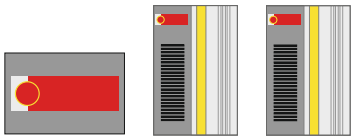
The iLight Driver



The iLight driver connects to the iLight lighting control system. Available for ObSys and Commanders.

This document relates to iLight driver version 2.1

Please read the *Commander Manual* or *ObSys Manual* alongside this document, available from *www.northbt.com*

Contents

Compatibility with the iLight System

The iLight driver allows North to interface with an iLight lighting control system. Use the driver to set system lighting areas to a pre-set scene, or adjust a channel light level.

The driver connects, via an RS232 serial connection, to an iLight SI-2 system integration node (Fig. 1).

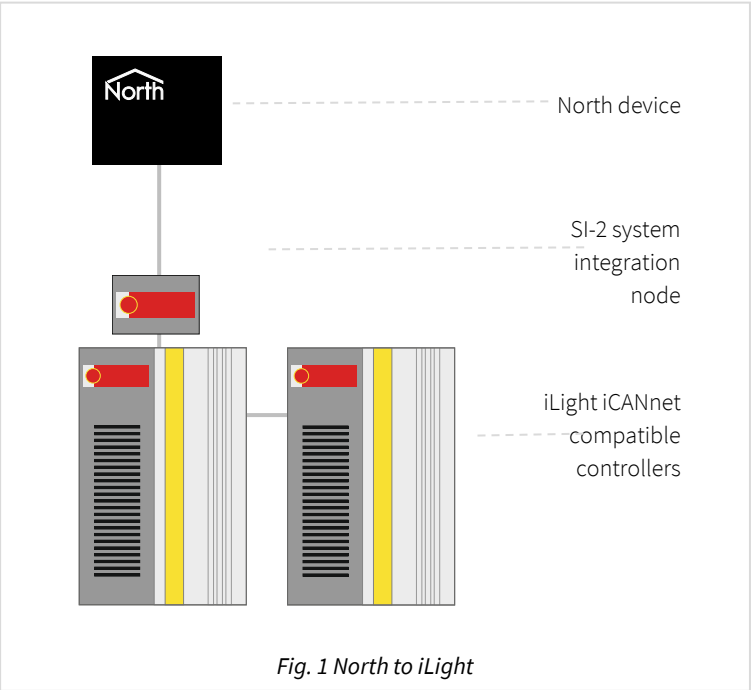


Fig. 1 North to iLight

Equipment

iLight lighting controllers connected to the iCANnet network are compatible with the driver.

Values

The driver can typically access the following values:

- Area scene select
- Area scene level adjust
- Area channel (zone) level (%)

Prerequisites

The iLight SI-2 system integration node is required to interface with the iCANnet network. This should be configured as follows:

- Baud rate: 9600, 19200, or 38400
- Data bits: 8
- Stop bits: 1
- Parity: none
- Handshaking: disabled
- RX Timeout: 25ms
- ASCII with Rx/Tx enabled.

The driver provides control of the system as a whole, rather than individual devices.

Using the Driver

On ObSys and Commander, the iLight driver is pre-installed. On all of these North devices, you can use the driver to create an interface iLight. Once started, you will need to set up the driver before it can communicate with the iLight system.

Making the Cable

Using the RS232 cable specification, connect the North Device COM port to the SI-2 RS232 port. Connector types at each end of the cable are shown.

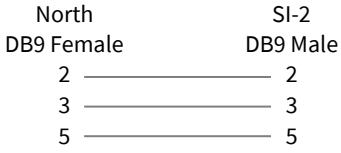


Fig 2 North to iLight SI-2 cable

The maximum RS232 cable length is 15m and should be as short as possible.

Starting the Interface

To start an interface using the iLight driver, follow these steps:

- **Start Engineering** your North device using ObSys
- Navigate to **Configuration, Interfaces,** and set a unused **Interface** to 'iLight' to start the particular interface
- Navigate to the top-level of your North device, then rescan it.

The driver setup object (Mc), labelled **iLight Setup**, should now be available. If this object is not available, check an interface licence is available and the driver is installed.

Setting up the Driver

To set up the driver, follow these steps:

- Navigate to the **iLight Setup** object (Mc). For example, if you started interface 1 with the driver earlier, then the object reference will be 'M1'
- Set the **RS232 Com Port** (RS.COM) to select which serial port on the North Device is connected to the iLight device
- Set the **Baud Rate** (RS.BR) to match that of the iLight SI-2 interface.

