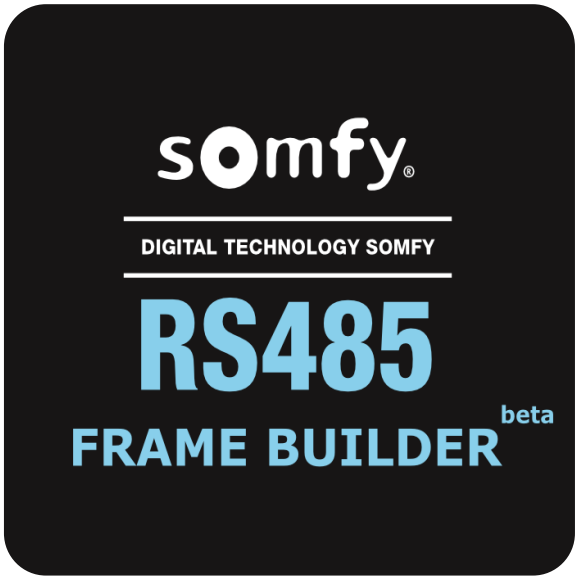
RS485 Frame Builder



Quick Guide

1. Objective

• The goal of this tool is to help system integrators, by avoiding to calculate in hexadecimal, to know which datas to send, to control Somfy RS485 products.

• No need to connect the PC to an RS485 network.

2. Configuration

• Windows XP

3. Installation

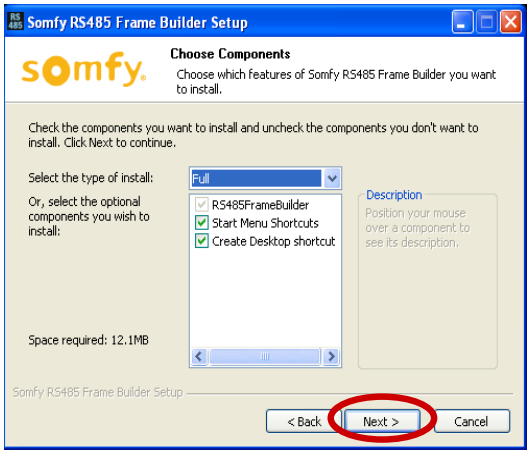
• Download the application:

RS485FrameBuilder Setup.1.1.1.33722.exe

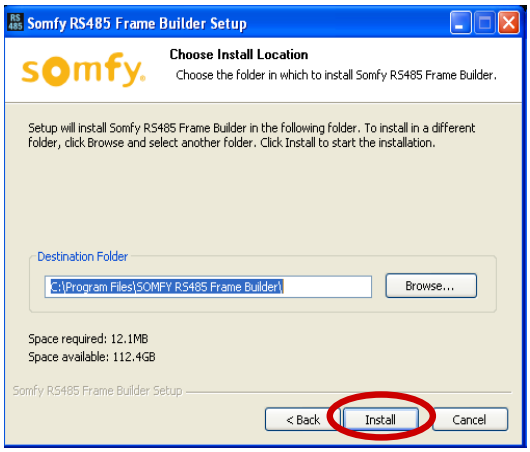
• Double-click to execute the installation

• Click on '**I Agree**'

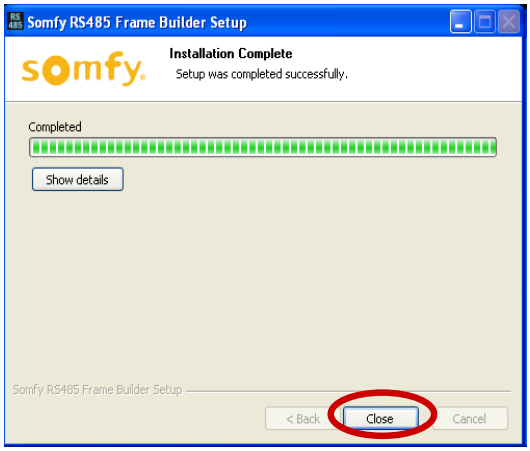
• Choose components, then click on '**Next >**'



