

(Ref. PHT/SRT-CTL V2.3)

PHT/SRT-CTL

Remote control unit for PHT/SRT





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1 About this manual

This manual has been prepared with great care and should be used to setup and use the PHT/SRT-CTL remote unit. The firmware of the PHT/SRT-CTL is updated with new features on regular basis, so please check for updates of the firmware and manual. If you have any questions or comments please feel free to contact us or a representative office. To make the manual more easy to read, sometimes the term "unit" is used for PHT/SRT-CTL.

Revision history

Before installation or using the unit make sure you have the latest version of this owners manual.

| Version | FW | Date | Remark | |
|-------------|-----------|------------|--|--|
| | PHT/SRT-C | | | |
| 0420M02V1.0 | 1.00 | | Initial manual | |
| 0520M02V1.1 | 1.00 | | Regulatory info modified | |
| | | | Minor corrections | |
| V1.2 | 1.03 | | Display parameters added (current and new) | |
| | | | Setting unit numbers for NCOM revised | |
| V2.0 | 2.00 | 23-11-2020 | Resolution: 800x480 | |
| | | | Preset edit enabled | |
| V2.1 | 2.00 | 21-06-2021 | Page numbering | |
| V2.2 | 2.02 | 29-06-2021 | Added: Activating presets by external RS485 commands | |
| V2.3 | 2.10 | 06-08-2021 | Bridge mode added | |

2 Disclaimer

Seatronx makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Further, Seatronx reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation of Seatronx to notify any person of such revision or changes. Please follow these safety instructions for best performance, and long life for your unit

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3 Box contents

Please check the box contents right after receiving the equipment. The contents depend on the options ordered.

| Image | Description | Remark |
|-------|--|-------------------------|
| | PHT/SRT-CTL | |
| | Mounting brackets with M5x50 screws | 2 pieces |
| | External power adapter (230VAC<>12VDC) | |
| | Mains cord (Euro style) | |
| | Screw type terminal block, pluggable | Metz RP01502VBLF, 2-pin |
| | Network cable 3mtr | |

4 Description

Then PHT/SRT-CTL is designed as an optional remote control unit for PHT/SRT units. It has a 4.3 Inch TFT with PCAP touch screen. With the PHT/SRT-CTL you can select an in put source and adjust brightness remotely by means of pressing buttons or making presets. This product is meant to be used indoor only, unless otherwise specified. With the right installation, proper operation and sufficient maintenance you will enjoy the unit for years to come. Please read this manual carefully before installation and usage.

5 Display

| Parameter | Description current | Description NEW | |
|---------------|---------------------|-----------------------|--|
| Diagonal | 4.3" | 4.3" | |
| Resolution | 480x272 | 800x480 | |
| Brightness | 830 cd/m2 | 720 cd/m2 | |
| Backlight | White LED | White LED | |
| Panel | Wide temperature | IPS, Wide temperature | |
| Touch | Capacitive touch | Capacitive touch | |
| Colors | 24-bit | 24-bit True Color | |
| Viewing angle | 6 O'clock best | 180/180 | |

6 Product identification

On the sticker at the backside of the unit you will find information for product identification.



7 Safety precautions

- Remove power if the unit is not used for a longer period. This will also result in a longer lifetime of the backlight leds.
- The cover glass or touch sensor is made of regular (or hardened) glass. This can be scratched or even broken in pieces by hitting it.
- Remove power before servicing the unit.
- In case of trouble contact your supplier. Service should only be done by qualified personal.
- Never open the chassis. There are no user-serviceable parts inside.
- Never place the unit or power supply near warm objects like heaters.
- Never place the unit of power supply in direct sunlight.
- Make sure there is enough space for airflow at the backside of the unit. Keep the ventilation gaps free from obstacles which can obstruct airflow.
- Keep the unit and power supply dry to avoid short circuit. Make sure no fluids can enter the units through the ventilation gaps.
- Wait for at least 6 seconds after switching power off before removing the cables.
- Make sure the temperatures do not exceed max values when storing or using the unit.
- Never expose the unit to strong vibrations during transport and use.

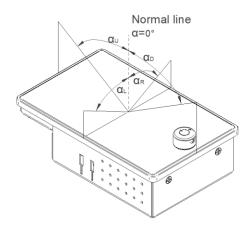
8 Hardware installation

The PHT/SRT-CTL can be placed used on a table top. The rubber bumpons at the rear side will prevent it to slide. The unit can also be flush mounted in a desk cutout.

Before installation check the power source to be compatible with the power input of your unit.

