

SOMFY CONNECT™ UAI PLUS



PROGRAMMING GUIDE

SOMFY CONNECT™ UAI PLUS

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I. INTRODUCTION

The Somfy Organization's strength has been demonstrated with 50 years of experience in motorization. As leaders in the shading industry with innovation and modernization solutions for homes and commercial buildings, Somfy offers the widest range of strong, quiet motors and controls for all types of applications and technologies.

Who is this Guide for?

This guide is aimed at providing support and guidance to installers and integrators for programming automation systems with Somfy Digital Network™ (SDN) motorized shading systems to create integrated projects operated using the Somfy Connect™ Universal Automation Interface (UAI) Plus and industry standard automation protocols.

What does this Guide contain?

The sections of this guide contain walkthroughs and methods of programming the Somfy Connect™ Universal Automation Interface (UAI) Plus to communicate via IP over serial connections.

This guide discusses the programming of SDN systems to operate from automation control systems.

For questions or assistance please contact technical support:

(800) 22-SOMFY (76639)

Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq

Follow the steps to access Service & Support.

How should this Guide be used?

This guide is intended to be used as a reference manual.

II. OVERVIEW

The Somfy Connect™ UAI Plus enables control of SDN motors from third-party control systems.

For more information go to the [Somfy Connect UAI Plus product page at Somfypro.com](https://www.somfy.com/en-us/products/somfy-connect-uai-plus)

The Somfy Connect™ UAI Plus is designed to commission and control residential and commercial Somfy Digital Network (SDN) motors through IP and RS-232 serial communication.

Commissioning includes auto motor discovery, limit setting, limit adjusting, intermediate positions, motor grouping, and generating a system integration report.

SYSTEM REQUIREMENTS

PC running Windows 10 or higher

Chrome 59.0.3071 or higher

NOTE: A PC running Windows 10 or higher with Chrome 59.0.3071 or higher is required for motor commissioning and Somfy Connect™ UAI Plus firmware updates. A mobile device can be used to control motors once commissioning is complete.

NOTE: The Somfy Connect™ UAI Plus must be powered by an external power supply.

CONNECTIONS & LEDS



LED BEHAVIOR:

FAST BLINK
START UP

SLOW BLINK
ONLINE

GREEN
DHCP ACTIVE

AMBER
STATIC IP ACTIVE

RS232/RS485 WIRING PINOUT

Pin #	Color	Function	
		UAI Plus	Third-Party
1	Orange White	SDN RS485 (+)	-
2	Orange	SDN RS485 (-)	-
3	Green White	RS232 RX (Port 1 Only)	RS232 TX
4	Blue	24V DC	-
5	Blue White	24V DC	-
6	Green	RS232 TX (Port 1 Only)	RS232 RX
7	Brown White	SDN RS485 GND	GND
8	Brown	SDN RS485 GND	-

III. INSTALLATION

MOUNTING & POWER

The Somfy Connect UAI Plus is mounted on a DIN rail either near an automation system, network switch, or anywhere close to the beginning of an SDN network.

Only one Somfy Connect UAI Plus is used per SDN Segment.

Power is received through an external power supply.

WIRING TO SYSTEM FOR OPERATION

The UAI Plus connects to any SDN device port.

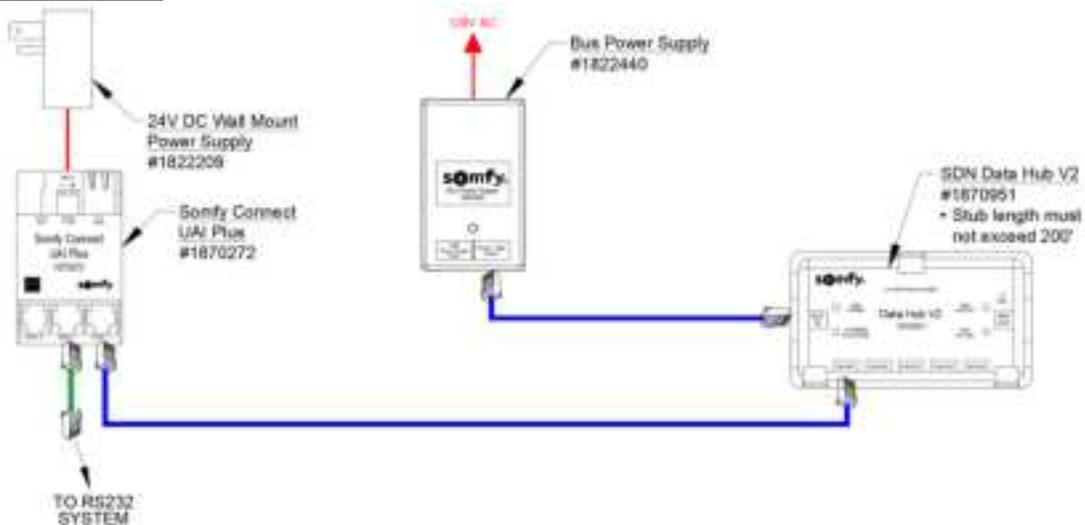
Serial Integration (RS232/RS485)