- Select the destination folder, then click on '**Install**'



- Click on '**Close**' to finish the installation

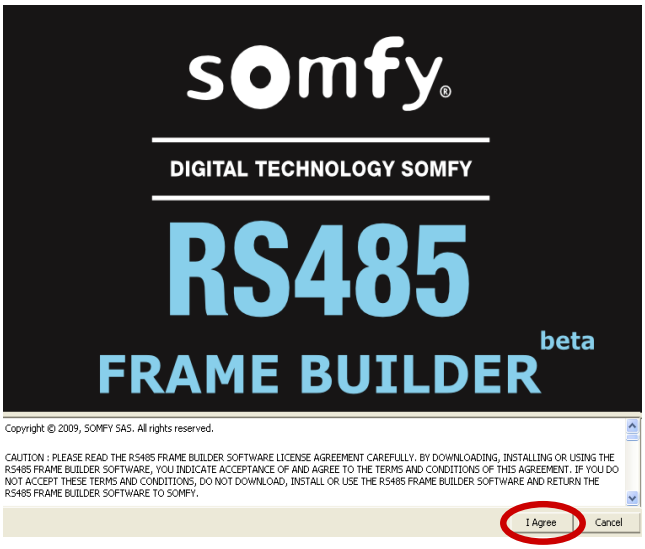


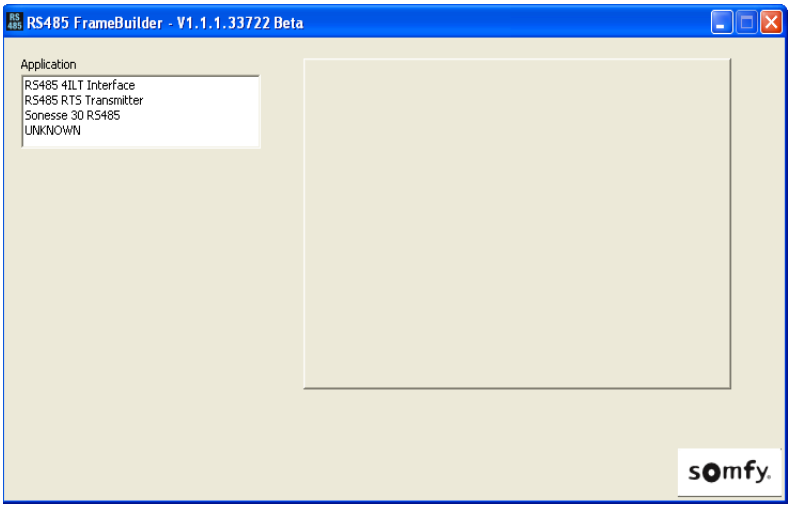
4. Use

- Launch the application '**RS485 Frame Builder**'

RS485 Frame Builder

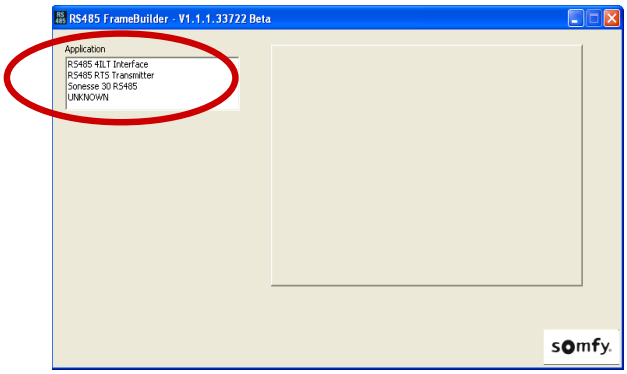
• A black window appears ; click on '**I Agree**' to continue or on '**Cancel**' to close





