



# User Manual

SCY00-040 Control Card

Version: SU6004 A

**Language:** EN



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## 1. ABOUT THIS DOCUMENT

This document aims to give the user a precise description of the installation process and the intended use of the control card.

Please read it carefully before using the control card as bad manipulations could result in hardware damage.

### 1.1 Model

The information in this manual applies to this product:

Reference	Description
SCY00-040	Control Card

### 1.2 Standards compliancy

The model referenced above complies with those standards:

- NF EN 60601-1 : 2007
- NF EN 60601-1-2 : 2007
- NF EN 60601-2-41 : 2013
- CEI 62304 : 2006
- FCC Part 15

### 1.3 Manufacturer

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### 1.4 Intended use

The Control card is an electronic card intended to be used has a surgical light controller of the SURGILED product line. It should not be used in any other application.

See appendix A for a list of host products where the control card can be used.

## 2. DESCRIPTION

### 2.1 Functionalities

The SCY00-040 Control Card is an electronic card intended to command SURGILED lights and their communications. It controls the light flow of the lights' LED cards over a RS485 communication bus. The user can send orders to the control card via a physical keyboard or over a RS232 communication. The Control Card can also communicate wirelessly with other control cards over ZigBee protocol.

### 2.2 Visual description

Following are visual descriptions of a Control Card:

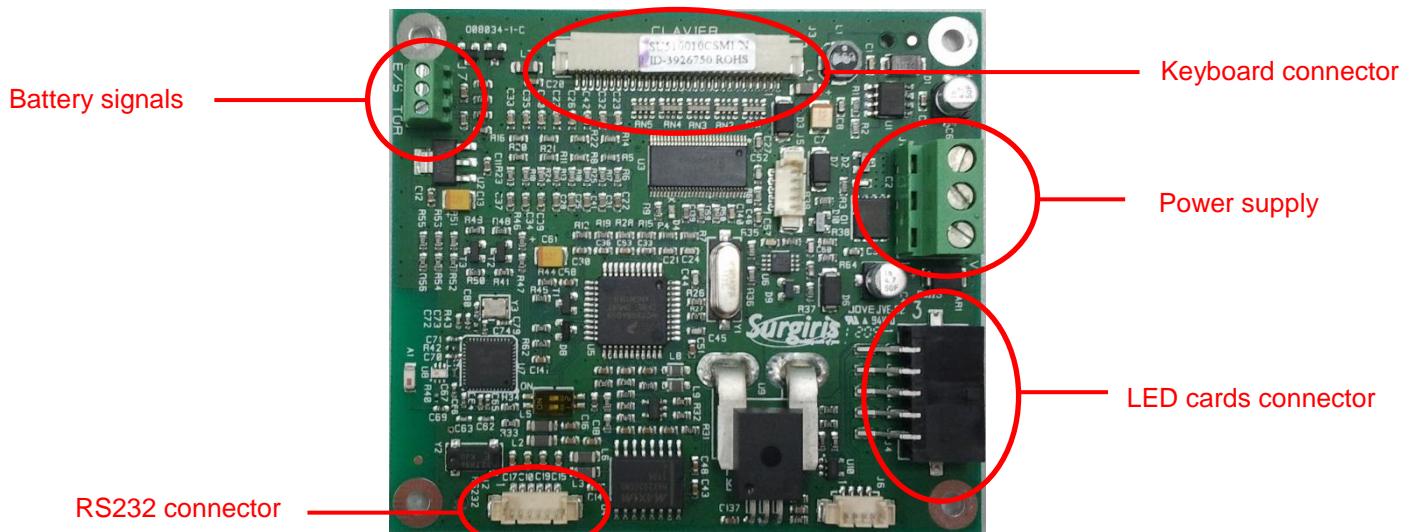


Figure 1: Control Card Front

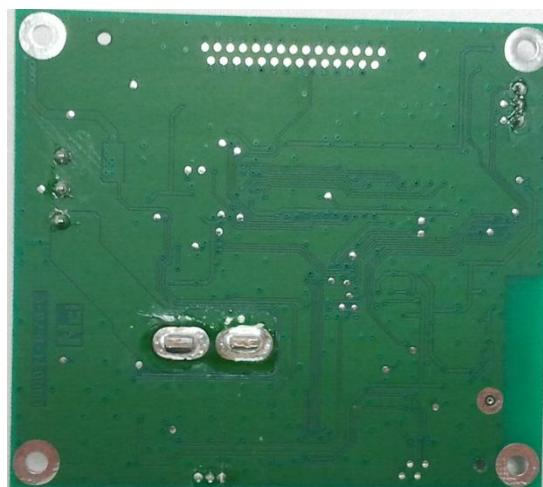


Figure 2: Control Card Back

## 2.3 Specifications

Characteristic	Unit	Value
<b>Input voltage (DC)</b>	V	18 to 30
<b>Output voltage (DC)</b>	V	18 to 30
<b>Maximum power consumption</b>	W	1.5
<b>ZigBee operating frequencies</b>	MHz	2 405 to 2 480
<b>Dimensions</b>	mm	85 x 75

## 2.4 Dimensions

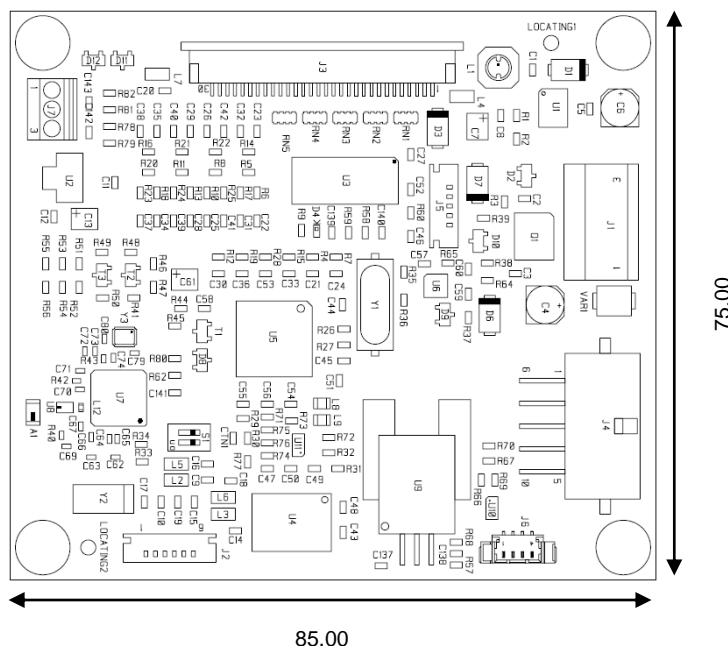
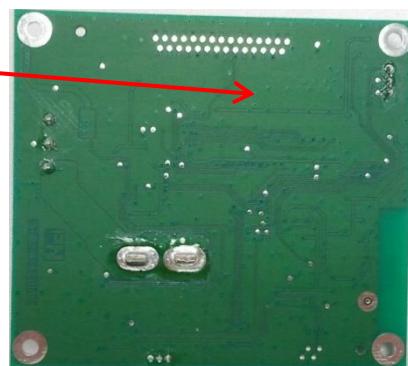


Figure 3: Control card dimensions

## 2.5 Identification

PROG-XXX  
Ref : SCY00-040  
FCC ID : 2AC7OCTRL000



### 3. INSTALLATION PROCEDURE

#### 3.1 Mechanical installation

The Control Card integration differs according to 3 fixation types: in lights, in light control units for technical panels and surface-mounted light control units.

