

CERTIFIED SAFE & PROVEN RELIABLE

INMOTION's G3 Controller is the epitome of purposeful design & product performance. The result exemplifies the state-of-the-art, certified safe, superior product that the G3 Controller truly is.



< automatically MORE BEAUTIFUL >

CONTROLLER DETAILS & SPECS



TECHNICAL FEATURES & BENEFITS

- Small, Sleek Design: Fits in Standard 2x4 Construction
- Lightest on the Market: Only 2.2 Lbs
- Built In Wireless
- UPC Power Backup Available
- · Unique Connector Ports: Error Proof Installation
- Simple Set Up Programming
- BLE Advanced Adjustability
- Fused Electrical Input

THE LEADER IN TECHNOLOGY & COMPLIANCE

- Safety: The First & Only Residential Door Automation System to Achieve these Accreditations:
 - · UL325, CSA C22.2 Certified
 - · Fire, Shock, Entrapment & Impact Certified
 - FCC Certified
- FCC Compliant to Radio Frequency Emission Interference
- Market Leading 900 Mhz Wireless Technology
 - Most Reliable & Longest Range: 300+ Feet & Multiple Layers of Common Building Materials
- Soft Open & Close Feature
- · Inline, Stacking, Pocketing, Bi-Parting & Curved Applications





ABOUT INMOTION

INMOTION lets you control your surroundings with a touch of a button. We automate any type of sliding door system—straight line, corner or curved; interior or exterior; stacking or pocketing—gracefully uniting your outdoor and indoor living areas into one magnificent space.

INMOTION is backed by Caldwell, a global window & door hardware manufacturer and fenestration industry technology leader; family owned and operated by since 1888.

Visit inmotion.company for more information including: Quick Start Guides, CSI Specifications, Installation Instructions, Detail Drawings, Warranty Information and more.



UNIQUE LIKE YOU

The INMOTION G3 Controller comes standard with Lifestyle Modes so your doors are as Unique as you are. Your door is ready to fit your Lifestyle, in whatever way works best for you.

ENTERTAINMENT MODE



MOTION ASSIST MODE

CLOSE BEHIND MODE



SIMPLICITY MODE





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LIFESTYLE MODES

ENTERTAINMENT MODE

- We see you coming!
- Hands full? Using your motion sensor, the door will sense when you are close by and open 4' for you to walk through. It will then close automatically when you get through the door.

MOTION ASSIST MODE

- Give the door a nudge, and it will take over!
- If you give the door a little push, the motor will take over and open the door to 4'. Then, if you give it a little push closed, the motor will take over and close the door, too.

CLOSE BEHIND MODE

- One less thing to worry about!
- You're busy, we get it. Use the wall switch to Open the door; the door will open 4' for you to pass through. Then it will close automatically after you.

SIMPLICITY MODE

• Your door knows where it is, it gets your point!



 The 'One Button' Mode: just press the Stop button or link a 3rd party single button device and your door will Open, Close or Pause midtravel, whatever makes the most sense.

EASY IMPLEMENTATION

- 1. Press and hold Open & Close for about 2 seconds, until the motor "double clicks," then release.
- 2. Then press the button associated with the Lifestyle Mode of your choice. The motor will "double click" again and your selection will be enabled.

To switch from one Lifestyle Mode to another, repeat the above steps and select a different mode in step 2

To return to Normal Mode, perform step 1 twice: Press Open + Close until the motor "double clicks," and repeat.



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G3 Programming Part Number(s): 28C0016

