Siteco Service Box
User Manual

siteco

Contents

siteco

Siteco Lightning Systems
Georg-Simon-Ohm-Straße 50, D-83301 Traunreut
Phone: + 49 8669 / 33 – 844
Fax: +49 8669 / 8653 - 2944
mail: technicalsupport@siteco.de
Internet: www.siteco.de

8. USB Mode

The Service Box can be connected to the PC with the included USB cable.

The Service Box may not be connected to mains during operation in this mode.

The PC recognizes the Service Box as mass storage device (SD-Card). The Service Box can be used like an USB stick.

Settings files that were stored on the Service Box can now be copied to the PC. Settings Files that were created with the PC Tool or firmware updates for the luminaire can be stored on the box and updated to the luminaire later.

Attention

The Service Box is only able to read Files from its root directory. Files that are located inside subfolders will not be displayed in the Data Transfer menu, when the Box is connected to the luminaire.

With the included Architainmet Suite you are able to create settings files and colour sequences at your PC very easily, store them on the Service Box and update them to compatible luminaires on site later.
For further information, please refer to the user manual of the Archtainment Suite.

9. Release Note

Release	Description	Author	Date
0	Preliminary	S.Seiche ID E	28.07.2009
1	First Release	S.Seiche ID E	01.09.2009
2	Service Box Release 2	S.Seiche E ELB	23.04.2010

Subject to change without notice!

Main Menu

Menu Luminaire

siteco

Menu Check Settings

Menu Options

USB Mode

Release Note

---

siteco

---

7. Service Box Options

This menu consists of two submenus

    a.   Backlight
    b.   Language

a.   Backlight

In this menu backlight can be switched on or off.

```
┌─────────────────────────────────────┐
│ Backlight                            │
│                                      │
│ On                            ◉      │
│                                      │
│ Off                           ○      │
└─────────────────────────────────────┘
```

b.   Language

With this menu you are able to select between different menu languages.

```
┌─────────────────────────────────────┐
│ Language                             │
│                                      │
│ German                        ○      │
│                                      │
│ English                       ◉      │
└─────────────────────────────────────┘
```

The transmission mode can be selected with the navigation keys and **<ENTER>**; the menu is quitted with **<ESC>**.

6. Check Settings

This menu consists of three submenus.
- a. Power On Level
- b. Reduction Level 1
- c. Reduction Level 2
- d. Reduction Wire

If one of the <u>first three</u> menus is chosen, the luminaire changes to the relevant status and the following message appears:

```
    XXX Level active
    (xxx %)

        <ESC>: Quit
```

After quitting the menu the currently valid status is reset.

In this menu the reduction signal can be applied and the behaviour of the luminaire can be checked.

```
Reduction Wire

ON                          ◉

OFF                         ○
```

The status can be selected with the navigation keys and **<ENTER>**, the menu is quitted with **<ESC>**.

I. References

This manual explains the menu structure and the related functions of the Service Box for parameterization of Siteco luminaires with a suitable ballast via Siteco Digital Interface (SDI).

The manual is prepared only for informational purposes for the user and is subject to changes or withdrawal by Siteco Beleuchtungstechnik GmbH (in the following called Siteco) without notice.

II. General Safety Recommendations

WARNING
The operation and parameterization may **only** be carried out by qualified personnel.

Attention! Do not drop the device! Avoid damages! If the device is dropped or if the device is damaged please refer to a service partner.

Attention! Danger of electric shock! Never open the housing! There are no parts inside that require maintenance. Service or repair work may only be carried out by qualified personnel.

Attention! Danger of fire or electric shock! Do not surcharge power connections or extension cables.

Attention! Danger of fire or electric shock! Never put foreign objects into the opening on the housing! These objects may cause short circuits.

Attention! Danger of fire or electric shock! If the cable or the connector plug are damaged, disconnect the plug and refer to a service partner.