- a. CONNECT **Port 1** to system serial port
- b. CONNECT **Port 2** to Somfy Device Port on a Somfy Bus Distribution Device (Data Hub V2, PowerConnect Panels)

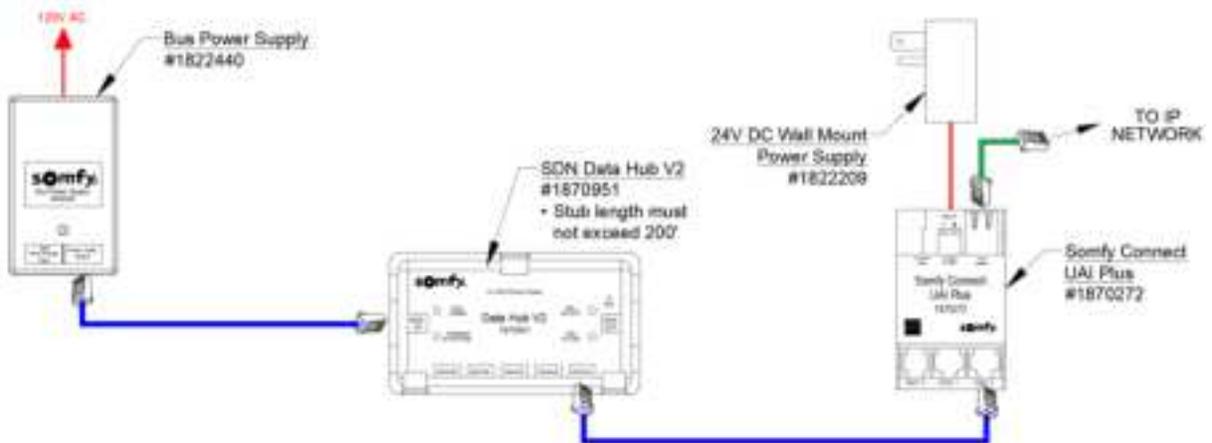
IP Integration

- a. CONNECT **Ethernet Port** to the building IP network to which the third-party system is also connected (Optional) or directly to a third-party IP port
- b. CONNECT **Port 2** to Somfy Device Port