G3D v0.7.5+

G3D (Si	ngle & Dual) Programming for One-	Way & Bi-Part Doors	Initial Wiring	Programming	CLI [Optional]			
• If this a first time setup, refer the "Tips" section at the end of this procedure to verify the Primary & Secondary								
 If programing a Single Motor G3 with firmware v0.7.5, follow the Primary programming steps and stop 								
when the Secondary programming steps begin.								
•	 Programming a G3D "Dual" requires programming each controller in sequence, Primary then the Secondary For a Bi-Part system, either controller can be the Primary 							
• For a 90° system however, the door that <u>must</u> open first, MUST be the Primary controller . Refer to the full G3								
Automation Manual for help with identifying Door 1. • When installing a 90° system. Step 4 configures the system as a 90° as apposed to a Bi-Part, 90° (One-Way) is								
	the default.				(0110 114)) 10			
1	Turn <u>BOTH</u> controllers <u>OFF</u> . Connect 10 Pin/Molex cables and the AC power cords to <u>BOTH</u> controllers. Do NOT turn either one on yet	G3 + Adaptor (Prin G3 + Adaptor (Prin CAT 5/6 Network Cable (NOT FLAT WIRE) G3 + Adaptor (Set	mary)					
	Use a wireless OR wired wall switch		Wire	less Wall Switch or Wireless Remo	ote			
2	which is attached to the PRIMARY G3	RF ANT BAT						
	Wireless components purchased with	7 P15 P16 1 2 3 PR						
	pre-paired at the factory.	G3 Controller R5485 Wired Adaptor & Wired Wall Switch						
		CAT 5/6 Network Cable (NOT FLAT WIR	E)					
	Manually close BOTH doors.							
0	Power on the Primary G3 Controller,			U				
3	then the Secondary G3 Controller							
		Fully CLOSE the door	S Wa	it for the "do	uble click"			
	Wait for the motor/brake	then the Secondary G3	iirst, 3	from the motors				
	Setting 90°(One-Way) & BI-Part	Only Required if System is a Bi-Part						
	the PRIMARY controller		They is the D					
4 opt	Press and hold the "Stop" button until the motor "clicks" (about 10s).	Primary CLICK"						
	Press OPEN to select a 90%							
	(DEFAULT)							
	(motor will click 2 times) OR	RELEASE	RELEASE		$ \rightarrow $			
	Press CLOSE to select Bi-Part	INPOTION	INPOTION	INMOTI	Ø			
	(motor will click 3 times)	Hold "Stop" until Pre the motor "Clicks" a 90	ess CLOSE (1s) for 0° System. Motor	Press CLOSE (Bi-Part System	1s) for a n. Motor			
	Setup will exit after this setting	(about IUs) "	N I N					
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9	Primary: Self-Learn Process: The door will open and close several times. When the Primary completes, it will stop at FULL Open. Now the Secondary programming begins	Primary Side Secondary Side Secondary Side Secondary Side Secondary Side
	If programming a Single motor G3 with firmware v0.7.5+ The panels should close to the jam and programming is COMPLETE	G3 Single Motor
	Single Motor G3 v	vith v0.7.5 firmwareSTOP HERE
10	Secondary: Begin Programming After the Primary reaches full Open and stops Press the "Stop" button for 1s (or use the CLI "b s")	Secondary "CLICK" "CLICK" Press "Stop" for 1s and the Secondary motor "Clicks"
11	Secondary: Set Jam Depth After the motor "click" Open the Secondary, Panel 1, ¼" to ½" to set the Jam Depth. Wait for the motor to "click" (~5s).	Primary Side Primary Panel BiPart Center Line Panel 1 Closed Secondary %" to %" From Fully Closed
12	Secondary: Set Motor Polarity Manually open the Secondary panel about 1 foot. After about 5 seconds, the door will move about 4 inches then Wait for the motor to "double click" (~5s)	Primary Side BI-Part Center Line Open Ti Foot

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Part Number(s): 28C0016



	Secondary: Set Full Open	Primary Side Bi-Part Center Line Secondary Side				
13	Manually open the Secondary side to its "full" open position.	Full Open				
	After 10 seconds the Secondary doors will begin to close automatically					
	Secondary: Self-Learn Process:					
14	The Secondary door will open and close several times. When the Secondary completes, both the Primary and Secondary <i>should</i> close.	Primary Side Primary is "waiting" for Secondary to complete Programming				
	When both doors are at full open & stopped, programming is actually complete	Secondary Completes Programming at Full Open				
15	Programming Complete	Primary Side				
	Verifying Single, Primary & Se	condary Configuration using the controller's status LED's				
	G3 Single Motor OK G3 Print P1 STATUS 1 2 3 PWR Single configuration is OK Primary con	P1 P1 P1 STATUS P1 S1 P1 S				
	Note: Status LED's are only set at <u>power up</u> . Power cycle the controller(s) to update after changing any cabling or configurations					
Tips	 If after programming a Bi-Part system the secondary side only starts moving after the primary, the system's door type is set to 90° (one-way) mode. Perform Step 4 above. Performing this step does NOT erase the controller's programming. If the door(s) do not close after the last programming step, chances are the system is programmed. Press the "Close" button to try and close the door. If that does not work, manually close the doors and reboot the controller(s). In most cases, failures during programming will cause the controller to abort the programming process so that it can be re-attempted without requiring a reboot. When a failure occurs, the controller does not reboot and does not reset the user's password. This means that upon a failure the installer can simply return the doors to full closed and start again without re-entering a password or power cycling the controller(s). Failures during Primary programming steps will cause the Primary alone to be wiped of its programming. If the secondary was already programmed, its program is NOT wiped. 					
	 Failures during the Secondary programming steps will cause both the Primary & Secondary controllers to be wiped of their programming. If the installer initiates programming but fails to move the panel to set the jam depth, the controller will cancel programming and preserve the previous program if previously set. 					