8.1 Position

When installing the PHT/SRT-CTL first make sure to determine the right place. Take at least the following variables in consideration: sunlight, heat, condensation, viewing angle, mechanical risc to front glass and control knob.

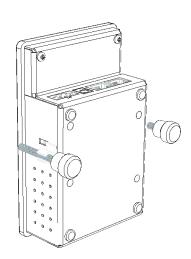


Viewing angle is an theretical value measured with standard colors and contrast. In real life some colors appear differet in certain viewing angles. The monitor should be installed with angle: $60 < \alpha < 0$.

The N-Control is used in portrait orientation.

8.1.1 Panel mount

There should be sufficient airflow at the back of the unit and avoid direct sunlight. This might heat-up the unit too much. The unit is supplied with 2 mounting brackets. Do not use excessive force on the screws. The screws should only used to hold the unit in position and not to make a watertight connection of the bezel with the desk.



8.2 Preparing the units to be controlled

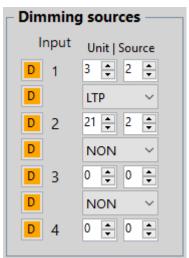
The monitors which will be controlled by the PHT/SRT-CTL need to be configured correctly. For Seatronx Monitors this can be done by using the NCOM-Application software. For SCOM models you can set the unit number with the OSD-function. Ncom and Scom can not be used simultaniously / mixed. The unit can be used in combination with VariCap illuminated Capswitch system from Seatronx, both running on NCOM.

8.2.1 Setting units numbers for NCOM

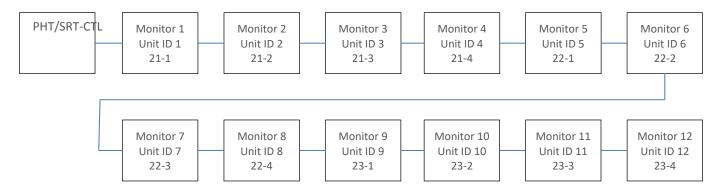
The Monitor control page (see 9) has 12 dedicated buttons for monitors. Each button can be seen as a dimming source. These source numbers are set in the NCOM app and correspond with the buttons shown in picture below:



21, 22 and 23 are virtual Unit numbers 1-2-3-4 are virtual Sources. In the App the selected monitor will be controlled by button [5]



Dimming control and non-dimming functions (power, source etc) are based on the unit ID with reference to the corresponding Monitor control button. The easiest way is setting the Unit ID same as the monitor number in the chain.

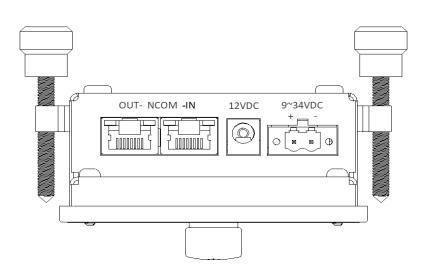


8.3 Setting the unit numbers for SCOM

When connecting Hatteland units, the button numbers correspond with the ID-numbers of the monitors. These can be set using the OSD control. First enable the Full Menu: PW protect: "321", Full Menu > Enter Key Code "362"
Then go to Management > Communication > 2-wire RS485 and Address RS with the corresponding number (ID 1-12).

8.4 Connecting the unit

Before switching on power make sure all connections have been made correctly. Finally power all units in the system.



NCOM-OUT : NCOM output to N-line NCOM-IN : RS-485 Input from PC

/ RS485 output to SCOM 12VDC : 12DC plug 2.5mm 9~36VDC : 9~36VDC (5W)

8.5 Front control knob

| OSD MENU Description | OSD MENU Description |
|----------------------|--|
| Dim knob | Dimming knob |
| (I)+ | Encoder knob for backlight brightness: rotate CW to increase and CCW to decrease. Brightness of PHT/SRT-CTL screen throught Settings page. Calibration: Press&hold the knob, release upon flash of backlit. Then push shortly again. 3 points are shown to touch. |
| | 3. To change parameters in <i>Preset edit</i> |