SERIAL INTEGRATION



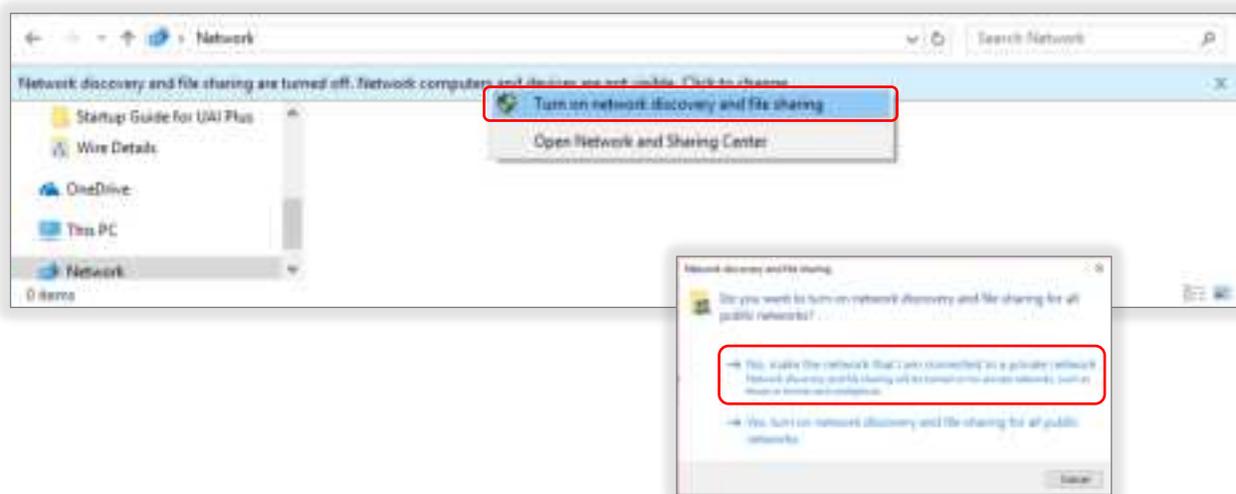
IP INTEGRATION



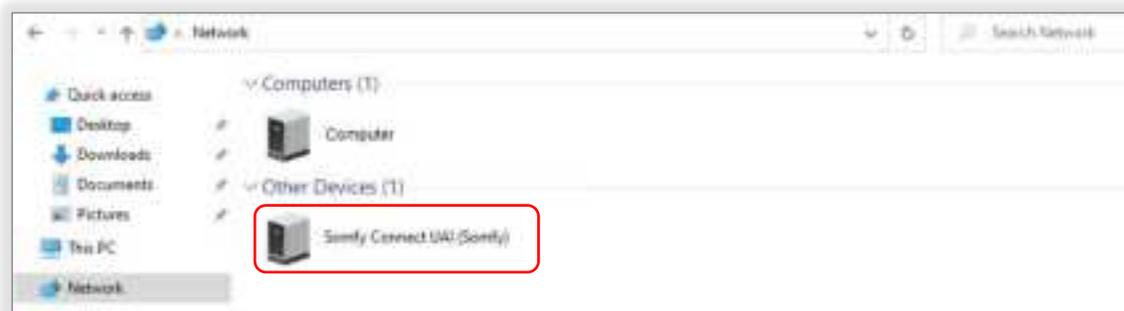
IV. CONNECT

1. DISABLE the WiFi on the computer, unless connecting to the UAI Plus over a WiFi network
2. CONNECT Windows PC to the Ethernet Port on the UAI Plus
3. OPEN the File Explorer
4. DOUBLE-CLICK the Network folder

NOTE: If prompted that network discovery is turned off, SELECT "OK". RIGHT-CLICK on the top bar and choose "Turn on network discovery and file sharing" and in the following window, DOUBLE-CLICK "No, make the network that I am connected to a private network".



5. The UAI Plus icon will appear in the list of devices, which means it is now connected. DOUBLE-CLICK the UAI Plus icon in the Network device list to open a web browser connecting to the UAI Plus homepage



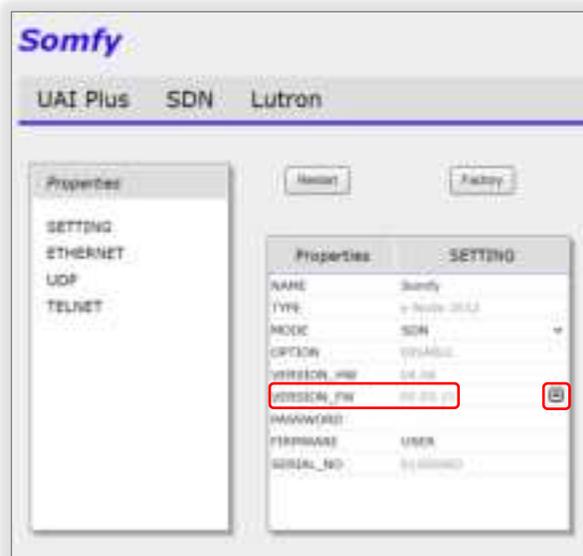
V. UPDATE

NOTE: Ensure the UAI Plus is updated to the most current firmware before installing on the SDN system. It may require running the update process multiple times until the UAI Plus is up to the latest version.