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Part Number(s): 28C0016

Command Line Interface (CLI) – [OPTIONAL]

The CLI can be used to program special functions, parameters, and settings to adjust door operations. For most installations CLI adjustments are <u>not</u> required. The CLI provides 4 help screens via the commands "help", "info", "cyct" and "config all". These screens list CLI commands/parameters, general info, settings and cycle test results. Refer to the full installation manual for instructions on how to access the CLI using a programming cable or wirelessly via Bluetooth (requires an RS485 module). ✓ For this release, the CLI passwords have changed. Please schedule a free training session or contact technical support for more information about CLI access and passwords.

	P W	Full Command	Shortcut	Description				
		"help"	"h"	Displays informational commands such as door position "pos"				
		"nwd"	"n nassword"	View or enter the access password. Most commands require the				
		pira	p pacemena	"installer" password. Contact service support for password information.				
		"ver"	"V"	Displays the controller's firmware version.				
spu	1	"brake #", "clutch #"	"brake #" "clutch #"	"brake/clutch 0" disengages the brake/clutch, while "1" engages brake/clutch				
			"b o"	Command the door to "Open"				
			"b c"	Command the door to "Close"				
		"button OP"	"b s"	Command the door to "Stop"				
ma	*		"b u"	Command the door to "Unlock", "b r" also supported for "Release"				
Ē			"b m"	Simulate a motion event. Only affective during close.				
ပိ			"b a"	Initiate "autoprogram" from the CLI				
-			"r"	Shows the reboot menu on the CLI.				
5			"r 0"	Reboot Only				
ш	1	"rot #"	"r 1"	Reboot + Resets all Special Features & Options				
Т	Ľ	TSL #	"r 2"	Reboot + Wipes Configuration. Must reprogram the controller				
			"r 3"	Reboot + Clears the friction profile. Must reprogram the controller				
			"r 4"	Reboot + Factory Wipe. Must reprogram.				
	1	"pos"		The help command "pos" shows the doors current position in inches. If a				
		pee		door is set to <i>bipart</i> , this distance will be doubled. Refer to "c drtp".				
	~	"cyct"	"t"	Show Cycle Test Status / Report				
			"t n"	Set or change number of cycles to run. Range [0 – 1000000]				
			"t 0"	If running, cancels test showing report. If canceled, disables test.				
		"config"	"c <i>all</i> "	Shows all config values, units, range and defaults. i.e. "c all"				
	1		"c CMD"	Shows the current value for the passed in config CMD. i.e. "c osp"				
			"c CMD reset"	Resets the config CMD to factory default. i.e. "c osp reset"				
	_	" <u>(</u>) () ()	"C CMD VAL"	Set the config CMD to passed in VAL. i.e. "c osp 4.5"				
	×	"config artp OP"		Gets or sets the door type to "oneway" or "bipart". i.e. "c drtp bipart"				
qs	*	"config osp #"	"c osp #"	Gets or sets the Open speed in inches/sec. i.e. "C osp 4.0"				
ano	-	"config csp #"	"c csp #"	Gets or sets the Close speed in inches/sec. i.e. "c csp 2.5"				
Ĩ	1	"config fsat"	"c fsat #"	Gets or sets the Span Adjust Time in seconds for Normal, Party Mode,				
шo				Egress and One Button Operation.				
Ŭ	*	"config ctfl #"	"C Cttl #"	Gets or sets the Cycle Test fault / cycle limit. Range [1 – 1000], Default 5				
5	1	"config fpce #"	"c fpce #"	Gets or sets friction fault envelope limit in mA. SEE FULL INSTALL GUIDE.				
Щ	✓	"config fpthr #"	"c fpthr #'	Gets or sets the friction fault count. SEE FULL INSTALL GUIDE.				
Z	✓	"config fpme #"	"c fpme"	Gets or sets "Entertainment/Party Mode". 0: Disable, 1: Enable				
0	✓	"config fpmd #.#"	"c fpmd #.#"	Gets or sets "Entertainment/Party Mode" opening span in inches.				
Ŭ		"config fpmw #"	"c fpmw #"	Gets or sets ""Entertainment/Party Mode" wait before close time in				
	_			seconds.				
	 Image: A start of the start of	"config fpmb #"	"c fpmb #"	Gets or sets "Entertainment/Party Mode" brake enable or delay.				
	Nc the	ote: Options for othe e full G3 installation r	r features such a nanual on our su	as Egress , One-Button-Operation and Move Assist are documented in upport site: https://inmotionsupport.freshdesk.com/support/home				

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RS485 "GPIO" ADAPTER LED'S







RJ45 CONNECTOR APPLICATION

RJ45 Connections for Wired Accessories to the RS485 Module Only

Terminated 26-8 Flat Wire should be verified with a data cable tester!