8.6 Screen layouts

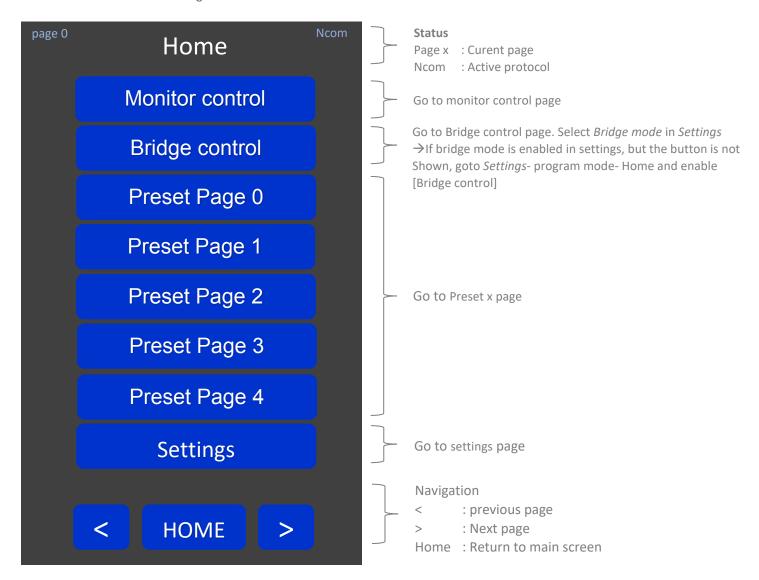
The PHT/SRT-CTL has pages you can scroll through. Reserved pages will be skipped when scrolling. All [Home] will always take you to page 0, the home-page.

| Page 0 | . Home | Page 7. Preset 5 |
|--------|-------------------|---|
| Page 1 | . Monitor control | Page 8. (reserved) |
| Page 2 | . Preset 0 | Page 9. Preset edit |
| Page 3 | . Preset 1 | Page 10. Settings |
| Page 4 | . Preset 2 | Page 11. (reserved) |
| Page 5 | . Preset 3 | Page 12. (reserved) |
| Page 6 | . Preset 4 | Page 13. Edit name (for 'Preset Page' and 'Preset') |

8.7 Home, main page

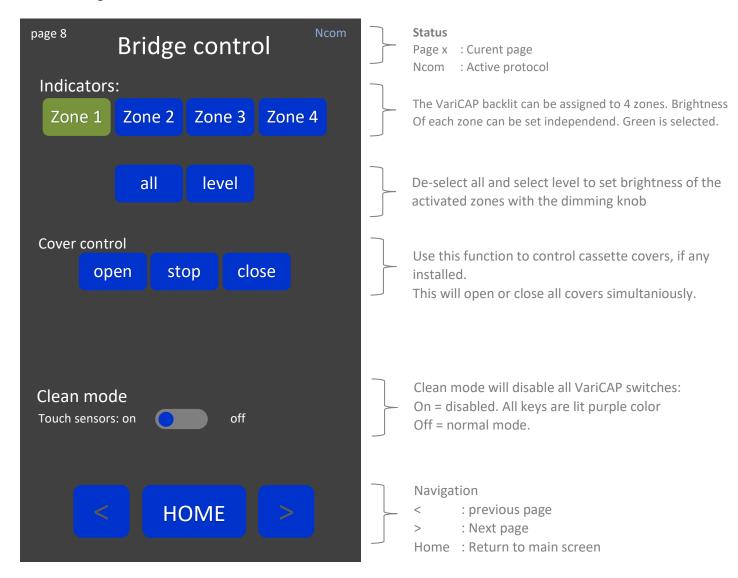
After powering up the unit 'Page 0' will appear. On this page you can select another page to enter.

→ Press&hold the dimming knob to activate touch screen calibration.



9 Bridge control (VariCAP)

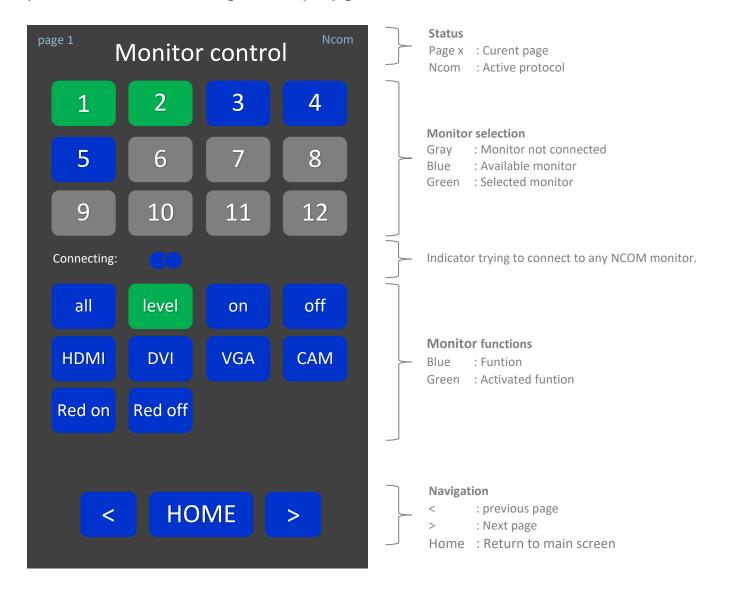
From the home page you can select *Bridge control*. Here you can set the backlit brightness for the zones, control the covers of the keyboard cassettes and disable the cap-switches when cleaning the glass surface. If the button is not shown, enable *Bridge mode* in *Settings*.



