw (at idle) is 90mA @ 12 VDC; 80 mA @ 24 VDC (with lights).

1.3 Cellular Select Gate Components



16.5 20 VA AC
Supplied Transformer

Optional **Curb** and **Street** mount pedestals.



Figure 2: (Above) CSG User Interface Location – (Right) Mounted CSG – (Left) Mounting Pedestals

1.4 Electrical

1.4.1 External Connections

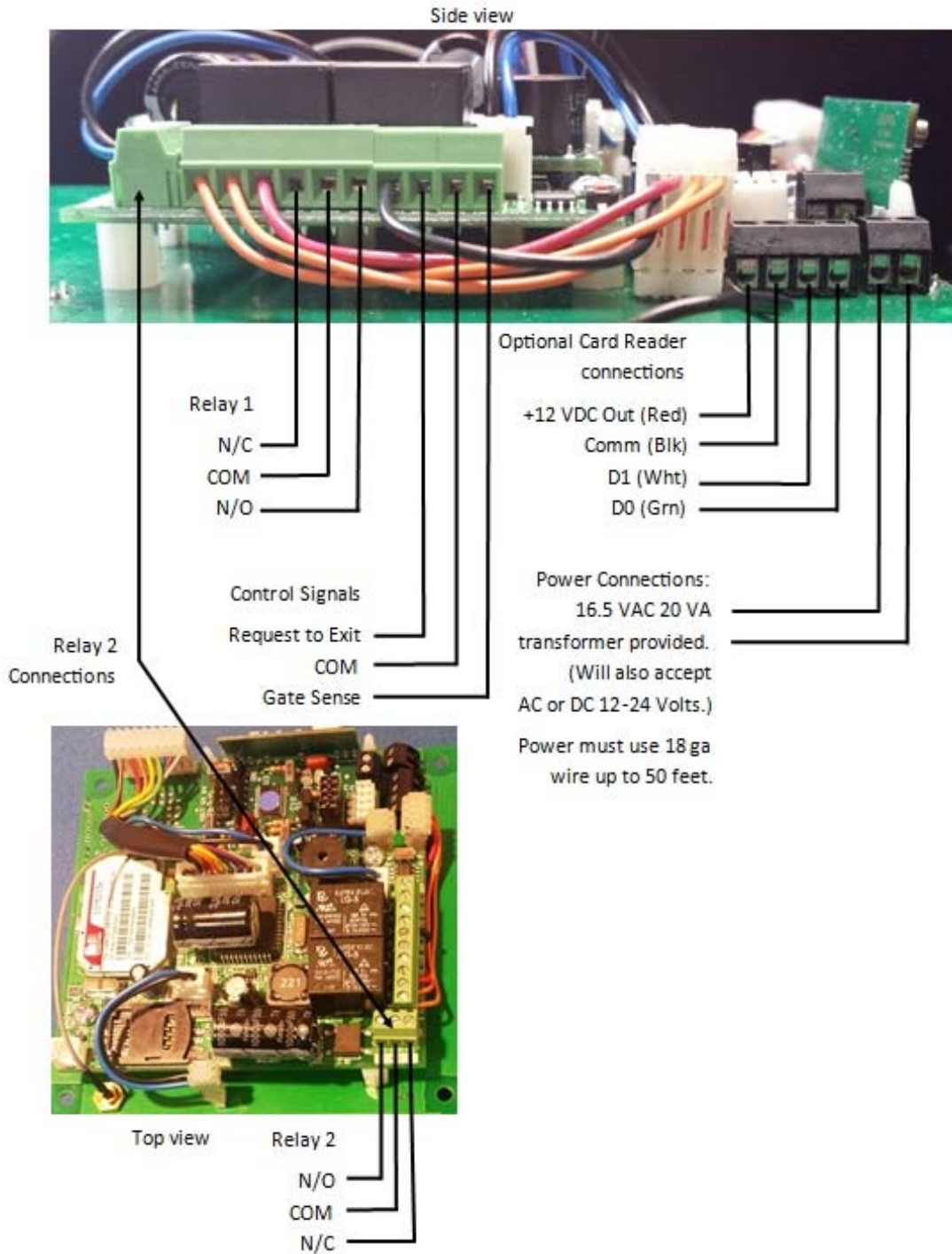
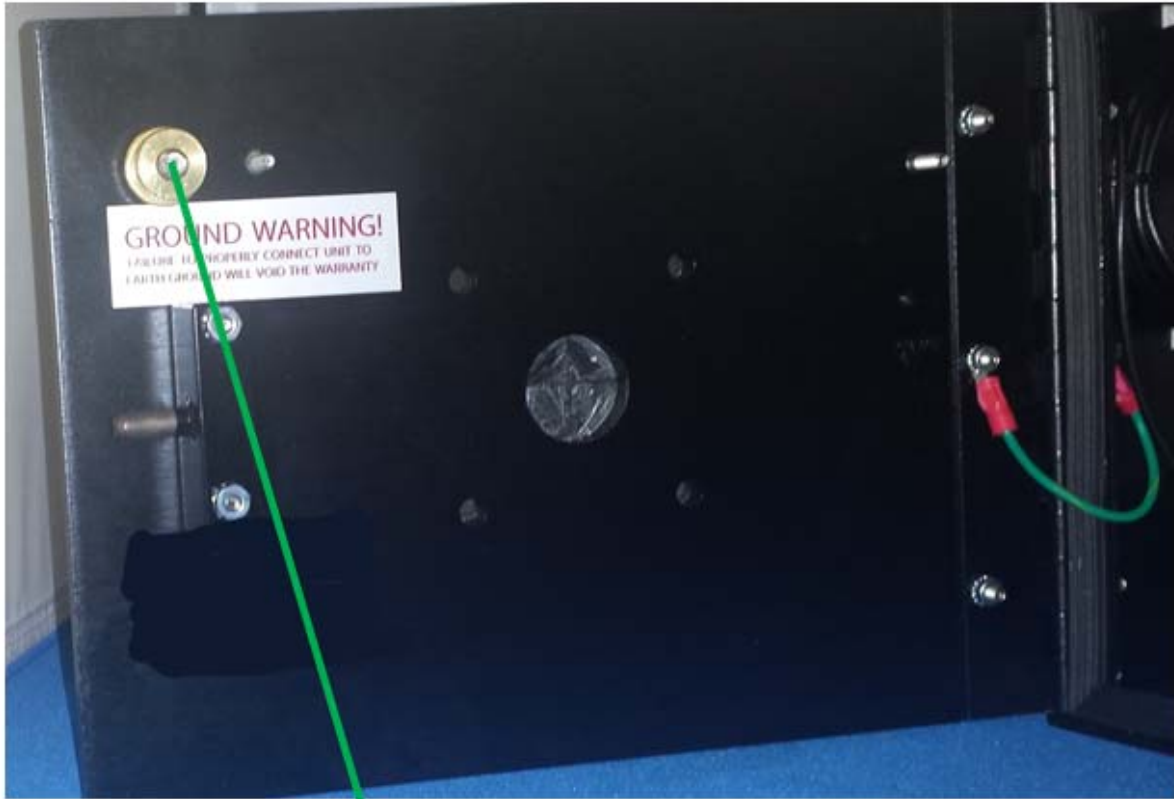