Attention! Danger of fire or electric shock! Ensure that the power connections are not crushed.

Attention! Switch off the device immediately in case of smoke emission, noise and/ or odour generation. Do not use the device any longer!

Repair work may only be carried out by our service partners!

!Attention!

The programming of data which is **not** supposed to be for the relevant device may cause malfunctions or destruction of the device.

d. FW Update

Via this module the operating software of the luminaire can be updated. The firmware files can be installed via USB on the Service Box and locally transmitted to the luminaire.

The required file is selected with the navigation keys and **<ENTER>**.

```
Select File

    DL10FW09.hex
```

After selecting the file, the following message appears:

```
        Update from file:

          <filename.PGM>

<ENTER>: Yes              <ESC>: No
```
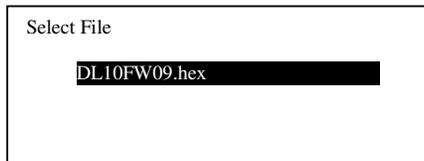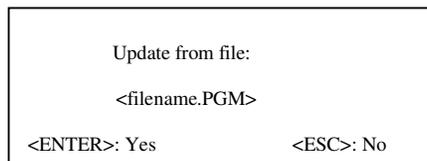
If confirmed the luminaire will be programmed with the selected firmware file.

The successful transmitting is confirmed by a short blinking of the Luminaire head.

```
Service Box Version: x.xx
Luminaire:              DL10 RGB
FW-Version:             x.xx
Serial:                 12345678

press <enter> to continue
```
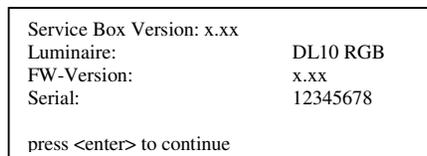
After disconnecting and connecting Service Box and Luminaire from power supply, please check the correct firmware version under point „FW-Version x.xx"

References to requirements for intended operation

Use the device only for its intended application. In case of misused utilization, improper installation or alterations the operating device and/or the Service Box may be destroyed and the operating licence and warranty claim are no longer valid.

Service notes

The device requires no maintenance.
For cleaning the device please use only a dry cloth. If necessary in case of stronger soiling you can carefully clean the device with a moist cloth. Under no circumstances use aggressive cleaning products for cleaning the device.

III. Technical Details

Power Supply	230V AC
Power Consumption	< 5W
Protection class	SK II
Temperature range:	-5℃ bis +60℃
Dimensions in mm (LxWxH)	290x180x50
IP rating	IP 54

siteco

IV. Device Description

Display

Navigation Keys

Softkeys

Connection for y-cable to the luminaire
and supply of the Service Box

USB-Mini Port

---

siteco

b. Write Settings

Previously stored settings can be installed on the luminaire or a
luminaire of the same type.
Prerequisite is an identical software status of the luminaires.

The required file is selected with the navigation keys and **<ENTER>** .

```
Select File

  DL100002.set
```

After selecting the file, the following message appears:

```
        Update from file:

         <filename.SET>

<ENTER>: Yes            <ESC>: No
```
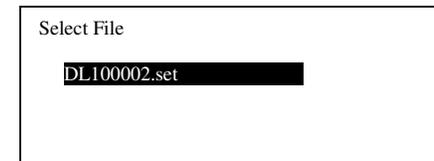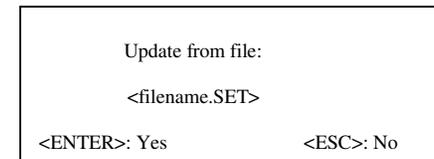
If confirmed, the FW version and the GTIN are checked.
If corresponding, parameters are transmitted.