10 Monitor control

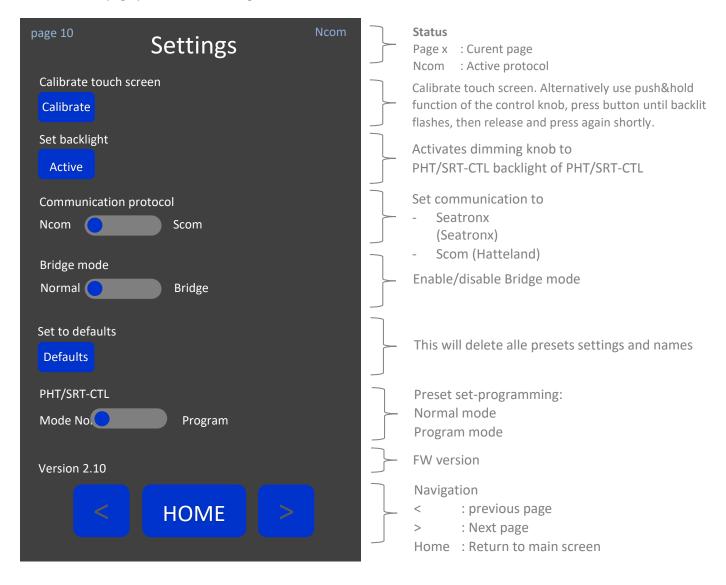
On this page you can choose a funtion to be activated on the selected monitor.

Select a monitor number (or [all]) and press one of the functions. When selecting [level] the button will stay active (green) so you will be able to rotate the dimming knob. Press [level] again to de-active.



11 Settings

From the home page you can select Settings.



12 Preset control

16 presets can be stored in 6 pages, max 4 presets per page. If bridge control is enabled there are 5 pages. A preset contains data for 12 monitors max.

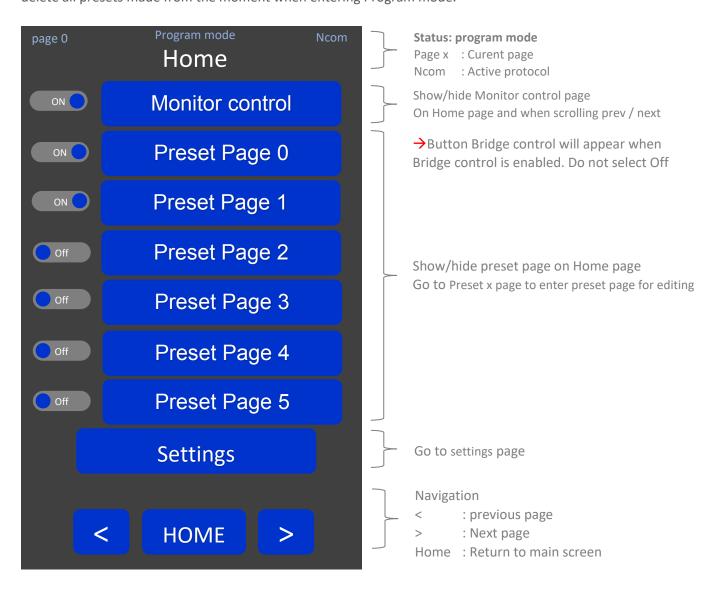
Main features:

- Define your own names for Preset Page and Preset
- Get and store monitor settings with only one button click
- Choose which parameter to activate in each preset
- Hide unused presets in Preset Page and Presets