- **Applying RJ45 Connectors** When applying RJ45 connectors, first make sure that all wires are properly identified. Use a high quality 26-8 data/phone cable stripper (shown Right) to create a clean and even end on the 26-8 flat wire cable.
- Then strip-off about $\frac{1}{2}$ of the outside jacket (only the outside jacket will be stripped). The 8 individual wires should have their relative shields intact.
- While holding the cable, identify the outermost colors of the 8 wires. Choose the left extreme white wire to be the #1 wire.
- Insert the stripped cable into the connector so that the #1 wire lines up with the connector position #1. Make sure to push the cable all of the way into the connector.
- Insert the wire/connector assembly into the correct crimper opening and crimp to form a permanent wire/connector assembly.
- Repeat this process for all wires making sure that the #1 (white) wire/connector position is the same for all wires.





RJ45 with Cable Inserted

RJ45 Connector for 26-8 Cable Insertion



Crimping RJ45 Connector to Cable



INITIAL WIRED SYSTEM SETUP



Connect the AC power cord(s). Do not power up the controllers.

Connect the RS485 "keyed" cable between the controller's J17 port and the RS485 adaptor's "FROM CTRL" port.

If this is a "Dual" system, connect the provided CAT 5/6 cable between the Primary & Secondary controllers

Make a flat 1:1 cable and connect a wired wall switch to the RS485 adaptor's Wall Switch "INSIDE" or "OUTSIDE" port.

Power up the controller(s) and verify all 3 LED's on the RS485 Adaptor are illuminated.



INITIAL WIRELESS SYSTEM SETUP

Wireless G3 kits including wireless wall switches are <u>factory paired</u> and SHOULD NOT require this procedure! Wireless G3D (Dual) systems are <u>factory paired</u> to the Primary Controller

Wireless Wall Switch Pairing













Press the "pairing" button on the controller for 1 second







Wireless G3D components can be paired to either the Primary or the Secondary Controller but NOT both at the same time!!!

Blue LED's



2

Press the "pairing" button the wireless wall switch for 1 second <u>Remote Pairing Instructions (p33)</u>



The LED's should begin to flash together. When pairing is complete the controller should receive and "Open" command from the wireless wall switch



• <u>900 MHz Wireless Receiver (for Wireless Wall Switch/Remote/Motion)</u> – The receiver is built into the G3 controller.



G3 Special Features

Part Number(s): 28C0016 & 28C0051 (K12 & RS485)



Special Features

Firmware v0.7.0 - 0.7.2Special features are fully supported on this "single" controller release.Firmware v0.7.5:Special features are fully supported on Single Controller installs.
On "Dual" installations, special features are only supported on the Primary controller.

The G3 controller offers 5 distinct modes of operation. These modes are Normal, Party Mode, Egress, Move Assist and One Button Operation. Each mode, when activated, remains in effect until the user switches to another and will remain in effect after resets and power failures.

Normal Mode

Normal mode is the factory default and operates by the way of a wall switch or remote. Pressing "Open" on the wall switch will cause the door to open as "Close" will return the door to its closed position. When the door closes, a magnetic brake will keep the door in the jam until it is re-opened, or the brake is released with the "Release" button. While the door is opening or closing the "Stop" button can be used to stop the door in that position.

Party Mode, aka: "Entertainment Mode"

When "Party Mode" is enabled, an attached motion detector or IR Beam sensor will automatically trigger the door to open approximately 40 inches. The door will then automatically close after 10s. While closing, if motion is detected near the door, the door will stop, pause, and return to 40 inches open position. The 10s auto close timer is restarted. The door does not engage the brake in this mode, but it can be manually activated from the wall switch. The wall switch can also be used to open the door to the same 40in position, where the auto close timer will close the door after 10 seconds. * *Party mode requires a wired or wireless motion detector and/or an IR Beam detector.*

Egress, aka: "Close Behind Mode"

Egress, sometimes called "close behind", uses the wall switch to open the door to 40 inches and then close the door after 10 seconds. The magnetic brake will not engage on close but can be activated with the "Release" button.