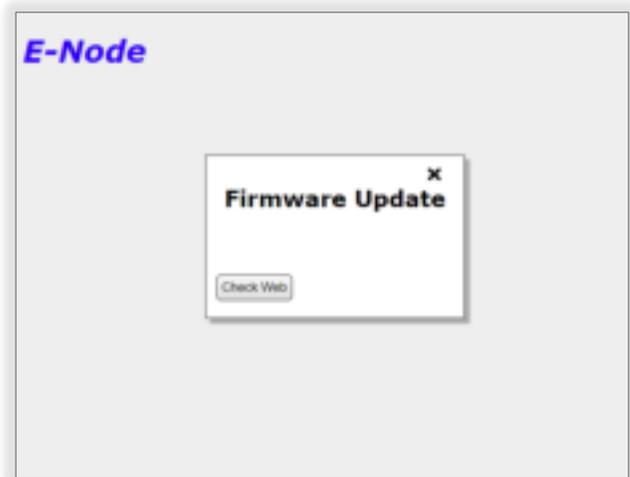


UAI PLUS HOMEPAGE

1. CONNECT PC then navigate to the UAI Plus homepage (Shown above)
2. HOVER OVER the three bars on the top right of the homepage then SELECT "Settings" (Shown below)
3. Find the current firmware version next to "VERSION_FW" then SELECT the square and triangle button which opens the "Firmware Update" page (Shown below)
4. DOWNLOAD the most recent firmware from the web or a locally saved file (Shown below)
5. REPEAT the process until "Latest already installed" displays



SETTINGS & PROPERTIES



FIRMWARE UPDATE PAGE

VI. VIRTUAL KEYPADS

TEST & CONTROL

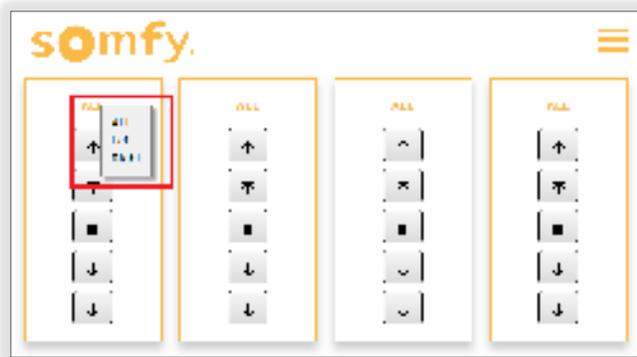
1. From the UAI Plus homepage, SELECT the “ALL” button (Shown below) This lists all the groups that are programmed to the UAI Plus

NOTE: This allows testing and control for up to four groups.

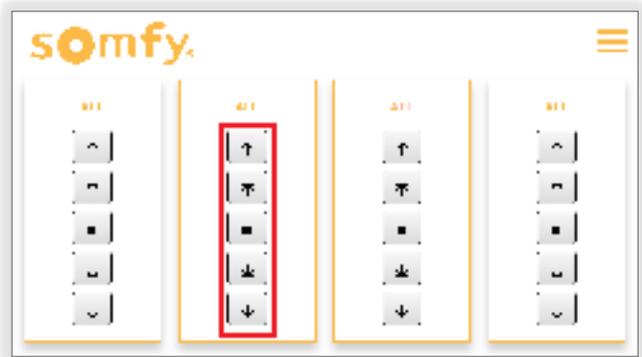
2. SELECT the group assigned to that keypad

The buttons below the group name do the following (Shown below)

- Arrow up will move the group to it’s upper limit
- Arrow up with line above it will move group up to it’s next Intermediate Position if it has any set, if not it will go to upper limit
- Square button will stop the group when moving
- Arrow down with line under it will move the group down to it’s next Intermediate Position if it has any set, if not it will go to lower limit
- Arrow down will move the group to it’s lower limit



VIRTUAL KEYPAD



VIRTUAL KEYPAD

TROUBLESHOOTING

This keypad is used to test all motors are operational and have limits set.