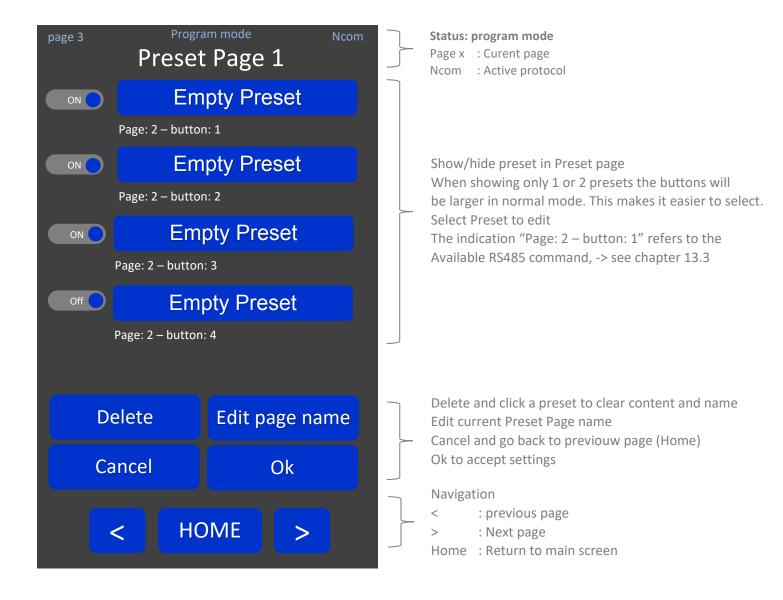
12.1 Programming presets - home

First enable program mode in: Home > Settings > PHT/SRT-CTL mode: set to Program Click Home and the Preset Page will be shown. Select the page you need to program/edit

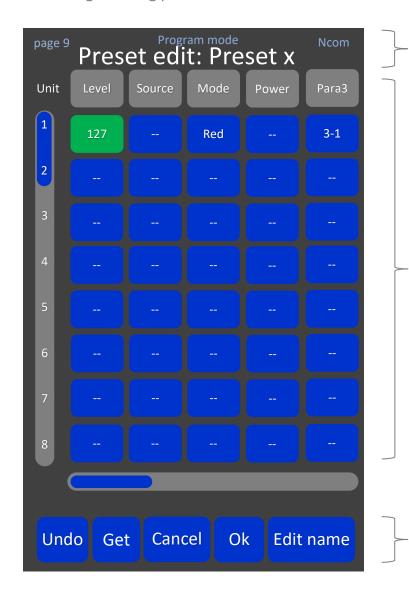
Presets will not be stored in Eeprom until return to normal mode. Unplugging power while in program mode will delete all presets made from the moment when entering Program mode.



12.2 Programming presets – Preset Page x



12.3 Programming presets - Preset edit



Status: Program mode
Page x : Curent page
Ncom : Active protocol

Parameter fields

Blue : Unselected parameter

Green : Selected parameter. Use encoder to modify data

- : Parameter not activated within preset

Unit : Unit number 1-12

Para3-6: Reserved

Use grey buttons for column selection

Use sliders to scroll

Undo : Cancel last change

Get : Upload parameters from display

Cancel: Cancel changes and return to prev screen

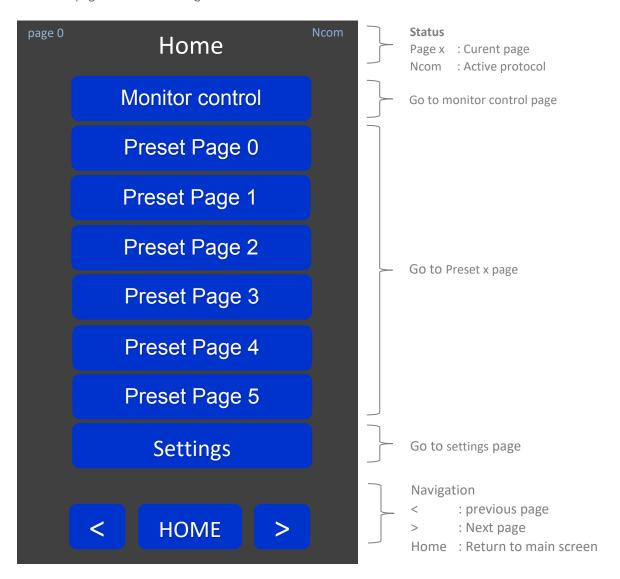
Ok : Accept and return to prev screen

Edit : Edit current preset name

name

13 Preset selection - Preset

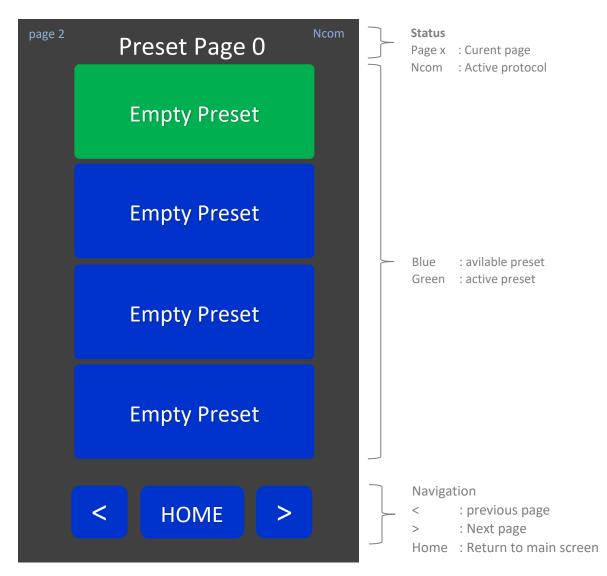
When all presets have been programmed, first enter Normal mode: Home > Settings > PHT/SRT-CTL mode, switch to Normal. The Home page will look like image below.