Figure 3: CSG Wiring Guide

1.4.2 Grounding

The Cellular Select Gate case **MUST** be grounded to a good earth ground. Use **at least** a #16 gauge wire no more than 25 feet from the Cellular Select Gate to the earth ground rod.



← Ground wire

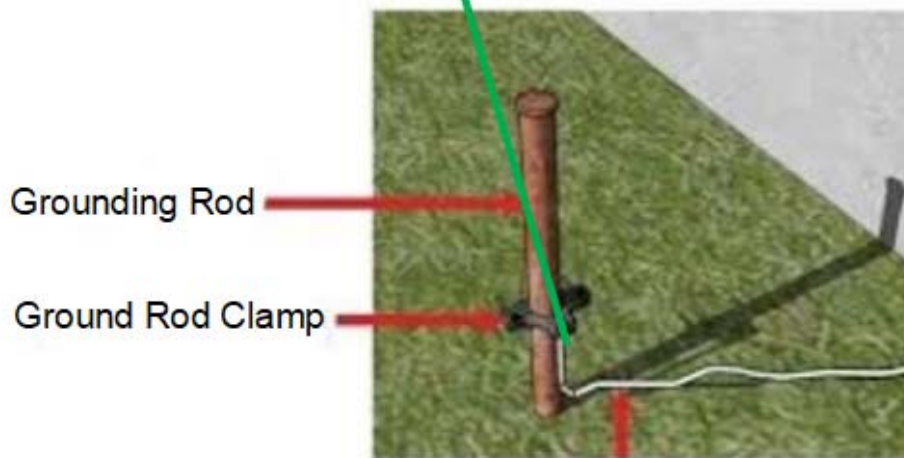


Figure 4: CSG Grounding

2 Keypad Programming on the Cellular Select Gate (CSG)

Keypad programming requires entry into Programming Mode using a four-digit password. Once in programming mode, commands can be entered as needed.

2.1 How to Enter Keypad Programming Mode

Use the following keypad sequence to enter Programming Mode.

Note that if the keypad is idle for 60 seconds, the CSG will exit automatically from Programming Mode, so if you wish to add more commands, you would need to re-enter Programming Mode.

Enter Programming Mode { * 0 } [4-digit password] *		
{ } means keys are pressed at the same time		
Steps	Keypad	CSG Response
Press * and 0 <i>together</i>	{ * 0 }	2 beeps
Enter password digits	4 digits 0 - 9	Short beep for each key pressed
Press * for "Enter"	*	Password OK: 2 short beeps Password NOT OK: long beep
Example: { * 0 } 7777 * Enters programming mode using factory default password 7777		

2.2 How to Exit Keypad Programming Mode

Once programming is complete, exit Programming Mode using the following sequence.

Exit Programming Mode {*0}		
{ } means keys are pressed at the same time		
Step	Keypad	CSG Response
Press Exit * and 0 <i>together</i>	{ * 0 }	2 short beeps

2.3 Assigning a Phone Number to Dial when a Specific Keypad Number is Pushed

Phone numbers can be assigned to specific keypad numbers so that when a visitor pushes a keypad number, the CSG dials the phone number programmed to that number/digit.

Assign Phone Number to Keypad Digit 1 K [Phone Number] *		
Steps	Keypad	CSG Response
Enter Programming Mode if you have not already		See section 2.1 above.
Enter command "1" then a single keypad digit K (0 – 9)	1 K	Short beep for each key pressed
Enter phone number	Up to 16 keys	Short beep for each key pressed
Press * to end command	*	Accepted: 2 short beeps NOT Accepted: long beep
Example: 1 5 3058235410 * Sets phone number 3058235410 to keypad digit 5. Once programmed, press keypad digit, then Call Button to call the assigned number.		

2.4 Clearing a Phone Number Already Assigned to a Keypad Digit

A phone number already assigned to a specific keypad number can be erased or cleared.

Clear a Keypad Digit Phone Number 1 K 0 *		
Steps	Keypad	CSG Response
Enter Programming Mode if you have not already		See section 2.1 above.
Enter command "1" then a single keypad digit K (0 – 9)	1 K	Short beep for each key pressed
Enter Clear Command (0)	0	Short beep
Press * to end command	*	Accepted: 2 short beeps NOT Accepted: long beep
Example: 1 5 0 * Clears the phone number assigned to keypad digit 5		

2.5 Adding a Personal Identification Number (PIN) to Operate a Relay

Personal Identification Numbers (PINs) can be assigned to either of the CSG relays, so that when the PIN is entered on the keypad, the assigned relay will open.