RS485 Frame Builder

- Select the concerned RS485 Somfy product



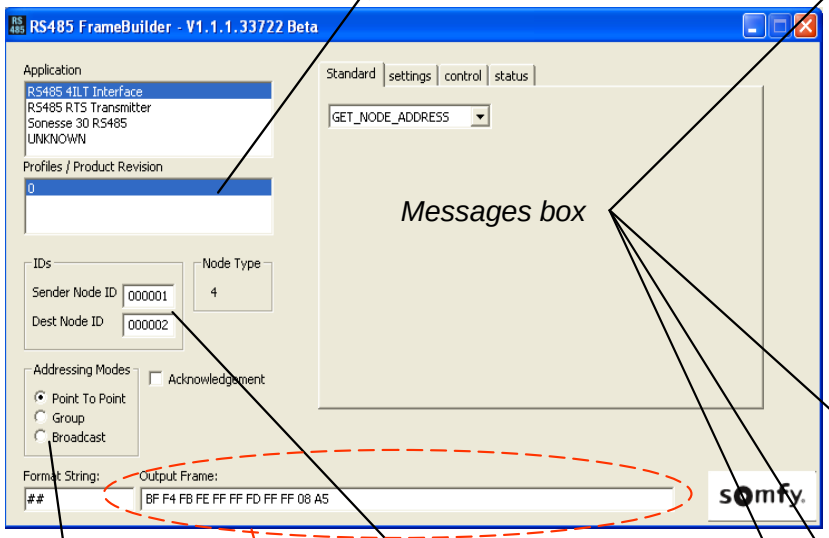
- List of managed RS485 products by the software:
  - RS485 RTS TRANSMITTER

  - RS485 4ILT INTERFACE

  - SONESSE 30 RS485 (not launched internationaly)

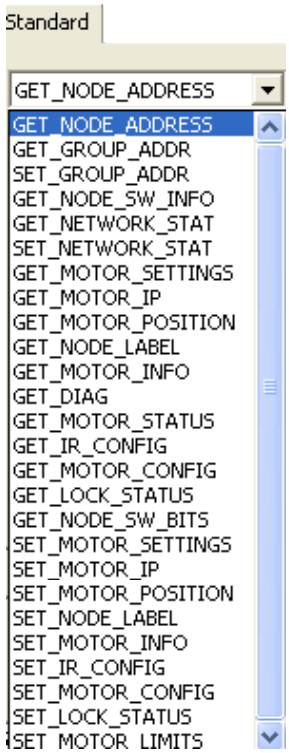
5. RS485 4ILT Interface

Product version

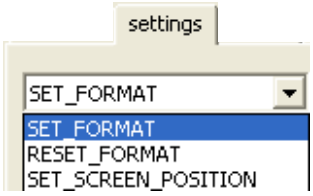


Messages box

Standard messages:



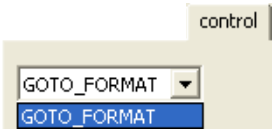
Settings messages:



Host address (master)

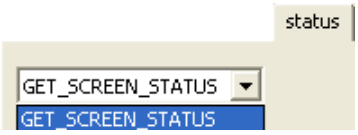
Slave address (= Node ID of the interface)

Control messages:



Addressing mode

Status messages:



Output Frame = Data to send

! Red text means something is not correct !