To activate a preset just select the corresponding button to enter the Preset Page.

13.1 Preset Page x

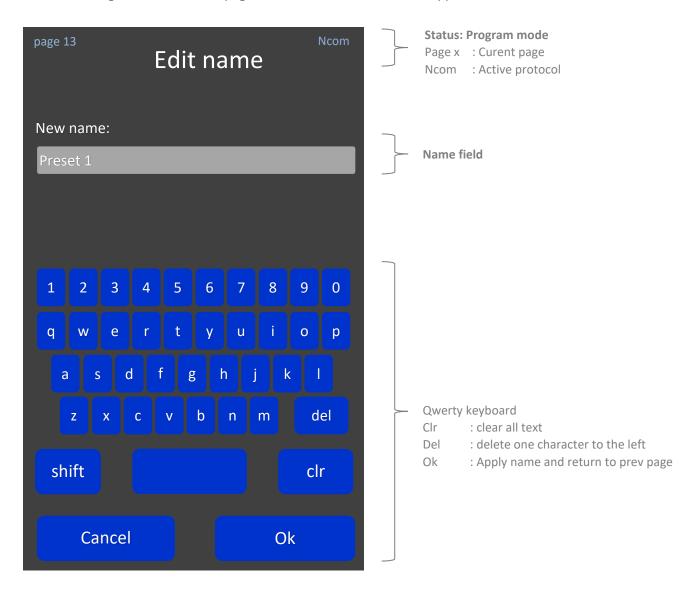
After selecting a Preset Page x you will enter the page with 4 presets. Click on a preset to activate.



To hide Preset pages or Presets, enter program mode in settings, go to the Preset Page and switch the selection box to OFF.

13.2 Edit name (keyboard)

When selecting Edit name or Edit page name the 'Edit name' screen appears:



13.3 Activating presets by external RS485 commands

Command: SetPresetNcontrol 0xA8

Description: Activate preset in PHT/SRT-CTL. Returns Ack or

Nack

| from: | to: | type: | network: | rate: |
|-------|-------------------------|--------------|----------|-------|
| PC | master/slave/last-slave | peer-to-peer | RS485 | once |

| line nr | byte nr | bytes | descript | ion | unit | type | Value | comment |
|---------|---------|--------|----------|--------|--------|---------|-------|------------------------------|
| 1 | 0 | 1 | STX | | byte | char | 0x02 | |
| 2 | 1 | 1 | Address | number | char | 0x01 | | logic address of PHT/SRT-CTL |
| 3 | 2 | 1 | Commar | nd | number | char | 0xA8 | |
| 4 | 3 | 1 | Data len | gth | index | char | 2 | |
| 5 | 4 | 1 | Data[0] | char | char | n | | preset page |
| 6 | 5 | 1 | Data[1] | char | char | n | | preset button |
| 7 | 6 | 1 | checksu | m | char | checksu | m | У |
| 8 | 7 | 1 | ETX | | byte | char | 0x03 | |
| | | total: | 8 | bytes | | | | |

Return is ACK / NACK

Example: activate *Preset 3* on *Preset page 1*.

| STX | Address Always 01 | | Data length | Preset page | Preset | Checksum | ETX |
|------|----------------------|------|-------------|-------------|--------|----------|------|
| 0x02 | 0x01 | 0xA8 | 0x02 | 0x01 | 0x03 | 0x4E | 0x03 |

Checksum: sum all data in hex: 02+01+A8+02+01+03 and inverse the byte, take lsb.

14 Maintenance

There are no user serviceable parts inside the unit. When the unit is used in its intended environment there is not much maintenance needed. Please follow these directions:

- Turn off the product and disconnect from the power source before cleaning or maintenance.
- To reduce the risk of electric shock, follow all safety notices and never open the unit's case
- Avoid dust and water to enter the unit and never open the unit for cleaning. This might damage the components inside
- Clean the chassis and glass with a soft, slightly moistened cloth. Do not use any abrasive or volatile cleaners.
- Always thoroughly dry off any moisture on the unit and glass before storing.
- Check all mounting screws if these are still sufficient secured
- Never use compressed air to clean the unit.