Add PIN – Command 81 [Relay Number] [PIN Number] *		
Steps	Keypad	CSG Response
Enter Programming Mode if you have not already		See section 2.1 above.
Enter PIN command	8 1	Short beep for each key pressed
Enter relay number	1 or 2	Short beep
Enter 4-digit PIN number	NNNN	Short beep for each key pressed
Press * to end command	*	Accepted: 2 short beeps, short low beep, 2 short beeps NOT Accepted: long beep
Example A: 81 2 0123 * Add PIN of 0123 to operate relay 2 when entered		
Example B: 81 1 7348 * Add PIN of 7438 to operate relay 1 when entered		
Note 1: For technical reasons this command is not the same as the SMS text equivalent command.		

2.5.1 Gaining Entry Using a PIN

To gain entry using a previously PIN, when **NOT** in Programming Mode, enter * followed by the PIN e.g.

Using **Example A** above, entering ***0123** will cause relay 2 to operate.

Using **Example B** above, entering ***7348** will cause relay 1 to operate.

(Pass – hear 3 fast short beeps)

(Fail – hear 1 long beep)

2.6 Deleting a Personal Identification Number (PIN)

Previously assigned Personal Identification Numbers (PINs) can be deleted, so that the relay will no longer operate if that PIN is entered on the keypad.

Delete PIN Using Keypad - Command 8 1 0 [PIN Number] *		
Steps	Keypad	CSG Response
Enter PIN command	8 1	Short beep for each key pressed
Enter 0 delete command	0	Short beep
Enter 4-digit PIN number to be deleted	NNNN	Short beep for each key pressed
Press * to end command	*	Accepted: 2 short beeps, short low beep, 2 short beeps NOT Accepted: long beep
<p>Example: 81 0 7348 * Deletes PIN 7438 to prevent relay operation if someone attempts to enter PIN 7348 on the keypad.</p> <p>Note 1: If the same PIN number has already been entered for both relays, only the first entry listed will be deleted when using this command. The second listed entry will only be deleted if the delete command is entered again.</p> <p>Note 2: <i>For technical reasons this command is not the same as the SMS text equivalent command.</i></p>		

2.7 Adding a Card or Transmitter to Operate a Relay

Standard 26-bit Wiegand cards and transmitters can be used to operate either of the CSG relays, so that when the card is swiped, or the transmitter is detected, the assigned relay will open.

Add Card – Command 82 [Relay Number] [3-Digit Site Code] [5-Digit Card Number] *		
Steps	Keypad	CSG Response
Enter Programming Mode if you have not already		See section 2.1 above.
Enter card command	82	Short beep for each key pressed
Enter relay number	1 or 2	Short beep
Enter 3-digit site code	001 to 255	Short beep for each key pressed
Enter 5-digit card number	00001 to 65534	Short beep for each key pressed
Press * to end command	*	Accepted: 2 short beeps, short low beep, 2 short beeps NOT Accepted: long beep
<p>Example C: 82 2 012 12345 * Add card or transmitter with site code 012 and card number 12345 to operate relay 2 when entered</p> <p>Example D: 82 1 125 30102 * Add card or transmitter with site code 125 and card number 30102 to operate relay 1 when entered</p> <p>Note 1: <i>For technical reasons this command is not the same as the SMS text equivalent command.</i></p>		

2.8 Deleting a Card (or Transmitter)

Previously assigned Cards (or Transmitters) can be deleted, so that the relay will no longer operate if that card is swiped or the transmitter is operated.

Delete Card – Command 8 2 0 [3-Digit Site Code] [5-Digit Card Number] *		
Steps	Keypad	CSG Response
Enter Programming Mode if you have not already		See section 2.1 above.
Enter card command	82	Short beep for each key pressed
Enter delete command	0	Short beep
Enter 3-digit site code	001 to 255	Short beep for each key pressed
Enter 5-digit card number	00001 to 65534	Short beep for each key pressed
Press * to end command	*	Accepted: 2 short beeps, short low beep, 2 short beeps NOT Accepted: long beep
<p>Example C: 82 0 012 12345 * Deletes Card with site code 012 and card number 12345 to prevent relay 2 operation if someone attempts to enter using card 01212345.</p> <p>Note 1: If the same card and site code number has already been entered for both relays, only the first entry listed will be deleted when using this command. The second listed entry will only be deleted if the delete command is entered again.</p> <p>Note 2: <i>For technical reasons this command is not the same as the SMS text equivalent command.</i></p>		

3 Advanced Features Available Through Text (SMS) Programming

Many advanced features can be programmed directly using a cell phone with SMS (text) capability. This can be done either using the SGMC Cell Phone App available both in the Android and iOS markets, or, using Direct Programming with CSG programming commands. The advanced features are available from the More button accessible in the Select Gate command page.