1. SELECT “Troubleshoot” in the dropdown menu (Shown below)
2. SELECT the Up, Stop, or Down buttons to control all motors on the system



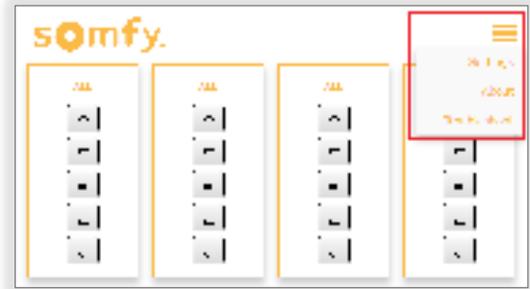
VIRTUAL KEYPAD

VII. SETTINGS & PROPERTIES

From the UAI Plus Homepage, HOVER OVER the three bars on the top right of the Homepage then SELECT "Settings" (Shown on the right)

The Settings & Properties page will open displaying the following information:

NOTE: SELECT Restart to apply changes to Settings, Ethernet, UDP and Telnet parameters



UAI PLUS HOMEPAGE

SETTING

- NAME – Current name; *SELECT field to edit*
- TYPE – Hardware type
- MODE – Mode type (Default is SDN); *Do not edit*
- OPTION – Not used (Default is DISABLE)
- VERSION_HW – Hardware version
- VERSION_FW – Firmware version
- PASSWORD – Displays the password; *SELECT field to edit*
- FIRMWARE – Firmware installed; *Do not edit*
- SERIAL_NO – UAI Plus serial number

ETHERNET

- IP_ADD – Current IP address
- DHCP – Current setting; *SELECT down arrow to edit*
- STATIC_IP – Static IP address when DHCP is disabled
- NETMASK – Subnet mask when DHCP is disabled
- GATEWAY_ADD – Default gateway when DHCP is disabled
- MAC_ADDRESS – MAC address of the UAI Plus
- UPNP – Enable or disable; *SELECT down arrow to edit*
- SDDP – Enable or disable; *SELECT down arrow to edit*

UDP

- SERVER – Enable or disable UDP server mode; *SELECT arrow to edit*
- LISTEN_PORT – Current listening port; *SELECT field to edit*
- SEND_PORT – Current sending port; *SELECT field to edit*

TELNET

- SERVER – Enable or disable Telnet server mode; *SELECT arrow to edit*
- LOGIN – Enable or disable Telnet logins; *SELECT down arrow to edit*
- USER 1,2,3,4 – Telnet usernames; *SELECT field to edit*
- PASSWORD 1,2,3,4 – Telnet passwords; *SELECT field to edit*



VIII.SDN COMMISSIONING

DISCOVER & PROGRAM

1. OPEN the SDN tab from the top menu of the Settings & Properties page
2. SELECT the magnifying glass to auto discover all motors found on the SDN system
All found motor Node IDs will populate in the left box under the Motors tab
3. SELECT any of the found motors to get the following options



SETTINGS & PROPERTIES PAGE



SDN COMMISSIONING PAGE

MOTOR SETTINGS

- NODE – Motor’s Node ID
- TYPE – Motor Type
- LABEL – Current motor name; *RIGHT-CLICK to edit*
- LOCK – Displays locked vs unlocked status
- POSITION – Current pulse count and % of motor; *SELECT to edit*
SELECT clockwise arrow to refresh motor position
- DIRECTION – Standard roll vs. reverse roll; *SELECT field to edit*
- LIMITS UP – Current upper limit pulse count; *SELECT field to edit*
- LIMITS DOWN – Current lower limit pulse; *SELECT field to edit*
- ROLL SPEED UP – Current roll up speed rate; *SELECT field to edit*
- ROLL SPEED DOWN – Current roll down speed; *SELECT to edit*
- ROLL SPEED SLOW – Current slow down speed; *SELECT to edit*
- SERIAL NUMBER – Motor’s Serial Number
- STACK VERSION – Motor’s stack version number