5. Data Transfer

In this menu the settings of the luminaire are stored on the Service Box or settings which are stored on the Service Box can be transmitted to the luminaire.
Furthermore there is the possibility of a firmware update of the luminaire.

a. Read Settings

The following question appears:

```
┌─────────────────────────────────────────┐
│                                         │
│       Save Settings to Flash Disc?      │
│                                         │
│                                         │
│  <ENTER>: Yes              <ESC>: No    │
│                                         │
└─────────────────────────────────────────┘
```

If confirmed, a file will be created on the SD card.
Filename: e.g.. : "DL10xxxx.set"
For xxxx the next higher free number of the files will be assigned with the same name.
Maximum 50 settings files of each luminaire type can be saved.

The following data can be read out and saved in the file.

-   GTIN
-   FW Version
-   Short addresses
-   Reduction Mode
-   Auto Reduction Times
-   Power On Level white
-   Reduction Level 1 white
-   Reduction Level 2 white
-   Memory 1 (depends on luminaire)
-   Memory 2 (depends on luminaire)
-   Memory 3 (depends on luminaire)
-   Assignments (depends on luminaire)

After successful saving, the following message appears:

```
┌─────────────────────────────────────────┐
│                                         │
│            Settings saved as            │
│             "DL10xxxx.set"              │
│                                         │
│                <ENTER>                  │
│                                         │
└─────────────────────────────────────────┘
```

V. Definitions

Reduction Mode
This operation mode shows the behavior of the luminaire on a signal at the input or a missing signal for reduction.
The following settings are possible:

Reduction at Signal on
At signal for reduction (phase) the luminaire changes into reduction mode.

Reduction at Signal off
At missing signal for reduction (phase) the luminaire changes into reduction mode.

Reduction by Timer
By an internal timer signal the luminaire changes into reduction mode. (see picture 1)
The reducing wire is ignored.

Reduction off
The reducition wire is ignored, the luminaire remains in Power On Level.

Auto Reduction Time
In this menu both times, time A and time B are defined for the operation mode "Reduction by Timer". Time base is the average operating time of the last four days. In the first three days the moment in which the luminaire changes into reduction mode may vary after first operation as the luminaire is still learning the switch-on/ -off behaviour within this period.

Time A$_{Red\ 1}$

> This time defines the reduction period in the **first half** of the operating time (t_{mid}) of a switch-on period, where the luminaire switches to Reduction Level 1 (picture 1)

Time A$_{Red\ 2}$

> This time defines the reduction period in the **first half** of the operating time (t_{mid}) of a switch-on period, where the luminaire switches to Reduction Level 2 (picture 1)

Time B$_{Red\ 1}$

> This time defines the reduction period in the **second half** of the operating time (t_{mid}) of a switch-on period, where the luminaire switches to Reduction Level 1 (picture 1)

Time B$_{Red\ 2}$

> This time defines the reduction period in the **second half** of the operating time (t_{mid}) of a switch-on period, where the luminaire switches to Reduction Level 2 (picture 1)

picture 1
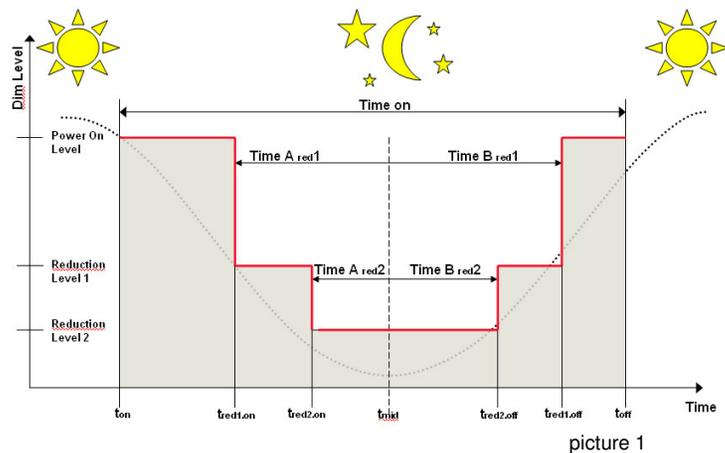
After quitting the menu, the luminaire sets the current status (Power On Level, Reduction Level 1 or Reduction Level 2).