Host@ = FF:FF:00 (FF FF 00 <= @ <= FF FF FE for a non-SOMFY host)
Slave@ = 05:00:02 (See NodeID label on product)

• Standard messages supported by the RS485 4ILT Interface

Message's number	Message's name	Compatibility	Message's description
40	GET_NODE_ADDRESS	√	Ask all online nodes to send their NodeID
41	GET_GROUP_ADDR	√	Read one entry of groups table
51	SET_GROUP_ADDR	√	Define one entry in the group address table
70	GET_NODE_SW_INFO	√	Read software information
4E	GET_NETWORK_STAT	√	Request to send network communication statistics
5E	SET_NETWORK_STAT	√	Configure and reset network communication statistics

• Settings messages supported by the RS485 4ILT Interface

Message's number	Message's name	Compatibility	Message's description
90	SET_FORMAT	√	Store current position of each motor in the selected format definition
91	RESET_FORMAT	√	Erase definition of selected format
98	SET_SCREEN_POSITION	√	Send Up/Down/Stop order to the selected motor output

• Control messages supported by the RS485 4ILT Interface

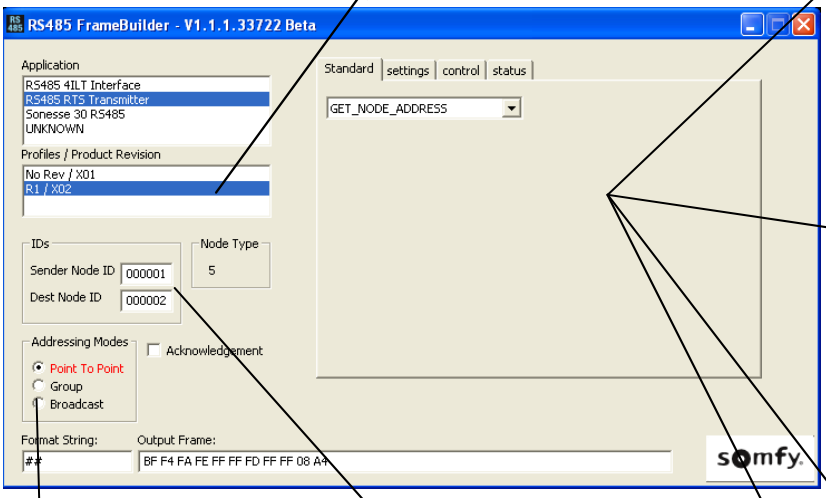
Message's number	Message's name	Compatibility	Message's description
80	GOTO_FORMAT	√	Change position of all motors following selected format definition

• Status messages supported by the RS485 4ILT Interface

Message's number	Message's name	Compatibility	Message's description
88	GET_SCREEN_STATUS	√	Read all information available for the selected motor output

6. RS485 RTS Transmitter

Product version



Host address (master)

Slave address (= Node ID of the transmitter)

Addressing mode

Output Frame = Data to send

! Red text means something is not correct !

Host@ = FF:FF:00 (FF FF 00 <= @ <= FF FF FE for a non-SOMFY host)
Slave@ = 05:00:02 (See NodeID label on product)

• Standard messages supported by the RS485 RTS Transmitter

Message's number	Message's name	Compatibility	Message's description
40	GET_NODE_ADDRESS	√	Ask all online nodes to send their NodeID
41	GET_GROUP_ADDR	√	Read one entry of groups table
51	SET_GROUP_ADDR	√	Define one entry in the group address table
4E	GET_NETWORK_STAT	√	Request to send network communication statistics
4D	GET_NETWORK_ERROR_STAT	√	Read error counter of the stack
5E	SET_NETWORK_STAT	√	Configure and reset network communication statistics
4C	GET_NODE_SERIAL_NUMBER	√	Read serial number of the node
74	GET_NODE_APP_VERSION	√	Read version of the software
45	GET_NODE_LABEL	√	Read label of the node
55	SET_NODE_LABEL	√	Write label of the node

• Settings messages supported by the RS485 RTS Transmitter

Message's number	Message's name	Compatibility	Message's description
90	SET_CHANNEL_MODE	√	Set the modes to use
91	SET_TILT_FRAMECOUNT	√	Set the number of RTS frames the product should send on a **CTRL_TILT** order
92	SET_DIM_FRAMECOUNT	√	Set the number of RTS frames the product should send on a **CTRL_DIM** order
93	SET_SUN_AUTO	√	Activate/Deactivate the sun protection
94	SET_DCT_LOCK	√	Lock/Unlock Dry Contact inputs
97	SET_CHANNEL	√	Validate an addition or a deletion of an RTS channel's address
98	SET_OPEN_PROG	√	Open the programming mode of a receiver
9A	SET_IP	√	Record/Delete Intermediate Position