3.1 SGMC Cell Phone App

3.1.1 Downloading the App by Scanning the QR Code

Scan the QR code below to link you to the app market appropriate to your cell phone.



Figure 5: QR Code for SGMC Cell Phone App

Follow the instructions at the link location to download the app.

3.1.2 Downloading the App using your Phone’s Play or App Store

You can download the app as follows from your phone:

Android	iPhone
<p>Go to the (Google) Play Store on your phone.</p> <p>How? There should be a link (icon to click) on your phone. It may be on one of your home pages, or in Applications. Here is an example icon:</p> <div data-bbox="386 1444 526 1581" data-label="Image"> </div> <p>In the store, search for “Select SGMC” then follow the store’s app installation instructions.</p>	<p>Go to App Store on your phone.</p> <p>How? There should be a link (icon to click) on your phone. Here is an example icon, but there are several other variants:</p> <div data-bbox="1081 1438 1201 1556" data-label="Image"> </div> <p>In the store, search for “Select SGMC” then follow the store’s app installation instructions.</p>

Figure 6: Example Play Store Icons

3.1.3 Direct Programming

You can also program the CSG using direct text (SMS) programming instructions.

Detailed programming instructions can be found in the Cellular Select Gate Programming Guide located on the SES website.

Go to <http://www.selectses.com/products/products/cellular-select-gate-series/>

Or click the QR code below for the SES website:



Figure 7: QR Code for SES Website

4 Troubleshooting - Visible and Audible Indications of Conditions

Visible and audio indications can be used to troubleshoot various conditions e.g. no cellular signal. Please use the following sections as a guide to try to identify common issues.

