

Software Module „Dräger“

For controlling and visualisation
of OR-light system Polaris made by Dräger

```
*****  
**classDÄGER  
**  
**.dll for OP-Lamp Control Type Polaris 5xx/7xx  
**  
**Interface: / RS232  
**  
*****  
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
```

Software Module „Dräger“

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Polaris 5xx/7xx
Integrated OR Interface G23840

```

*****
**class0000
**
**_dll for OR-Lamp Control Type Polaris 5xx/7xx
**
**Interface: / RS232
**
*****
Imports System.IO.Ports
Public Class class0000
    Private WithEvents myCOMPort As New SerialPort
    Private COM_Listen() As String
    Private COM_Error As String
    Public Event Communication(RxTxal ComString As String)
    Private CheckConnection 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

```

Features

- Parallel to the actual light control of the Polaris series
- Automatic recognition of the light model
- Save communication via the Integrated OR Interface by Dräger

Application

With this software module the OR-light systems Polaris 5xx/7xx by Dräger can be parallel controlled and visualized via the screen of a Touch Control Panel (TCP). Up to three OR-lights can be controlled which might be of the type Polaris 5xx and/or 7xx.

To control the OR-light the Integrated OR Interface G23840 by Dräger is required.

Functional description

The communication between the TCP and the Integrated OR Interface is made by via an RS232 interface.

An additional USB to RS232 converter inside the TCP is required.

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 lights must be provided in order to adapt the visualisation program to the requirements on site.

The software module can control up to three Polaris lights.

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

The following functions are supported:

- Light ON/OFF
- Light intensity, UP/DOWN
- Lighthouse mode:
Endoscopy light ON/OFF
- Lighthouse status:
On battery (respectively: Additional Safety Power Supply)
System Error
Communication Error

Please refer to the detailed description of the light controls and function provided by Dräger.

Distinctive feature

A faulty communication protocol or even a temporary lost connection between the Integrated OR Interface and the TCP will not result in a change of status of the OR-light. The OR-lights can be controlled via their control pad at any time.

Integrated OR Interface G23840



The outer dimensions of the Integrated OR Interface are:
WxHxD: 120x91x120 mm

Components (example only)

The Integrated OR Interface (7) allows the remote control of the OR-light systems (1+2) and of the optional camera system (6) via the user interface of a Touch Control Panel (8).

- 1 - OR-light system Polaris7xx (supplied by Dräger)
- 2 - OR-light system Polaris5xx (supplied by Dräger)
- 3 - External wall control unit, optional (supplied by Dräger)
- 4 - External wall control unit with camera control, optional (supplied by Dräger)
- 5 - Control unit for the video system, optional (supplied by Dräger)
- 6 - Camera system, optional (supplied by Dräger)
- 7 - Integrated OR Interface G23840 (supplied by Dräger)
- 8 - TCP Touch Control Panel (supplied by Bender)

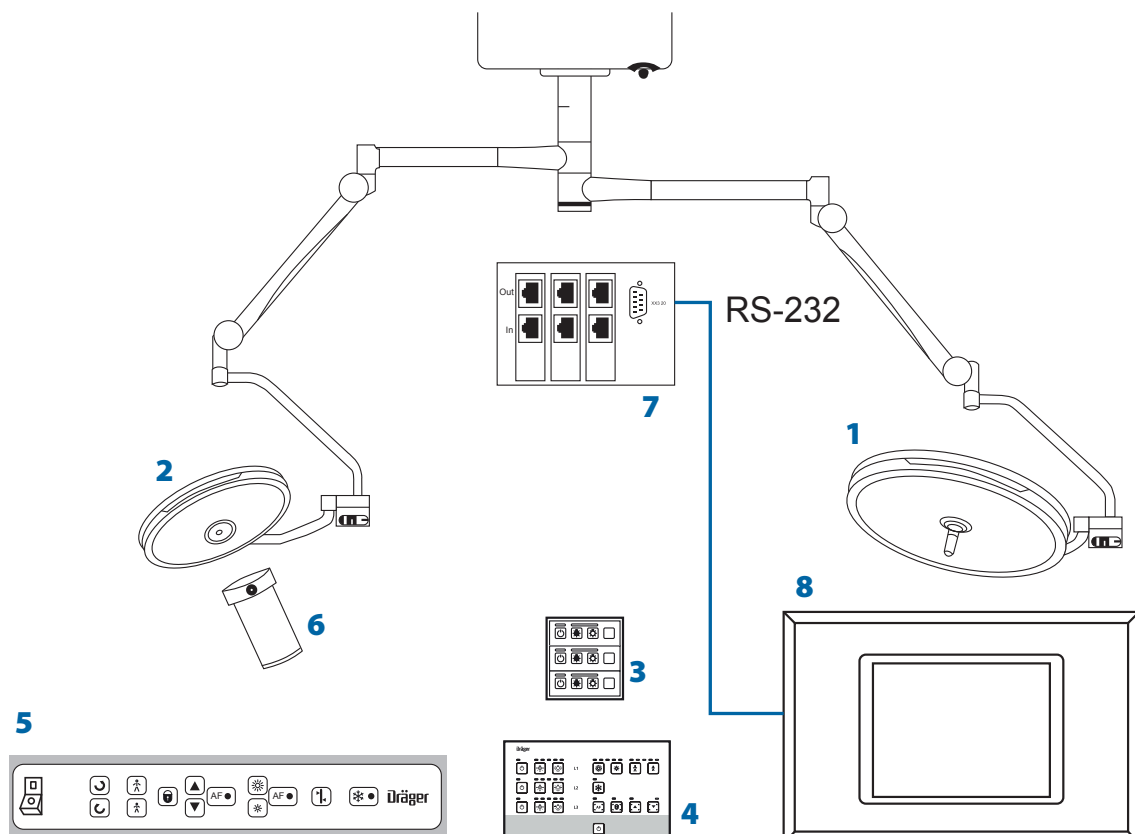
The OR lights as well as their mounting assembly, the camera control unit, power supply, wiring and the interface converter are not part of the scope of delivery by Bender and must be supplied by Dräger.

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

For wiring and mounting refer to the installation instructions by Dräger.

System overview

Typical setup, example only.





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