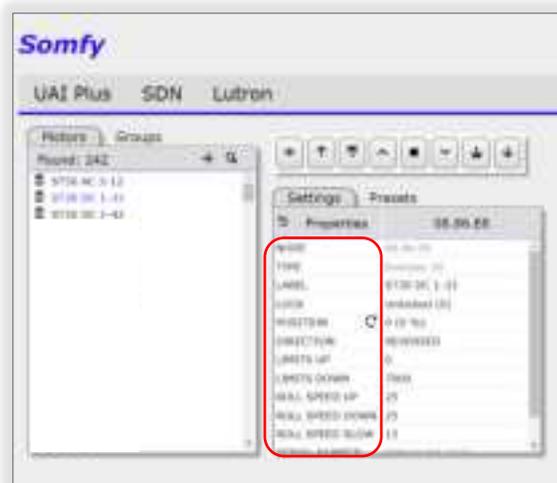
MOTOR PRESETS

[Presets Icons]

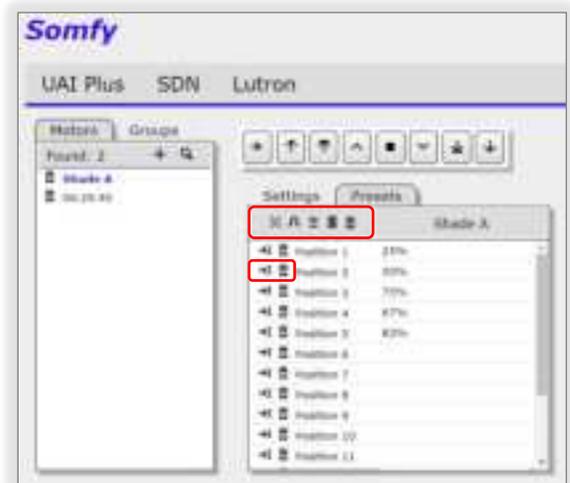
- PERCENT – Select to view percent values
- PULSE – Select to view percent values
- 3 LINES – Select to set the first 3 presets to 25/50/75%
- 5 LINES – Select to set the first 5 presets to 17/33/50/67/83%
- GARBAGE CAN – Select to delete all presets in the motor

[Position Icons]

- ARROW with 3 LINES – Select to set the Position to the motor’s current position
- GARBAGE CAN – Select to delete the selected Position



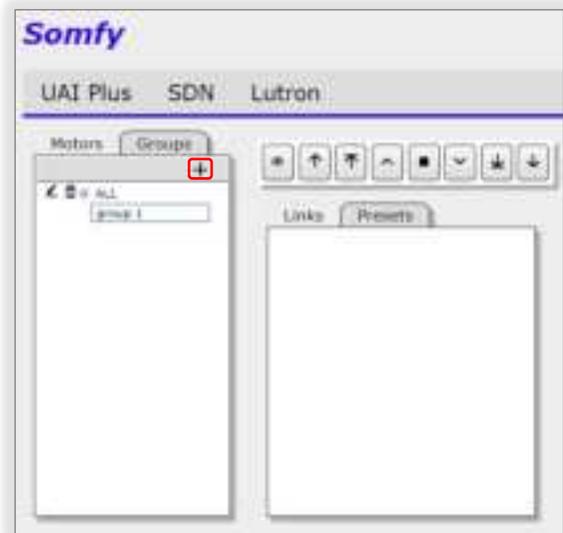
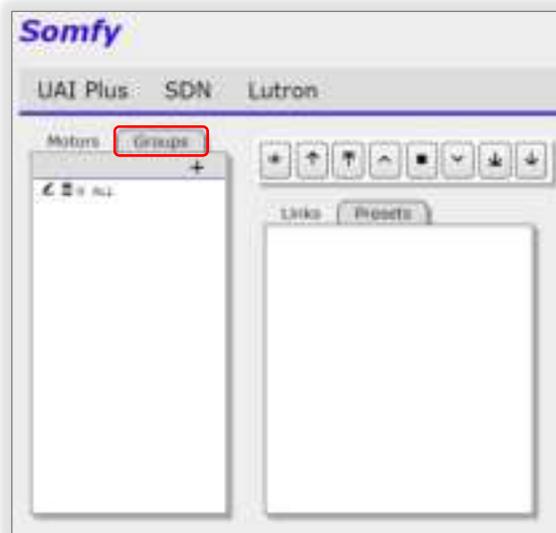
MOTOR SETTINGS



