

APeX Gate Controller Replacement Instructions – v1.3 and higher

The APeX gate operator controls many different types of operators; there are fundamental differences in the operators that need to be accounted for in the controller. As such, the APeX controller adapts to the different types of operators via a programming switch located underneath the separate (if equipped) motor control board and small blue removable cover.

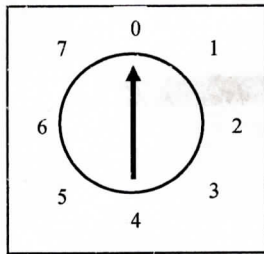
When using this APeX controller as a replacement, please follow these instructions:

1. Determine which type of operator the replacement board is for:

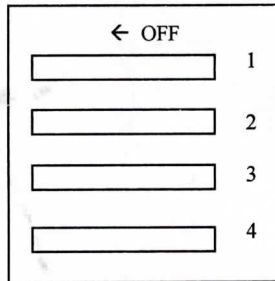
Switch Setting	Operator type	Used on operator models
0	Slide/Swing	SL and SW series, HSLG, GSLG, SWG
1	Barrier	BGU, BGU-D
2	Barrier Slow	BGUS, BGUS-D, SG, SG-D
3	Variable Speed	VS-GSLG, VS-GSWG

2. Set the multiple position switch located under the small removable blue cover to the corresponding setting. There may be two different switches used in this location, a rotary switch or a set of four dipswitches.

Rotary Switch



Dip Switch



Dip Switch Table

Setting DIP#	0	1	2	3
#1	OFF	ON	OFF	ON
#2	OFF	OFF	ON	ON
#3	OFF	OFF	OFF	OFF
#4	OFF	OFF	OFF	OFF

3. Cut the jumper wire next to the switch after setting the proper switch position. This enables the switch to change the operator type. *Not required if using setting 0 (Slide/Swing) since setting 0 is the factory default.*

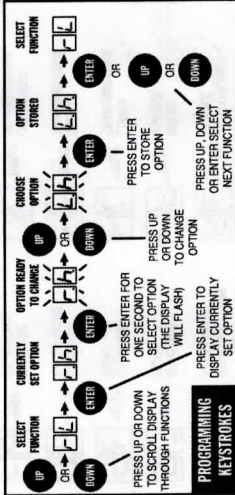
4. Install and wire the APeX controller as appropriate for the installation.

5. On power up, the controller will indicate " - - " "software version" " - - " "operator type" where operator type displayed is as follows:

Switch Setting	Operator type	Display indication
0	Slide/Swing	"5L"
1	Barrier	"b9"
2	Barrier Slow	"b5"
3	Variable Speed	"u5"

6. Program as desired for application.

PRESS UP & DOWN BUTTONS FOR 1-SECOND TO ENTER PROGRAMMING



PROGRAMMING KEYS/TROKES

APEX FUNCTION DISPLAY INDICATIONS

"RL" LEFT OR RIGHT HAND OPERATION	"LP" LOW POWER MODE	"FB" FAILURE MODE	"SS" SOFT START/STOP DURATION	"CT" RESET CYCLE COUNT	"MA" MAINTENANCE ALERT TRIGGER	"OR" OPEN/RESET INPUT	"TG" ANTI TAILGATE	"MT" MID-TRAVEL STOP POSITION	"RA" ANTI-TAILGATE ENABLE	"RA" RADIO ENABLE	"TL" LEARN TRANSMITTERS	"ST" STAGER TIME	"AR" AUXILIARY RELAY MODE	"RD" REVERSE DELAY TIME	"BD" BRAKE DELAY TIME	"CP" CONSTANT PRESSURE MODE	"SP" SHADOW LOOP OPEN PREVENTION
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FUNCTION **"SS"** **55**

OPTIONS **55** → **50**

SOFT START/STOP DURATION

SET SOFT START DURATION TIME FROM 1 TO 10 SECONDS

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

DC MODELS ONLY

FUNCTION **"OR"** **07**

OPTIONS **07** → **00**

OPEN/RESET INPUT

OPEN MODE OFF

OPEN COUNTER MODE

OPEN SUPERVISED MODE

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

BARRIER GATES ONLY

FUNCTION **"AT"** **AE**

OPTIONS **AE** → **AN**

ANTI-TAILGATE ENABLE

ANTI-TAILGATE ENABLE OFF GATE REQUIRES AUTO OR MANUAL CLOSE

ANTI-TAILGATE ENABLE ON GATE CLOSURE WHEN SHADOW LOOP CLEARS

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

NOT FOR BARRIER GATES

FUNCTION **"TD"** **ED**

OPTIONS **ED** → **ED**

DELETE TRANSMITTERS

"TD" WILL BLINK FOR 30 SECONDS WHILE THE CONTROLLER IS READY TO DELETE ONE OR MORE TRANSMITTERS. (TO EXIT WITHOUT DELETING ANY, PRESS ENTER)

TO DELETE ALL TRANSMITTERS, PRESS ENTER FOR 2 SECONDS, OR TO PICK TRANSMITTERS GO TO NEXT STEP

PRESS UP OR DOWN TO SCROLL THROUGH THE LIST OF TRANSMITTER NUMBERS & PICK (ALSO TO EXIT WITHOUT DELETING, PRESS ENTER)

PRESS ENTER FOR 3 SECONDS TO DELETE THE TRANSMITTER DISPLAYED

FUNCTION **"MO"** **ED**

OPTIONS **ED** → **ED**

MOTOR TYPE SELECTION

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

AC MOTOR ONLY

DC MOTOR ONLY WITH BRAKING

DC MOTOR WITH SOFT START/STOP

ALL LRA INSTALLATIONS USE D2

3 PHASE AC MOTOR

AC MOTOR PRIMARY WITH BRAKING

DC MOTOR BACKUP WITH BRAKING

DC MOTOR PRIMARY WITH SOFT START/STOP

NOTE: SELECTION MUST MATCH MOTOR BOARD!