- Control messages supported by the RS485 RTS Transmitter

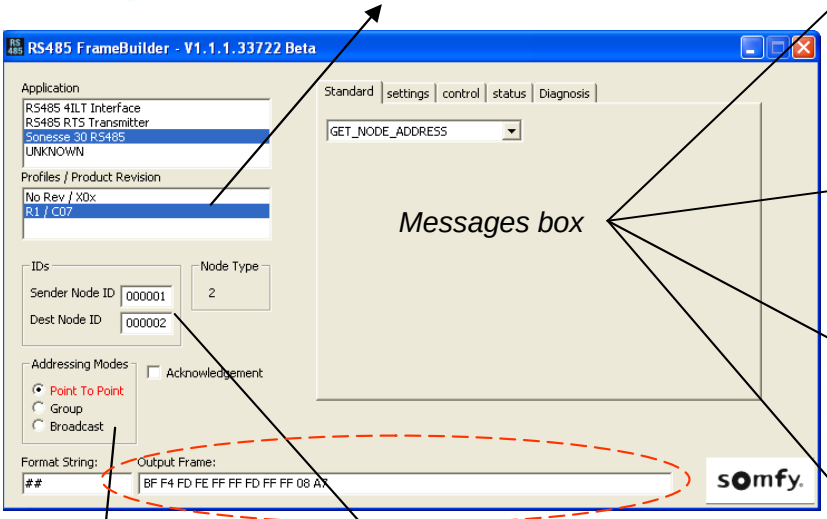
Message's number	Message's name	Compatibility	Message's description
80	CTRL_POSITION	√	Send orders to open (or ON), stop a movement, go to the favorite position and to close (or OFF)
81	CTRL_TILT	√	Send orders to tilt slats of venetian blinds
82	CTRL_DIM	√	Send orders to dim the light on RTS receivers with dimming function

- Status messages supported by the RS485 RTS Transmitter

Message's number	Message's name	Compatibility	Message's description
A0	GET_CHANNEL_MODE	√	Get the modes used for the selected channel
A1	GET_TILT_FRAMECOUNT	√	Get the number of RTS frames the product should send on a **CTRL_TILT** order (=accuracy)
A2	GET_DIM_FRAMECOUNT	√	Get the number of RTS frames the product should send on a **CTRL_DIM** order (=accuracy)
A4	GET_DCT_LOCK	√	To know which Dry Contact inputs are locked or not

