

Software Module „Steris XLED“

For controlling and visualisation
of the XLED OP-lamp system

```
*****
**classSTERIS
**
**.dll for OP-Lamp Control Type XLED
**
*****
Imports System.IO.Ports
Public Class ClassSTERIS
    Private WithEvents myComPort As New SerialPort
    Private COM_Liste() As String
    Private ComError As String
    Public Event Communication(ByVal ComString As String)
    Private ChecksumActive As Boolean
    Private Structure Lamp
        Dim Active As Boolean 'Lamp present (responding)?
        Dim Status As Integer
        '0: normal operation on mains supply (green)
        '1: on backup power, battery ON (orange)
        '2: overtemp, over temperature (red)
        '3: lamp fault (steady red)
        Dim Mode As Integer
        '0: standard mode
        '1: Ambient light mode
        '2: Head detection mode
        Dim Illuminance As Integer '0-10
    End Structure
End Class
```

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```

*****
**classSteris
**
**_dll for OP-Lamp Control Type XLED
**
*****
Imports System.IO.Ports
Public Class classSteris
    Private WithEvents myComPort As New SerialPort
    Private COM_List() As String
    Private Confirmer As String
    Public Event CommunicationStatusChanged As String
    Private CheckCommunication As Boolean
    Private Structure Lamp
        Dim Active As Boolean 'Lamp present (responding)?
        Dim Status As Integer
        '0: normal operation on mains supply (green)
        '1: on backup power, battery on (orange)
        '2: quiescent, over temperature (red)
        '3: lamp fault (steady red)
        Dim Mode As Integer
        '0: standard mode
        '1: Ambient light mode
        '2: Head detection mode
        Dim Illuminance As Integer '0-10
    End Structure

```

Features

- Parallel control to the actual light head control and the wall control unit
- Control of up to three lamps
- Recognition of the lamp model
- No additional interface converter required

Application

With this software module the XLED OP-lamp systems by Steris Surgical Technologies SAS can be controlled in parallel to the wall control unit and visualized via the screen of a Touch Control Panel (TCP).

Functional description

The communication between the TCP and the central control and power module is done via a serial RS232 interface.

The software module itself is a Dynamic Link Library (DLL) which is linked directly to the operation system of the TCP.

For each visualisation project the individual number of lamps must be provided in order to adapt the visualisation program to the requirements on site.

The software module can control up to three XLED lamps.

The lamps can easily be controlled by a click/touch on to the graphic.

Depending on the OP lamp model various functions can be controlled:

- Lamp ON/OFF
- Light intensity/dimming
- Ambient Light mode for endoscopy
- Alarm when lamp is "On Battery" supply
- Alarm when transformer has reached an "Over Temperature" condition

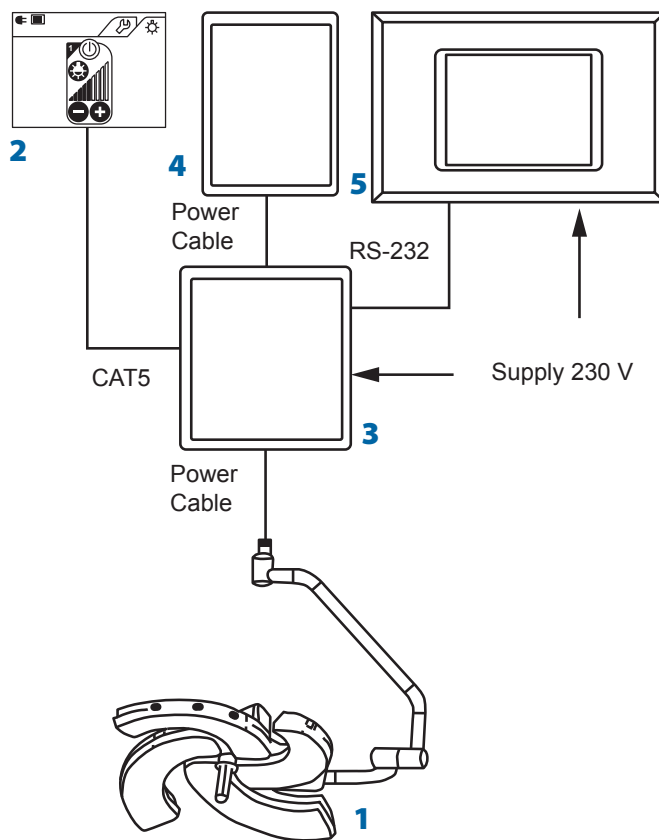
Please refer to the detailed description of the lamp controls and function provided Steris Surgical Technologies SAS.

Important note

No additional converter between the TCP and the central control and power module is required.

The OP lamps of the Harmony or VLED series cannot be controlled.

System overview



Components

All components are being connected to the central power and control unit by Steris.

- 1 - XLED Lamp head incl. control pad (supplied by Steris)
- 2 - XLED lamp wall control unit w/ touch screen (supplied by Steris)
- 3 - Power and control unit (supplied by Steris)
- 4 - Battery backup unit (supplied by Steris)
- 5 - TCP Touch Control Panel (supplied by bendersystembau)

The OP lamps as well as their mounting assembly, the power control unit, battery backup unit, wall control unit as well as interconnecting cables and all other related accessories are not part of the scope of delivery by bendersystembau and must be ordered at Steris or their partners.



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