15 Trouble shooting

15.1 Power

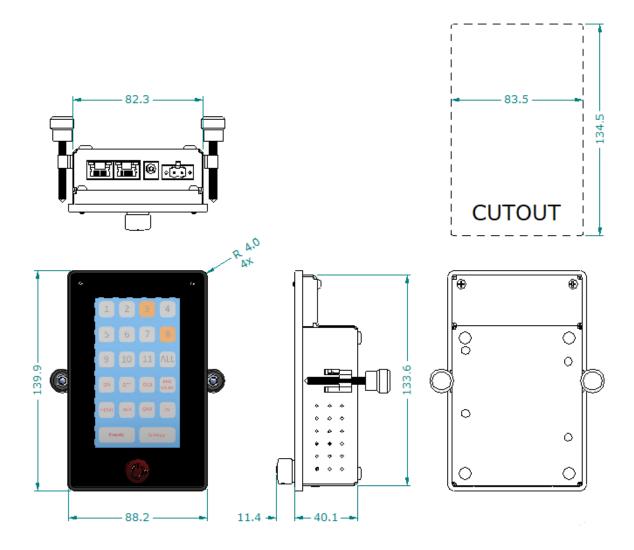
| Symptom | Problem | Action |
|-------------------------|-----------------------------|---|
| No image is shown | No power to the PHT/SRT-CTL | Check proper pinning of power connections Check proper fitting of the wires in the screw connector Check proper fitting of the power connector in the socket Measure voltage on power connector. |
| | | Should be 9~34VDC |
| Low brightness of image | Brightness not at 100% | Set higher brightness in Settings |

15.2 Touch screen

| Sympto | om | Problem | Action |
|--------|--|--|--|
| • | When you touch the screen no touch is detected | Touch screen is not calibrated | push&hold the control knob until backlit flashes, then release and press again shortly. Touch the points accordingly |
| • | A false touch is generated | There is a flow of wat the surface of the glas | |

16 Specifications

16.1 Dimensions



16.2 Electrical and environmental

In this manual all basic specifications are summarized. If you need more detailed info please contact us.

| Item | Item | Min | Max | Unit |
|-----------------------|--------------------|-------|------|------|
| Power | | | | |
| DC Input | 12VDC -plug | 12.0V | 36.0 | VDC |
| | Ext. DC Power | 12.0V | 36.0 | VDC |
| | | | | |
| IP-rating | | | | |
| | Front (with proper | | IP65 | |
| | mounting in desk | | | |
| | Rear | | IP22 | |
| | | | | |
| Storage tempereature | | -20 | 60 | °C |
| Operating temperature | | 5 | 50 | °C |

16.3 Pin assignments

Ncom - IN connector (RJ45 8p,8c)



(L -R)

| Pin | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 1 | 12V | 2 | - | 3 | - | 4 | RS485 D+ | 5 | RS485 D- |
| 6 | - | 8 | GND | | | | | | |

Ncom – OUT connector (RJ45 8p,8c)



L -R)

| Pin | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 1 | - | 2 | - | 3 | - | 4 | RS485 D+ | 5 | RS485 D- |
| 6 | - | 8 | GND | | | | | | |

12 VDC input plug



| Pin | Function | Pin | Function | Pin | Function | Pin | Function | Pin | Function |
|-----|-----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 1 | +12~36VDC | 2 | Detect | 3 | GND | | | | |

9~36 VDC input connector, max wire 2,5mm2 (N84 – N121 models)



| 60 | | | | | | | | | |
|-----|-----------|-----|----------|-----|----------|-----|----------|-----|----------|
| Pin | Function | Pin | Function | Pin | Function | Pin | Function | Pin | Function |
| 1 | +12~36VDC | 2 | GND | | | | | | |

17 Regulatory information

PHT/SRT-CTL remote dimming and control unit

This product is in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

Low Voltage Directive 2014/35/EG EMC Directive 2014/30/EU ROHS 2011/65/EU

The standards and/or technical specifications referenced below have been applied:

EN 55022: 2011, Information technology equipment - Radio disturbance characteristics -

EN 55024: 2010, Information Technology Equipment – Immunity Characteristics

EN 61000-3-2: 2019 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

EN 61000-3-3: 2013, Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection

18 Warranty

→ Warranty notification: Due to the extraordinary conditions for 'outdoor' use sunlight readable models (included options LED, Transflective and Optical bonding) have limited warranty of 1 year (12 months).

18.1 Coverage of the Warranty

Seatronx warrants any Seatronx unit first sold to an enduser to be free from defects in components and workmanship under normal use for the duration of the warranty period which is two (2) years (Warranty Period).