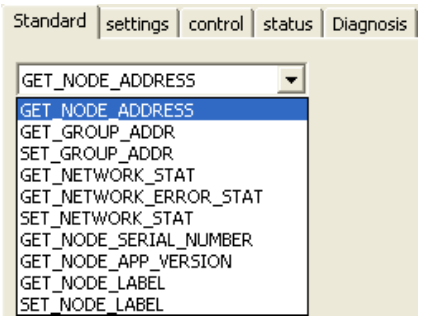
7. Sonesse 30 RS485 *

Product version

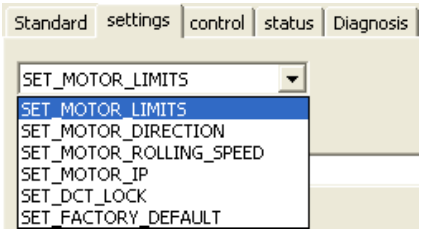


Messages box

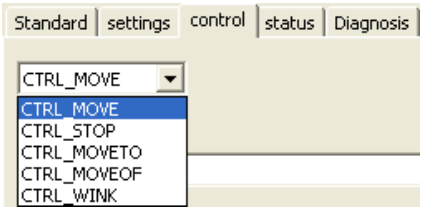
Standard



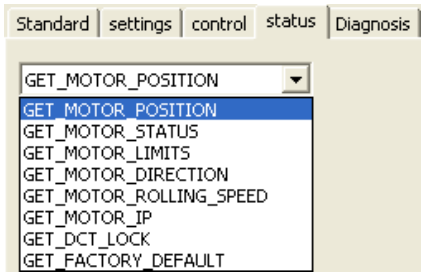
Settings messages:



Control messages:



Status messages:



★ *Host address (master)*

Slave address (= Node ID of the motor)

Addressing mode

Output Frame = Data to send

! Red text means something is not correct !

★ Host@ = FF:FF:00 (FF FF 00 <= @ <= FF FF FE for a non-SOMFY host)
Slave@ = 05:00:02 (See NodeID label on product)

*** : Not launched internationaly**

• Standard messages supported by the Sonesse 30 RS485

Message's number	Message's name	Compatibility	Message's description
40	GET_NODE_ADDRESS	√	Ask all online nodes to send their NodeID
41	GET_GROUP_ADDR	√	Read one entry of groups table
51	SET_GROUP_ADDR	√	Define one entry in the group address table
4E	GET_NETWORK_STAT	√	Request to send network communication statistics
4D	GET_NETWORK_ERROR_STAT	√	Read error counter of the stack
5E	SET_NETWORK_STAT	√	Configure and reset network communication statistics
4C	GET_NODE_SERIAL_NUMBER	√	Read serial number of the node
74	GET_NODE_APP_VERSION	√	Read version of the software
45	GET_NODE_LABEL	√	Read label of the node
55	SET_NODE_LABEL	√	Write label of the node

• Settings messages supported by the Sonesse 30 RS485

Message's number	Message's name	Compatibility	Message's description
11	SET_MOTOR_LIMITS	√	Set or adjust UP and DOWN motor limits
12	SET_MOTOR_DIRECTION	√	Set the rotation direction of the motor
13	SET_MOTOR_ROLLING_SPEED	√	Set the motor speed for rolling application
15	SET_MOTOR_IP	√	Set or delete Intermediate Positions
17	SET_DCT_LOCK	√	Lock/Unlock local dry contact inputs
1F	SET_FACTORY_DEFAULT	√	Recall factory default for all or selected parameters

• Control messages supported by the Sonesse 30 RS485

Message's number	Message's name	Compatibility	Message's description
01	CTRL_MOVE	√	Start a UP or DOWN movement in momentary mode (for settings)
02	CTRL_STOP	√	Stop all movement
03	CTRL_MOVETO	√	Move to an absolute position: Up end-limit, Down end-limit, one of the 16th Favourite Intermediate Position, Position in pulses, Position in %
04	CTRL_MOVEOF	√	Relative movement from current position: Next IP up, Next IP down, Jog up (in pulses or msec), Jog down (in pulses or msec)
05	CTRL_WINK	√	Move the blind for visual identification: Up and down movement

• Status messages supported by the Sonesse 30 RS485

Message's number	Message's name	Compatibility	Message's description
0C	GET_MOTOR_POSITION	√	Request current position of the motor
0E	GET_MOTOR_STATUS	√	Request current status of the motor
21	GET_MOTOR_LIMITS	√	Request values of UP and DOWN end-limits
22	GET_MOTOR_DIRECTION	√	Request motor rotation direction
23	GET_MOTOR_ROLLING_SPEED	√	Request motor speed values for the rolling mode
25	GET_MOTOR_IP	√	Request position of an Intermediate Position (in pulses or %)
27	GET_DCT_LOCK	√	Request the status of a DCT input: Lock or unlock
2F	GET_FACTORY_DEFAULT	√	Request if specified function has its default value