MOTOR PRESETS

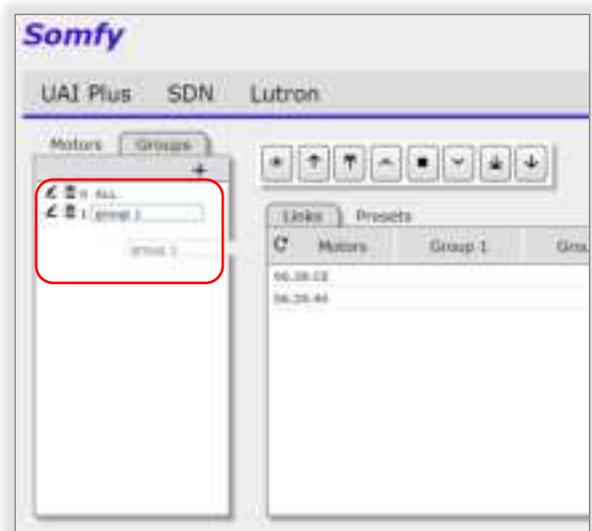
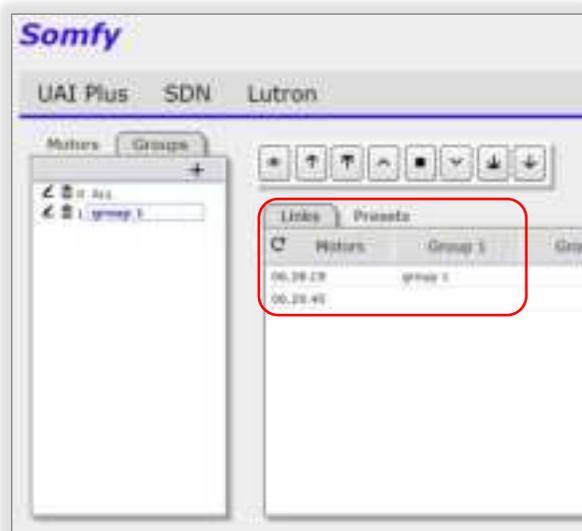
GROUPS

1. SELECT the "Groups" tab to create, delete, edit motor groups, and add individual motors to groups
2. SELECT the + sign to create a new group and name the group



3. SELECT the Links tab to the right to open a grid listing all the motors
4. SELECT the group from the left column then DRAG & DROP it to any group space next to the motors

NOTE: RIGHT-CLICK in the Group 1-16 columns to assign the group to the motors



- SELECT the pencil and paper icon to edit a group name
- SELECT the garbage can icon to delete a group

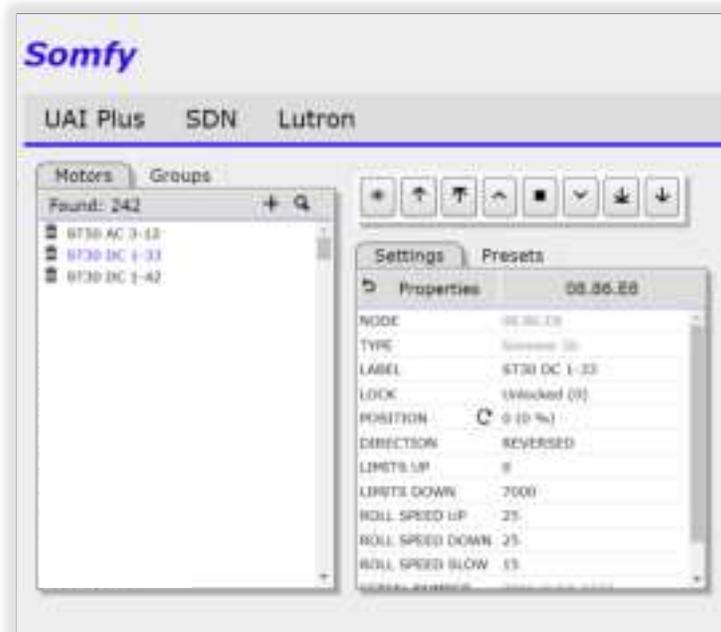
IMPORTANT: DO NOT DELETE THE "ALL" GROUP

An "ALL" group that has been deleted will only come back after a Factory Reset [[see Factory Reset Section](#)]

