Date: 10/17/23

JC

Acquire + Crestron FW Update Steps:

- 1. Send **ACQUIRE START SG** first before you press button.
- 2. Press SET (middle) button three times + one 10s hold.
 - You might see it flash white once before 10 seconds are up, but continue to hold the button until there is another flash around 10 seconds.
- 3. When you see the white LED light up for a long pause, that means it acquired to Gateway and you should see the shade pop up on the GW screen.
- 4. Send **REP** command to check status
- 5. Change RFID: RFRCON 01 SUBGID [newRFID] SG
- 6. Set Serial Number: RFRCON xx SERIALNUMBER [s/n] SG
- 7. Check motor status using RFRCON xx MDBGINFO SG

```
CEN-GW1>RFRCON 23 MDBGINFO SG
CEN-GW1>
Upper Limit:
Lower Limit:
                      008007f5
                     00800420
                      00800430
Position:
Err Flgs: Oh
Raise Direction: CCW
Reverse:
Mode:
                      Normal
Batt Voltage:
                      010101
Motor SW Ver:
Mtr Stopped:
Mtr Running:
                      Ν
                      O [O: stopped, 1: raising, 2: lowering]
O [O: ready, 1: success, 2: interrupted, 3: timeout]
Mtr Status:
Remote Status:
Speed (RPM):
                      18
21041701
App Ver:
Number Raise Count:
Number Lower Count:
                              0
Number Cycle Count:
                              470
CSM-QMTDC-163-1-SG-RC>
CEN-GW1>
```

- 8. Make sure the upgrade file is in FileZilla /firmware folder.
- 9. If batt level is > 25%, you can update FW using **SENDBURNCLIENTFW xx** [file_name.bin]



When testing, see motor debug information using RFRCON xx MDBGINFO SG console command.

```
CEN-GW1>acquire start sg
SG acquire started
CEN-GW1>[FAh][B3h] Active
                                                    00124b0029f7c6da 39F7C6DA Y 01 Y CSM-QMTDC-163-3-SG-RC [v1.001.0115, #39F7C6DA] [FBh]
CEN-GW1>acquire stop sg
SG acquire stopped
CEN-GW1>rfrcon 01 subgid 24 sg
CEN-GW1>[FAh][B3h] Active 00124b0029f7c6da 39F7C6DA Y 24 Y CSM-QMTDC-163-3-SG-RC [v1.001.0115, #39F7C6DA] [FBh]
[FAh][B3h] Active 00124b0029f7c6da 39F7C6DA Y 24 Y CSM-QMTDC-163-3-SG-RC [v1.001.0115, #39F7C6DA] [FBh]
 [CTR] Device ID chg (0/0000h)
SUBG ID set to 24h
CSM-QMTDC-163-1-SG-RC>
CEN-GW1>
CEN-GW1>
CEN-GW1>rfrcon 24 mdbginfo sg
CEN-GW1>
Upper Limit:
Lower Limit:
                            00800d81
                            00800668
Position: 0080
Err Flgs: Oh
Raise Direction: CCW
                            00800669
Reverse:
Mode:
                           Normal
Batt Voltage:
Motor SW Ver:
Mtr Stopped:
Mtr Running:
                           68
010101
Y
N
Mtr Status:
                            Stopped
Speed (RPM):
App Ver:
                            18
21041701
Number Raise Count:
Number Lower Count:
Number Cycle Count:
CSM-QMTDC-163-1-SG-RC>
```



RFRCON xx HELP SG Console Command

This command prints out all possible console commands available. I highlighted commands that will be helpful for motor control testing.

CEN-GW1> RFRON 24 HELP SG

Commands:

Note: all numeric parameters are in hex unless noted

ACQUIRE [START|STOP] [ch] Display/enter/exit acquire mode

REBOOT Reboot the device

RSSI Display RSSI data

STATUS Display general device status info SUBGID [ID] Display/set device SUBG ID

TIME Display current time/date
UNACQUIRE Unacquire from gateway
VER Display device version string

? This help menu

RESTORE Restore Factory Defaults

RAISE Raise Shade

LOWER Lower Shade

OPEN Open Shade

CLOSE Close Shade

STOP Stop Shade

SETUL Set Upper Limit
SETLL Set Lower Limit
GETUL Get Upper Limit
GETLL Get Lower Limit
DELLIM Delete limits

GETMTRDATA Get Wistar Motor Data

PAIRREM Pair Wistar Remote

DELREM Delete Wistar Remote

MDBGINFO Shade Motor Info

MDBGCNTR Shade Counters



SHOWUI Display UI state

GOTOPOS Move shade to position MTRUPDWN Move motor one time

JOGUPJog Up LimitJOGDNJog Down LimitWIGGLETest WiggleCYCLECycle the ShadeCYCLECNTCycle Count