b. Assign Scene

This menu consists of three submenus.

    a.   Power On Level
    b.   Reduction Level 1
    c.   Reduction Level 2

With this menu a previous set scene can be assigned to each status (Power On Level, Reduction Level 1 or /and Reduction Level 2).
The currently selected assignment is shown when entering the menu.

```
Assign PON Level

No assignment          ◉
Memory 1               ○
Memory 2               ○
Memory 3               ○
```

With the navigation keys and **<ENTER>** the relevant option is selected. With **<ESC>** you quit the menu.

If the new and the previous settings differ, the following question appears:

```
       Settings have been changed
               Assume?

<ENTER>: Yes              <ESC>: No
```

<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

siteco

4. Menu Settings Colour (Dependent on Luminaire)

This menu consists of two submenus.
  a. Edit Scene
  b. Assign Scene

a.   Edit Scene

This menu consists of three submenus
  a. Memory 1
  b. Memory 2
  c. Memory 3

With these menus three static colour scenes can be set and stored. The colour is set by mixing the three colour channels RGB. The currently selected colour values are shown when entering the menu.

```
Scene 1

Red :            165       (65%)

Green :          127       (50%)

Blue:            127       (50%)
```

Each colour channel can be selected with the **navigation keys** and **<ENTER>**.
If a colour channel was selected it can be changed via the **navigation keys**.
Every change of the settings is shown immediately at the luminaire head after releasing the key.
With **<ESC>** you quit the selected colour channel.
By pressing **<ESC>** again you quit the menu.

If the new and the previous settings differ, the following question appears:

```
Settings have been changed
         Assume?

<ENTER>: Yes            <ESC>: No
```

<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

---

siteco

Factory Reset

The luminaire is reset to factory default settings.

Settings White

Settings for white channel.

Power On Level

Switching-on value of the luminaire. This value has to be higher than the reduction value. According to operation mode (Reduction Mode) the luminaire changes after switching on immediately in the reduction level.

Reduction Level

Reduction value of the luminaire. This value has to be lower than the switching-on value.

Settings Colour

Settings for the colour channel (dependent on luminaire)

Scene

Static colour value (dependent on luminaire)

Sequence

Dynamic sequence of several successive scenes.
Each scene has a Fade Time and a Hold Time.
(dependent on luminaire)

Fade Time

Crossfading from the current scene to the following.
(dependent on luminaire)

Hold Time

Hold time of the current scene within a sequence.
(dependent on luminaire)

Data Transfer

Transfer of data from or to the Service Box.

SDI

Siteco Digital Interface (standard transfer)

ECG

Ballast; operating device of the luminaire

---

3. Menu Setting White

This menu consists of three submenus.

    a.   Power ON Level
    b.   Reduction Level 1
   c.   Reduction Level 2

Via these two submenus illumination can be adapted to the relevant application individually. The currently selected value is shown when entering the menu.

```
Power On Level


[███████████          ]

White :  154 (60%)
```
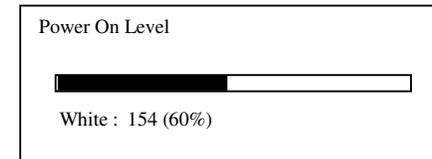
Brightness can be set with the **navigation keys**. Every change of the settings is shown immediately at the luminaire head after releasing the key.

By pressing **<ESC>** again you quit the menu.

