

# Software Module „Maquet PowerLED1“

For controlling and visualisation

of PowerLED1 OP-lamp system made by Maquet

```
*****
**classMAQUET
**
** .dll for OP-Lamp Control Type PowerLED
**
*****
Imports System.IO.Ports
Public Class ClassMaquet
    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 OK (orange)
        '2: on backup power, battery low (flashing 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
    Private Lamp(0 To 3) As Lamp
    Private Structure Camera
        Dim Active As Boolean 'Camera available?
        Dim Zoom As Integer '0=Zoom Off, 1=Zoom +, 2=Zoom -
        Dim Focus As Integer '0=Focus Off, 1=Auto, 2=Manual, 3=Near, 4=Far
        Dim Exposure As Integer '0=Auto, 1=Manual, 2=brighter, 3=darker
        Dim White As Integer '0=Auto, 1=Manual, 2=Indoor, 3=Outdoor, 4=OneShot
        Dim Freeze As Boolean 'False=Off, True=On
        Dim Contrast As Integer '0=Reset, 1=Level 1, 2=Level 2
        Dim Preset As Integer '0=no Preset, 1=Preset 1, 2=Preset 2
    End Structure
End Class
```

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## Application

With this software module OP-lamp system PowerLED1 by Maquet can be parallel controlled and visualized via the screen of a Touch Control Panel (TCP).

To control the OP-lamp the interface converter FIBOX40 by Maquet is required.

## Functional description

The communication between the TCP and the interface converter is made by via a 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 PowerLED1 lamps.

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

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

- Lamp ON/OFF
- Light intensity, UP/DOWN
- Lighthouse mode:
  - Standard
  - Ambient light / Endoscopy light
  - AIM / Head detection
- Lighthouse status:
  - Normal
  - On battery
  - Battery low
  - Failure
  - Fault

Please refer to the detailed description of the lamp controls and function provided Maquet.

## Important note

The integrated firewall function of the interface converter prevents the light heads and the optional cameras from being driven by undefined control commands that for example may result in the accidental turning off of the light heads.

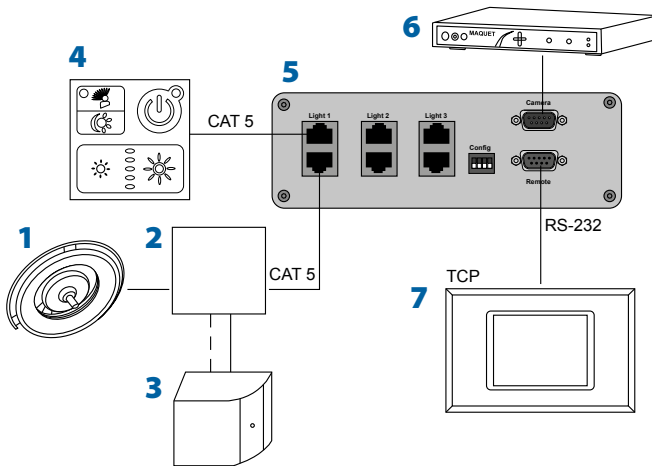
This software module is for the use in combination with the PowerLED1 lamp system by Maquet only!

To control the VOLISTA lamp system by Maquet the original control panel AXONE must be used. A front foil integration of the AXONE control panel is available.

## Features

- Parallel to the actual lamp control of the PowerLED1 series
- Recognition of the lamp quantity
- Automatic recognition of the lamp model
- Save communication via the an interface converter by Maquet

## System overview



## Components

The interface converter (5) allows the remote control of the lighting systems PowerLED1 (1) and of the optional camera system (6) via the user interface of a Touch Control Panel (5).

- 1 - Lamp system PowerLED1 (supplied by Maquet)
- 2 - Coupling unit CP (CM) (supplied by Maquet)
- 3 - Power supply (supplied by Maquet)
- 4 - External controller ALM (supplied by Maquet)
- 5 - Interface converter FIBOX40 (supplied by Maquet)
- 6 - Control unit for video systems, optional (supplied by Maquet)
- 7 - TCP Touch Control Panel (supplied by Bender)

The OP lamps as well as their mounting assembly, the camera control unit, power supply, battery pack coupling unit and the interface converter are not part of the scope of delivery by Bender and must be ordered at Maquet.

Depending on the size of the Touch Control Panel the interface converter might be mounted inside the panel.

The outer dimensions of the interface converter are:  
WxHxD: 175 x 55 x 170 mm





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