4.1 Internal LEDs

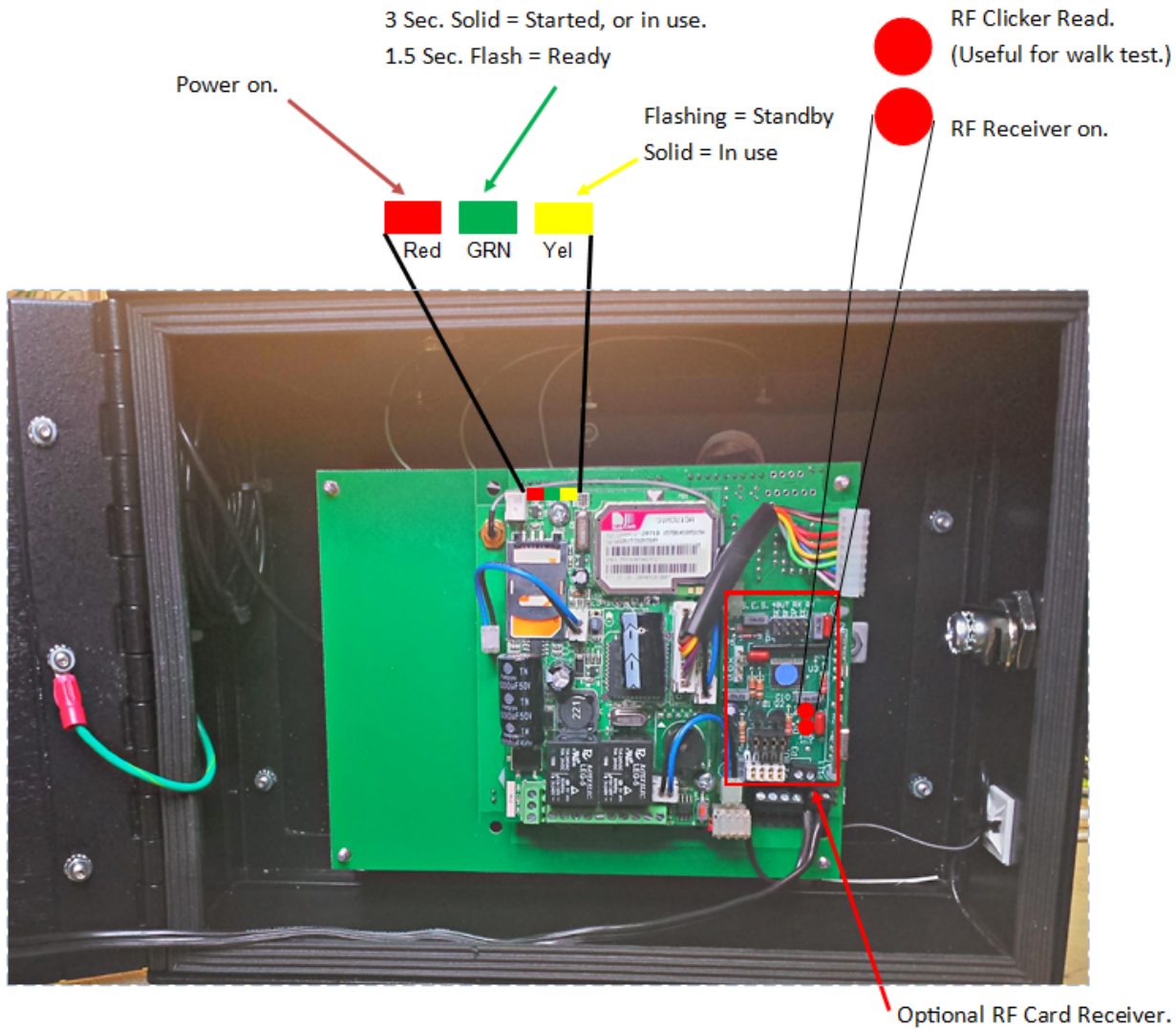


Figure 8: CSG LED Indications

4.2 Keypad

During startup the blue lighted keypad will turn off and then back on. The keypad will briefly cycle OFF to ON during the repeat power up search until signal is found.

4.3 Audible and LED Indications

Condition Description	Audio Sounds	LEDs	Suggested Action
Power Up/Restart – searching for signal – first 30 seconds	One long beep, then repeated bursts of two short beeps approx. every 1 ½ seconds until signal is found	Red, yellow and green solid	None
Cellular signal found	On finding service, one higher beep followed by 2 pairs of lower beeps, then no more beeps	Red and yellow solid, green changes from solid to flashing approx. once per second	Can use CSG normally
No SIM in unit, SIM not mounted correctly, bad SIM or SIM not detected	Repeat cycle: 30 beeps followed by silence for 15 seconds, then repeats power up search for signal	Red, yellow and green LEDs solid; green LED turns off briefly then ON whilst power up search restarts	Disconnect power from CSG and install SIM correctly.
SIM inserted but no Signal	Repeat cycle: One long beep, then repeated bursts of two short beeps approx.. every 1 ½ seconds for 60 seconds, then repeats power up search for signal	Red, yellow and green LEDs solid, green LED turns OFF briefly then ON whilst power up search restarts	
SIM not activated	After first 30 seconds, no beeping (quiet) for 30 seconds, then reset and repeat power up searching for service	LEDs blink ON and then OFF	Contact carrier to activate SIM

4.4 Card and PIN Audible Indications

Condition Description	Audio Response	Follow up Action
Card Accepted	Wait 4-5 secs then three rapid beeps	Enter Property
Card Not Accepted	One long beep	Program Card Number into CSG
PIN Accepted	Wait 4-5 secs then three rapid beeps	Enter Property
PIN Not Accepted	One long beep	Program PIN into CSG
PIN not entered correctly on keypad	10 second delay then one long beep	Re-enter PIN correctly: press * followed by 4-digit PIN

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