The warranty period commences on the date of purchase. Your original purchase invoice (sales receipt), showing the date of purchase, model number and serial number of the unit, is your proof of the date of purchase.

This Warranty represents a Carry-In warranty to Seatronx or any representative in the country where the unit has been purchased. The defective unit should be returned to the original Point of sales (POS)/reseller for repair.

This Warranty covers the costs of service parts and labour required to restore your unit to full working order. Seatronx will, at its option, repair or replace any defective units or parts thereof covered by this Warranty with new or factory-refurbished parts or units that are equal to new products in performance. A unit or part that is repaired or replaced under this Warranty shall be covered for the remainder of the original warranty period applying to the unit or part. For batteries the warranty period is limited to one (1) year due to the nature of item. This Warranty does not affect your statutory rights.

18.2 Warranty Exclusions and Disclaimer

The Warranty with respect to your unit is subject to the following exclusions and limitations:

a) Exclusions

This Warranty does not extend to:

- 1. any unit not manufactured by or for Seatronx, or sold to an end-user in a country not covered under this Warranty.
- 2. any unit that has been damaged or rendered defective (a) as a result of use of the unit other than for its normal intended use, failure to use the unit in accordance with the User's Manual that accompanies the unit, or other misuse, abuse or negligence to the unit;
- (b) by the use of parts not manufactured or sold by Seatronx;
- (c) by modification of the unit;
- (d) as a result of service by anyone other than Seatronx;
- (e) by improper transportation or packing when returning the unit to the Point of Sales (POS)/reseller; or
- (f) by improper installation of third party products (e.g. objectives).
- 3. any unit or parts thereof from which labels or serial numbers have been modified or made illegible.
- 4. loss of any, or damage to data. You are responsible for saving (backing up) any data or removable storage media. Seatronx may opt to replace the unit submitted for warranty services ith a manufactured unit of equal quality, and, thus, any data stored by you on your original unit may become permanently inaccessible to you.
- 5. fair wear and tear of consumable parts, i.e., parts that require periodic replacement during the normal course of the units usage, including without limitations, batteries, AC Adaptaters, AC/USB/AV cable, remote control or appearance parts.
- 6. cosmetic damages such as scratches and dents, scratched, faded or discoloured covers and plastics. Seatronx is not liable for any transport/delivery/ insurance costs, import duties, taxes, licensing fees and any charges from telephone/fax communication as consequence of the failure of the unit.
- 7. Seatronx supplies no warranty, either expressed or implied, for any bundled software, its quality, performance, merchantability, or fitness for a particular purpose. Nor does Seatronx warrant that the functions contained in the software will meet your requirements or that the operation of the software will be uninterrupted or error-free. As a result, unless otherwise stated in writing, the software is sold "as is".

b) Disc laimer of Warranty

Except for the express warranty provided and to the extent permitted by applicable law, Seatronx, its Authorised Resellers or Authorised Service Providers do not issue any warranty or guarantee for your unit. Seatronx expressly excludes any other liability, whether express or implied, to the fullest extent allowed by the law. In particular, but without limit to the generality of the exclusion, any implied terms as to merchantability, satisfactory quality, fitness for a particular purpose and/or non-infringement

of third party rights are excluded whether in contract or tort. Any implied warranties that may be imposed by law are limited in duration to the term of the express warranty given by Seatronx to the extent permitted by applicable law. To the maximum extent permitted by applicable law, in no event shall Seatronx or its supplier be liable for (1) damage to, or loss or corruption of data or removable storage media, or (2) any damages whatsoever (including direct or indirect damages, loss of business profits, lost savings or other special, incidental, exemplary or consequential damages whether for breach of warranty, contract, strict liability, tort or otherwise) arising out of or resulting from the use of or inability to use the products and/or the enclosed written materials, even if Seatronx, its supplier, an authorized Seatronx representative, service provider or dealer have been advised of the possibility of such damages or of any claim by any third party. Any liability of Seatronx or its supplier which is not excluded shall be limited to the purchase price of the unit.

18.3 Obtaining Warranty Service

Your Seatronx Warranty includes a Carry-In warranty service. The warranty service will be subject to the following terms and conditions:

- 1. Consult the User's Manual accompanying your unit for important tips on how to operate and troubleshoot your unit;
- Note down unit name, model number, serial number and a description of the problem (e.g. error messages that appear on the screen);
- 2. Under the terms of Carry-in warranty service, you will be required to deliver your Seatronx unit including battery, power cord and AC adapter to the Point of sales (POS)/reseller. For further information on the Seatronx range of options and accessories contact your reseller or visit the Seatronx web site www.Seatronx.com