ENDCYCLE End the Cycling Test

MOVEBYTICKS Rotate by number of ticks

CSMDEBUG Set debug mode CSMERRLOG Show Error Log

DIAGNOSTICS Enter/Exit Diagnostics

UPTIME Time since bootup

GETPOSPERC Get Position in percent

GETPOS
Get Current Position
MTRSTAT
Get motor status
MTRVER
GET Motor Sw ver
GETSPEED
GET Motor Speed
GETDIR
Get motor dir
SETDIR
Set motor dir

PRODTEST SET prodtest flag

LEDTEST Test FP LEDs
BTNTEST Test FP Buttons
TEMP Temperature

FLASHTEST Test External Flash

GOSTANDBY Enable/Disable Power Policy

REBOOTMTR Reboot Wistar Motor

SHADEINFO Shade information

GETADC Get Raw ADC Value for the Ch

BATTLEVEL Battery Level
BATTCAP Battery capacity
PSRC Power source
BATTLIMIT Battery limit
CURLOG Current log print

CURFLUSH Current log flush



CURSTEP Current log step

MDBGPRINT Periodic Motor Dbg Print
DEBUGCURRENT Shows debug current
CAPTURE Starts current capture

OCTHON OCTH ON
OCTHOFF OCTH OFF
OCTHCLEAR OCTH CLEAR
FLASHSLEEP Put Flash Sleep

MASSEREXTFLASH Mass Erase Ext Flash
READNVPARAM Get shade spec. NV Data
SHADEPARAMS Read loaded NV Params

NVSTATUS Read Various NV Stats
WISTARMSG Send message to Wistar

TESTLEDBLU
TESTLEDRED
TESTLEDGRN
TESTLEDWHITE
SHADEFLAGS
Test blue LED
Test red LED
Test green LED
Test white LED
Test white LED

WISTAROTA Initiate Host OTA Cmd (NOT AVAILABLE YET FOR TESTING)

GID Group ID list

RFRCON xx PAIRREM SG Console Command

You can pair remote using **RFRCON xx PAIRREM SG** console command.

Note: Please send command and press STUDY button on back of remote right away (timeout is about 3 seconds from what I've observed...)



Setting Limits w/ Buttons

Below are screenshots of SETTING LIMITS <u>WITH BUTTONS</u>. You can see the different limit states <u>highlighted</u> as we set limits.

- 1. Press middle button for 4 seconds until LED turns red/green alternating.
- 2. Press Up button once to set Upper Limit
- 3. Press Up to desired limit position.
- 4. Press middle button for 4 seconds to SET limit.
- 5. Press Down to desired limit position.
- 6. Press middle button for 4 seconds to SET limit.

```
h][B3h] Active
                             00124b0029f7c6da 39F7C6DA Y 24 Y CSM-QMTDC-163-3-SG-RC [v1.001.0115, #39F7C6DA] [
CEN-GW1>
CEN-GW1>
CEN-GW1>rfrcon 24 mdbginfo sg
CEN-GW1>
Jpper Limit:
Lower Limit:
                    00ffff00
                    0000000ff
00800000
Position:
Err Flgs: Oh
Raise Direction: CCW
Reverse:
                    No Limits
Batt Voltage:
Motor SW Ver:
                    010101
    Stopped:
```

```
CEN-GW1>rfrcon 24 mdbginfo sg
CEN-GW1>
                 00ffff00
Upper Limit:
ower Limit:
                 000000ff
                 00800000
Position:
Err Flgs:
                 Oh
Raise Direction: CCW
Reverse:
                 Enter Set Limits
Mode:
Batt Voltage:
                  100
                 010101
Motor SW Ver:
ftr Stopped:
   Running:
```



CEN-GW1>rfrcon 24 mdbginfo sg CEN-GW1> Upper Limit: Lower Limit: 00ffff00 000000ff 00800000 Position: Err Flgs: Oh Raise Direction: CCW Reverse: Mode: Set-Lower Batt Voltage: Motor SW Ver: Mtr Stopped: 100 010101 CEN-GW1>rfrcon 24 mdbginfo sg CEN-GW1> Upper Limit: Lower Limit: 00ffff00 007ffa15 Position: 007ffa0a Err Flgs: Oh Raise Direction: CCW Reverse: Mode: Set-Upper Batt Voltage: Motor SW Ver: Mtr Stopped: Mtr Running: 010101 CEN-GW1>rfrcon 24 mdbginfo sg CEN-GW1> Both limits set = Upper Limit: Lower Limit: 007fff9e 007ffa15 Position: **Normal Mode** UU/fffa2 Err Flgs: Oh Raise Direction: CCW Reverse: Mode: Normal Batt Voltage: Motor SW Ver: Mtr Stopped: 100 010101

Mtr Running:

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Previous Solution Provided for Multiple RFID Problem

Here is the solution for Gateway problem mentioned in WhatsApp (multiple RFID 01):

- 1. Use SETRFIDBYUUID [newRFID] [UUID] SG command to change RFID.
 - a. newRFID = any RFID from 3 FE (choose a unique ID for each motor)
 - b. UUID = first number next to Active/Inactive in REP command

The blue box shows where the UUID is located. And the yellow box shows you that the RFID was changed from 22 to 23 using the SETRFIDBYUUID console command.