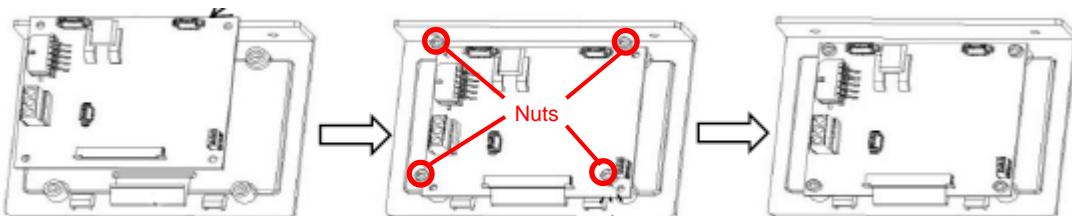


Figure 4: Light mounting process

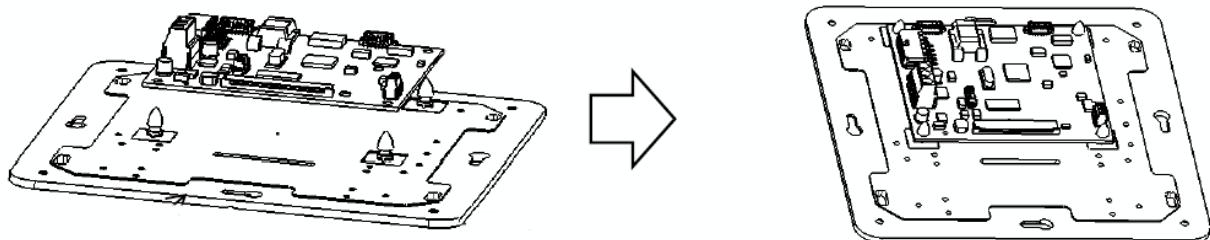


Figure 5: LCU for technical panels mounting process

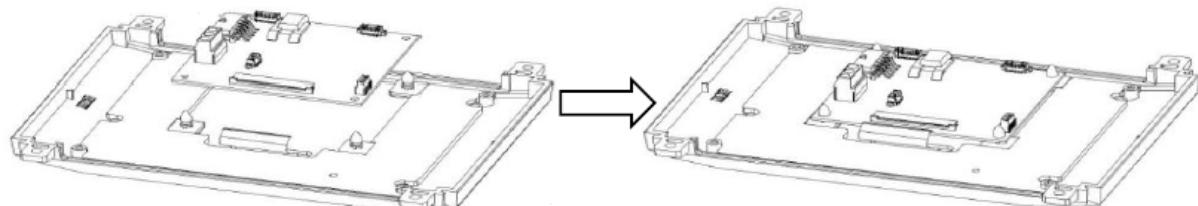


Figure 6: Surface-mounted LCU mounting process

### 3.2 Connections

Connections of the Control Card must be done as in those figures:

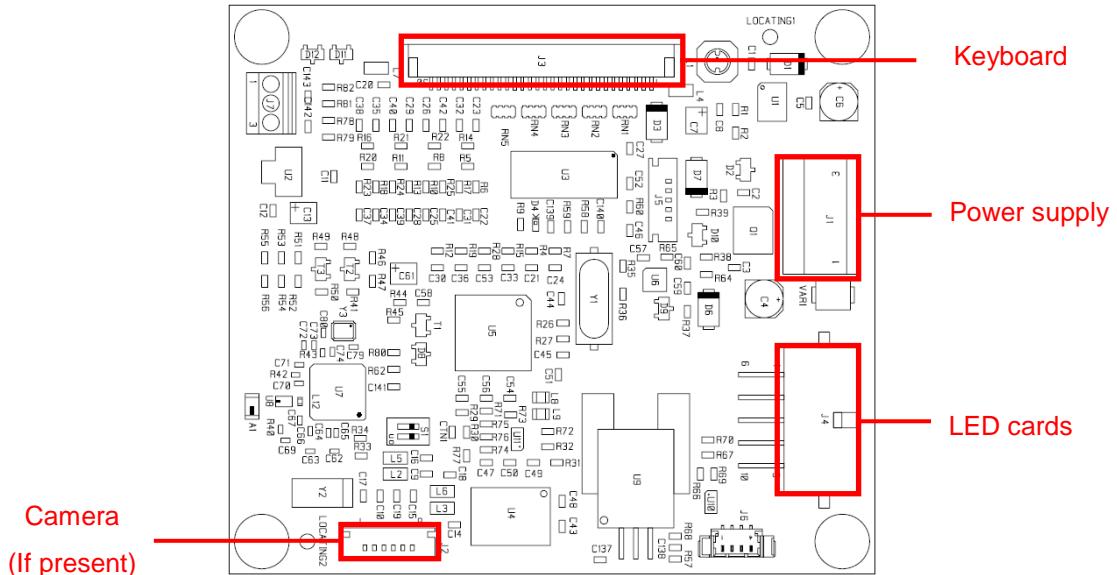


Figure 7: Light Control Cards connections

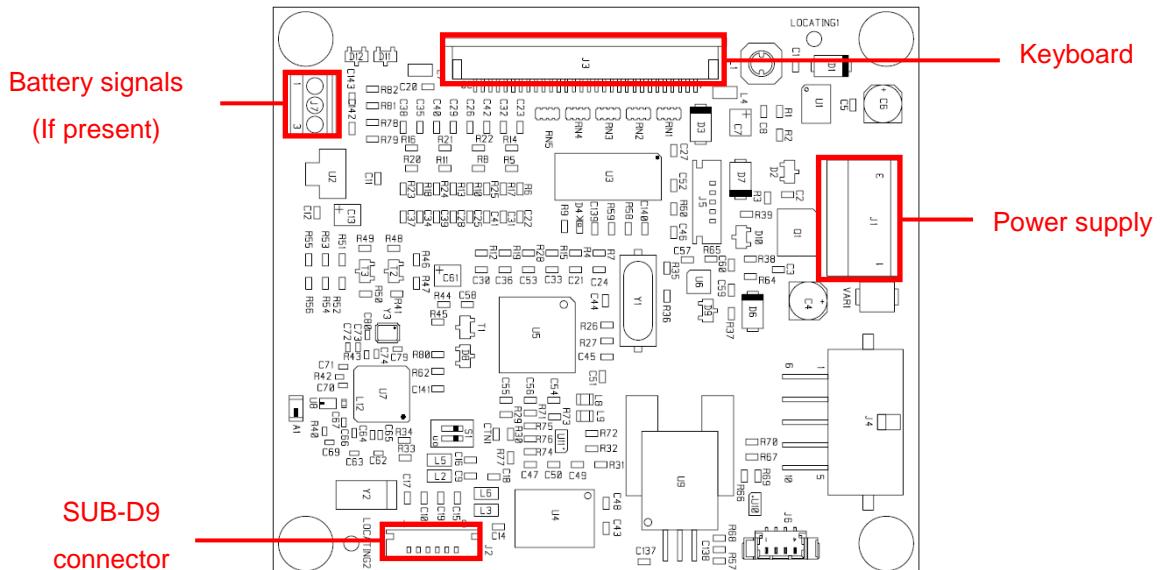


Figure 8: LCU connections

### 3.3 Flash and configuration

All the software flashing and software configuration operations must be done by qualified SURGIRIS staff.

## 4. LEGAL INFORMATION

### 4.1 United states related information

#### WARNING TO USERS IN THE UNITED STATES

##### Federal Communication Commission Interference Statement 47 CFR Section 15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device SCY00-040: Control Card complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### NO UNAUTHORIZED MODIFICATIONS

##### 47 CFR Section 15.21

**CAUTION:** This equipment may not be modified, altered, or changed in any way without signed written permission from SURGIRIS. Unauthorized modification may void the equipment authorization from the FCC and will void the SURGIRIS warranty.

This device complies with FCC RF radiation exposure limits set forth for general population (uncontrolled exposure). This device must be installed to provide a separation distance of at least 20cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

**MODULE INTEGRATION SPECIAL WARNINGS FOR US**

- The SCY00-040: Control Card module is considered as component that will be operated in combination with the final equipment. Then, the final equipment (including power supply system) still needs to re-confirm that the whole system complies with both intentional and unintentional emission requirements.
- Up to 1 module may be collocated in a host device while still meeting RF Exposure requirements.
- The statement warning of 20cm separation distance and warning of collocation should appear in the user manuals of end products.
- The end product's regulatory label should mention:  
"Contains FCC ID: 2AC7OCTRL000".

## APPENDIXES

### Appendix A: List of host products

<b>SURGILED product line</b>	
<b>KALEA 30</b>	<b>KALEA 20</b>
CK30, CK30V, CK30F, CK30FV	CK20, CK20V, CK20F, CK20FV
<b>X3MT</b>	<b>X2MT</b>
CX3C, CX3CV, CX3CF, CX3CFV	CX2C, CX2CV, CX2CF, CX2CFV
<b>X3ST</b>	<b>X2ST</b>
CX3, CX3V, CX3F, CX3FV	CX2, CX2V, CX2F, CX2FV
<b>X1</b>	
CX1, CX1V, CX1F	

<b>LEDFISION product line</b>					
<b>LV303</b>	<b>LV302</b>	<b>LV203</b>	<b>LV202</b>	<b>LV201</b>	<b>LV200</b>
WL303DY1, WL303SYV1	WL303DYV1, WL303SYV1	WL303SY1,	WL302DY1, WL302SYV1	WL302DYV1, WL302SYV1	WL302SY1,
WL203DY1, WL203SYV1	WL203DYV1, WL203SYV1	WL203SY1,	WL202DY1, WL202SYV1	WL202DYV1, WL202SYV1	WL202SY1,