If the new and the previous settings differ, the following question appears:

```
              Settings have been changed
                      Assume?

   <ENTER>: Yes                    <ESC>: No
```
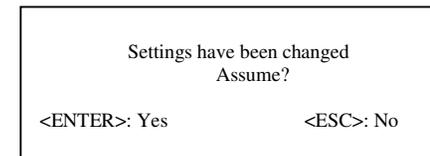
<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

d. Factory Reset

Here you can recall factory settings upon request.

```
            Recall Factory settings?


<ENTER>: Yes              <ESC>: No
```

<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

VI. Menu Structure (Overview)

Data Transfer
- FW Update
- Write Settings
- Read Settings

Settings Colour
- Assign Scene
  - Reduction Level 2
  - Reduction Level 1
  - Power ON Level
- Edit Scene
  - Memory 3 → Colour
  - Memory 2 → colour
  - Memory 1 → colour

SDI

Settings White
- Reduction Level 2 → white
- Reduction Level 1 → white
- Power On Level → white

Basic Settings
- Factory Reset
- Auto Reduction Times AB
- Reduction Mode

---
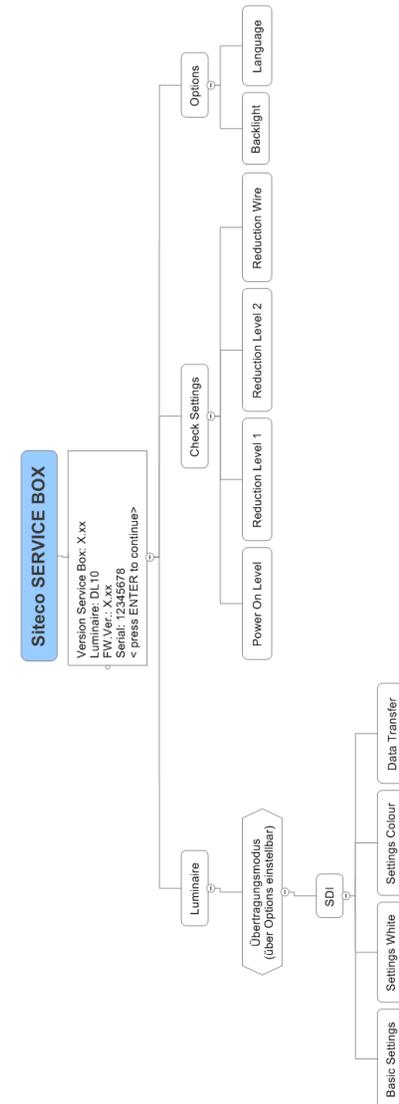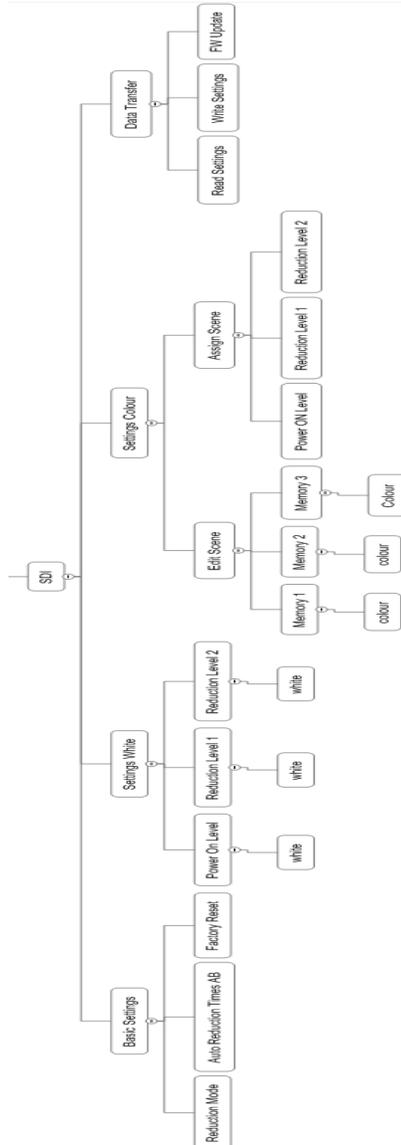
c. **Auto Reduction Time A$_{Red2}$ und B$_{Red2}$**

This menu defines time A$_{Red\,2}$ and time B$_{Red\,2}$ for the "Reduction by Timer" mode.
During that time, the luminaire switches to Reduction Level 2.
The currently selected time is shown when entering the menu.