FUNCTION **"CT"** **00**

OPTIONS **00** → **00**

RESET CYCLE COUNT

PRESS ENTER TO START THE CYCLE COUNT DISPLAY

1ST DISPLAY → 2ND DISPLAY → 3RD DISPLAY → 4TH DISPLAY → 5TH DISPLAY

EXAMPLE ABOVE SHOWS 10,020 CYCLES

DECIMAL POINT/LIT ON 4TH DISPLAY

NOTE: PRESS ENTER FOR 2 SECONDS WHILE THE "CT" FUNCTION IS DISPLAYED TO RESET THE CYCLE COUNT TO ZERO

FUNCTION **"TG"** **02**

OPTIONS **02** → **00**

ANTI-TAILGATE

ANTI-TAILGATE FUNCTION DISABLED

ANTI-TAILGATE FUNCTION ENABLED

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

BARRIER GATES ONLY

FUNCTION **"RA"** **02**

OPTIONS **02** → **00**

RADIO ENABLE

INTERNAL RADIO RECEIVER DISABLED

INTERNAL RADIO RECEIVER ENABLED

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

FUNCTION **"ML"** **02**

OPTIONS **02** → **00**

LEARN MGT TRANSMITTERS

"ML" WILL BLINK FOR 30 SECONDS WHILE THE CONTROLLER IS READY TO LEARN AN MGT TRANSMITTER

ACTIVATE THE MGT TRANSMITTER. THE DISPLAY WILL FLASH "YE". IF THE TRANSMITTER IS ALREADY ENTERED, "YE" WILL BE DISPLAYED. IF DECODE IS BAD "ERROR" WILL BE DISPLAYED.

"YE" = REVERSE "N" = STOP "OP" = OPEN OBSTRUCTION "CL" = CLOSE OBSTRUCTION

PRESS UP OR DOWN TO SELECT THE MGT FUNCTION

PRESS ENTER TO ACCEPT THE SELECTION

"ML" WILL SHOW "YE" FOR 3 SECONDS, THEN SHOW THE TRANSMITTER ID NUMBER. REPEAT STEPS FOR SECOND MGT TRANSMITTER IF USED

FUNCTION **"CL"** **00**

OPTIONS **00** → **00**

RESET TO FACTORY DEFAULTS

WHILE "CL" IS DISPLAYED, PRESS ENTER

ALL PROGRAMMED DATA WILL BE CLEARED AND THE FACTORY DEFAULTS WILL BE STORED IN MEMORY.

NOTE: THIS FUNCTION WILL NOT ERASE CURRENT SENSE VALUES, OR MOTOR TYPE.

FUNCTION **"MA"** **00**

OPTIONS **00** → **00**

MAINTENANCE ALERT TRIGGER

DISABLES THE MAINTENANCE ALERT FUNCTION

SETS THIS MAINTENANCE ALERT TRIGGER FOR 5, 10, 15 OR 25 THOUSAND CYCLES

RESETS THE MAINTENANCE ALERT INDICATOR AND SETS THE MAINTENANCE ALERT COUNT TO ZERO

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

FUNCTION **"MT"** **02**

OPTIONS **02** → **00**

MID-TRAVEL STOP POSITION

MID-TRAVEL STOP DISABLED (GATE RUNS FULL TRAVEL)

SET LENGTH OF OPENING TIME FROM 1 TO 99 SECONDS

PRESS UP OR DOWN TO CYCLE THROUGH OPTIONS

PRESS ENTER TO SELECT AN OPTION

NOT FOR BARRIER GATES

FUNCTION **"TL"** **00**

OPTIONS **00** → **00**

LEARN TRANSMITTERS

PRESS ENTER (ONCE FOR EACH TRANSMITTER, UP TO 40 TRANSMITTERS TOTAL)

"TL" WILL BLINK FOR 30 SECONDS WHILE THE CONTROLLER IS READY TO LEARN A TRANSMITTER

ACTIVATE THE TRANSMITTER

DISPLAY WILL SHOW "YE" THEN THE TRANSMITTER ID NUMBER. "YE" WILL BE DISPLAYED. IF DECODE IS BAD "ERROR" WILL BE DISPLAYED.

FUNCTION **"MD"** **00**

OPTIONS **00** → **00**

ERASE MGT TRANSMITTERS

PRESS ENTER

"MD" WILL BLINK FOR 30 SECONDS WHILE THE CONTROLLER IS READY TO DELETE ALL MGT TRANSMITTERS

TO DELETE ALL MGT TRANSMITTERS, PRESS ENTER FOR 2 SECONDS. (TO EXIT WITHOUT DELETING ANY, QUICKLY PRESS ENTER)

THE DISPLAY WILL SHOW "DELETE ALL" AND THE CONTROLLER RETURNS TO PROGRAMMING MODE



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