One Button Operation, aka: "Simplicity Mode"

Sometimes called "Garage Door or ADA mode", uses the wall switch's "Stop" button to open, close and stop the door. This feature operates like a garage door remote. When the door is closed, pressing "Stop" starts opening the door. While opening, if the "Stop" button is pressed the door will stop. Another press will cause the door to close again. If the door is allowed to fully open to 40 inches and stop, another press of the "Stop" button will cause the door to close. The magnetic brake does not engage but can be activated from the wall switch.

Move Assist, aka: "Motion Assist Mode"

From the closed position, if the door is moved approximately ½ inch towards open, the motor will engage and automatically open the door to 40 inches and stop While open, if the door is pushed towards closed, the motor will engage and close the door to the jam. If the door is stopped using the wall switch, a slight push of the door in either direction will engage the motor to assist the movement in the desired direction.

Opening Distance Adjustment (Span Adjust)

All 5 modes allow the user to manually adjust how far the door opens when activated. Each mode will remember its "new" open position until it is changed again. In "Normal" mode, the factory default is the full door width, and the other 4 features default to 40 inches open. When adjusted, any of the 5 modes can be changed from as little as 6 inches to the maximum door width.

For 5 seconds, after the door has reached its open position and stopped, the user can manually move the panel to a new position. Each mode can be programmed independently. Span adjust will not work if the door is stopped midspan; it must be programmed within 5 seconds of reaching its programmed open position.

Tip: If the door is already opened, and 5 seconds has already elapsed, pressing "Open" again will re-enable the adjustment period. Each movement will also reset the timer. The new position will be saved after the door has stopped moving for 5 seconds or more.

Additional Options

A qualified installer can program additional options for all 5 modes. These options include enabling/disabling the magnetic brake, delayed brake on close, brake on open, delayed auto close and changes to the span adjust time. See your dealer/installer for more information.

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G3 Special Features

Part Number(s): 28C0016 & 28C0051 (K12 & RS485)



Enabling/Disabling Special Features							abled Inst	aller Required	
!	Make sure the door is <u>fully closed</u> , powered on and operational for all of the following steps.								
1	Using a wireless/wired wall switch or remote Press and hold Open & Close for about 2s or until the motor " double clicks ", then release.			otor le CLICK" -2s)					
2	Within 10 seconds, press one the 4 buttons to select a feature mode: Open: Party Mode* Close: Egress Stop: One Button Operation Release: Move Assist The motor will "double click" again and your selection will be enabled. * Motion Detector/IR Beam/Signal required			Wait for Motor "Double CLICK" (~2s) Party Mode One Button Op Egress Move Assist Move Assist					
opt	To switch from 1 mode to another repeat the above steps and select a different mode in step 2						C Forganos C Forganos Manyouth Ma		
opt	To return to Normal mode Perform step 1 twice. Press Open + Close until the motor clicks, wait ~1s and repeat.			Wait for Motor "Double CLICK" (~2s) Repeat Wait for Motor "Double CLICK" (~2s) Normal Mode					
	Dealer/Ins	staller Options:							
		Installer Ontions	Normal	Dorty Made	Earcos	One Butter Or	Movo Assist		
			n/a	Default ON	Default ON	Y Default OFF	Y Default OFF		
		Auto Close Time Limit	n/a	1s – 1 dav	1s – 1 dav	1s – 1 dav	1s – 1 dav		
			n/a	Y	Y	Y	Y		
		Brake on Close	Default	Y	Y	Y	n/a		
Ont		Delayed Brake on Close	1s – 1 dav	1s – 1 dav	1s – 1 dav	1s – 1 dav	n/a		
Opt		Brake on Close Disable	V	Default	Default	Default	Default		
		Brake on Open	Y	Y	Y	Y	n/a	-	
		1	1 – 98 seconds Default 5s (Shared Setting)						
		V (Shared Setting) Infinite - 00				n – 905			
		Infinite Span Adjust Lime		r (Snared S	etting) Infinite =	33	n/a	4	
		Span Adjust Disable	01- 1001	Y (Shared S	etting) Disable =	= U	Y		
		Span Adjust Range(in) Global Brake Disable* *wall switch brake disable	ып – 100ft Ү	6in – 100ft Y	ып – 100ft Ү	ып – 100tt Y	ып – 100tt Ү		

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