MOVEMENTS

Select a motor or group, then select the control buttons

- EYE – Wink
- ARROW UP – Move to upper limit
- ARROW UP WITH LINE – Move up to the next IP, if set, or the upper limit if there are none set
- CARET UP – Jog that moves up a few pulses
- SQUARE – Stop all movement
- CARET DOWN – Jog that moves down a few pulses
- ARROW DOWN WITH LINE – Moves down to the next IP, if set, or the lower limit if there are none set
- ARROW DOWN – Move to the lower limit



APPENDIX

[APPENDIX A] GENERATE INTEGRATION REPORT

1. To generate the Integration Report, HOVER OVER the SDN tab then SELECT "Report"
2. Go to the Download folder to open/view the report.csv file
3. Send this file to the Integrator and/or save it for project record keeping

The report will show:

- The IP address of the UAI Plus
- The MAC address of the UAI Plus
- The Firmware that the UAI Plus is running
- All Telnet Usernames and Passwords that are set up on the UAI Plus
- All motor IDs that have been discovered
- The motor's label (name) that it was given in the UAI Plus
- All the groups that each motor belongs to
- All the Groups that were created in the UAI Plus
- The Group's Hexadecimal address
- The Group's inverted address which is used when programming the Somfy DecoFlex Keypads using the Set pro by Somfy Configuration software
Download the latest Software: www.somfypro.com/services-support/software
- The Group's name that it was given in the UAI Plus



DOWNLOAD EXCEL FILE



INTEGRATION REPORT

APPENDIX

[APPENDIX B] FACTORY RESET

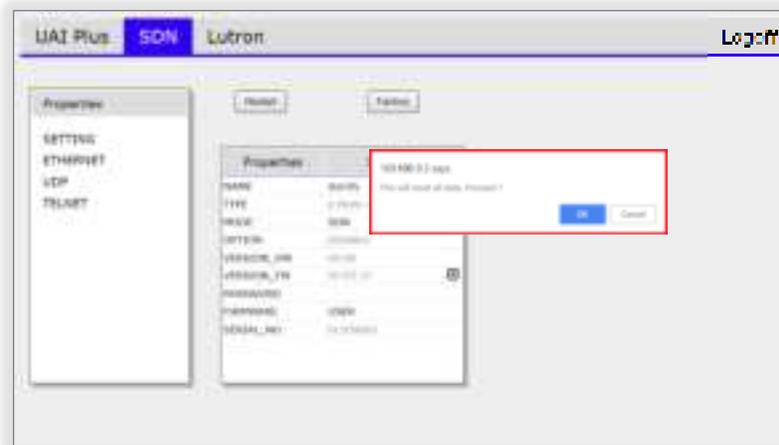
Below are two ways to factory reset the UAI Plus:

IMPORTANT: Generate the Integration Report before performing a Factory Reset.

When a Factory Reset is performed, the motors will not lose their programming, the UAI+ IP addresses and the SDN Group List need to be recreated to restore project operation.

Virtual Factory Reset button from the GUI or user interface:

1. FIND the "Factory" button on the Settings page
2. When this button is pressed, it will prompt "This will reset all data"; SELECT OK to proceed
3. Once the UAI Plus reboots, RECONNECT using the steps in the [Connect section of this guide](#)



VIRTUAL FACTORY RESET

Physical Factory Reset button on the UAI Plus:

1. CLOSE all browser windows that are connected to the UAI Plus
2. REMOVE the cover to expose the blue reset button
3. PRESS & HOLD the blue reset button until the green LED blinks 3 times
4. Once the UAI Plus reboots, RECONNECT using the steps in the [Connect section of this guide](#)



PHYSICAL FACTORY RESET

FOR QUESTIONS OR ASSISTANCE PLEASE CONTACT TECHNICAL SUPPORT:

(800) 22-SOMFY (76639)

Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq

Follow the steps to access Service & Support.

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About Somfy®

For over 50 years, Somfy has been pioneering innovative motorization and automated solutions for window coverings and exterior shading products. With comfort, ease of use, security, and sustainability in mind, our seamless and connected solutions are designed to help people make the move to living spaces impactful for humans and with a reduced impact on nature.

A BRAND OF SOMFY GROUP

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