The periods can be changed in 5-min-steps from 5min to 8h 30min.

```
Auto Reduction Time
████████████░░░░░░░
  Time A 2:        5 h        35 min

████░░░░░░░░░░░░░░░
  Time B 2:        3 h        5 min
```

Each time can be selected with the **navigation keys** and **<ENTER>**

If a certain time was selected it can be set via the **navigation keys** again.

With **<ESC>** you quit the selected time.

By pressing **<ESC>** again you quit the menu.

If the new and the previous settings differ, the following question appears:

```
         Settings have been changed
                  Assume?

<ENTER>: Yes              <ESC>: No
```
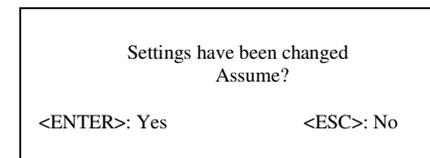
<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

b. **Auto Reduction Time A_Red1 und B_Red1**

This menu defines time $A_{Red\,1}$ and time $B_{Red\,1}$ for the "Reduction by Timer" mode.
During that time, the luminaire switches to Reduction Level 1.
The currently selected time is shown when entering the menu.

The periods can be changed in 5-min-steps from 5min to 8h 30min.

```
Auto Reduction Time

Time A 1:        5 h         35 min

Time B 1:        3 h          5 min
```

Each time can be selected with the **navigation keys** and **<ENTER>**

If a certain time was selected it can be set via the **navigation keys** again.

With **<ESC>** you quit the selected time.

By pressing **<ESC>** again you quit the menu.

If the new and the previous settings differ, the following question appears:

```
        Settings have been changed
                Assume?

<ENTER>: Yes            <ESC>: No
```

<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.

---

1. Connect / Switch-on

Connect the Service Box first with the luminaire and then with the power supply.

The following message appears:

```
        Please connect luminaire
        to Service Box and
        press <ENTER>
```

After pressing **<ENTER>** the Service Box starts a short self test.
In case of hardware failures a relevant message appears.
Please inform our support team.

Afterwards a communication with the luminaire via SDI will be established.

The following appears on the display:

```
Service Box Version:    x.xx
Luminaire:              DL10 RGB
FW-Version:             x.xx
Serial:                 12345678

press <enter> to continue
```

Service Box Version: Software Version of the Service Box

Luminaire: GTIN of the ballast.
If the Service Box knows the GTIN the product description appears here.

FW-Version: Firmware Version of the ballast

Serial: Serial Number of the ballast

siteco

After pressing <ENTER> the second information menu appears.

Reduction: xxxxxxxxxxx

Power On Level : xxx
Reduction Level 1: xxx
Reduction Level 2: xxx
press <enter> to continue

Reduction:

     Currently selected reduction mode

Power ON Level :

     Switching-on value white

Reduction Level 1:

     Reduction value 1 white

Reduction Level 2:

     Reduction value 2 white

Menu Luminaire

2. Menu Basic Settings

In this menu the following basic settings of the luminaire can be
selected.

a.   Reduction Mode

In this menu the reduction mode is set.
The currently selected mode is shown when entering the menu.

Reduction Mode

Reduction at Signal Off   ◉
Reduction at Signal On   ○
Reduction by Timer   ○
Reduction Off   ○

With the navigation keys and <ENTER> the relevant option is selected.
With <ESC> you quit the menu.

If the new and the previous settings differ, the following question
appears:

Settings have been changed
Assume?

<ENTER>: Yes   <ESC>: No

<ENTER> sends the relevant command for change to the luminaire.

<ESC> discards the change.