Object Specifications

Once an interface is started, one or more extra objects become available within the top-level object of the device. As with all North objects, each of these extra objects may contain sub-objects, (and each of these may contain sub-objects, and so on) - the whole object structure being a multi-layer hierarchy. It is possible to navigate around the objects using the ObSys Engineer.

Each object is specified below, along with its sub-objects.

Example Object Reference

An example of a reference to an object in the same device: the iLight System (S1) contains Area 1 (A1), which itself contains Scene 1 (S1) with a Select object (S). Therefore, the complete object reference is 'S1.A1.S1.S'.

An example of a reference to an object in a different device: the IP network object (IP) contains Default Commander object (CDIP), which contains the object above (S1.A1.S1.S) – therefore the complete object reference is 'IP.CDIP.S1.A1.S1.S'.

Device Top-Level Objects

When an interface is started using the iLight driver, the objects below become available within the top-level object of the device. For example, if interface 1 is started, then the object references 'M1' and 'S1' become available.

Description	Reference	Type
iLight Setup Set up the iLight driver, started on interface *c* (*c* is the interface number)	M*c*	Fixed Container: On the Commander platform this will be *[CDM v20\iLight v21]* On the ObSys platform this will be *[OSM v20\iLight v21]*
iLight System Access iLight system connected to interface *c* (*c* is the interface number)	S*c*	Variable Container: *[iLight v21]*

iLight Driver Setup

Object Type: *[OSM v20\iLight v21]*
Object Type: *[CDM v20\iLight v21]*

The iLight driver contains the following objects:

Description	Reference	Type
System Label	DL	Obj\Text: 20 chars; Adjustable
RS232 COM Port	RS.COM	Obj\Num: 0…8; Adjustable
Baud Rate	RS.BR	Obj\Num; Adjustable Values: 9600…38400
Fade Time (secs) The time taken for the lights to raise or lower when selecting a scene or setting a channel level. Setting this to 0 allows instantaneous switching	FT	Obj\Num: 0…99; Adjustable
Number Width Length of parameters expected by the iLight SI-2, such as scene number and area. Typically this is set to 3, to enable parameters in the range 000…999. On older systems, set to '2', for parameters in the range 00..99.	NW	Obj\Num: 2…3: Adjustable Default: 3

iLight System

Object Type: *[iLight v21]*

An iLight system provides control of system lighting areas, rather than individual devices.

The iLight System contains the following objects:

Description	Reference	Type
Area *x* The area number, *x*, can be in the range 1…999	A*x*	Fixed Container: *[iLight v21\Area]*

Area

Object Type: *[iLight v21\Area]*

An iLight area is a lighting area within an iLight lighting system. Select a pre-set lighting scene, or adjust a channel (zone) within the area.

The iLight area contains the following objects:

Description	Reference	Type
Scene Select Select a pre-set scene in the area. Set the scene to '0' to turn off.	S	Obj/Num 0, 1...999; Adjustable 0: Off
Scene *y* Alternative object to select the scene for the area. The scene number, *y*, can be in the range 0…999. Set scene 0 to 'Yes' turns all lamps off.	S*y*.S	Obj/NoYes; Adjustable
Channel *z* The channel number, z, can be in the range 0…999. Channel 0 affects all channels in the area	C*z*	Fixed Container *[iLight v21\Channel]*

Channel

Object Type: *[iLight v21\Channel]*

An iLight channel is a zone within a lighting area. Use channel 0 to affect all channels in the area. A particular channel could be assigned to one light for individual control.

The iLight channel contain the following objects:

Description	Reference	Type
Level (%) Sets the level of a channel in an area. Lamps which are non-dimmable will be off when this value is 0, otherwise a level > 0 will be on.	L	Obj/Num: 0...100; Adjustable
Adjust Level by 1% Adjusts a channel in an area by 1% level. Set a +ve number to raise the level, -ve to dim the level, or '0' to stop the fade	A	Obj/Num: -1…1; Adjustable
Raise Level by 1% Set 'yes' to increments a channel in an area by 1% level. Set 'no' to stop fading.	R	Obj/NoYes; Adjustable
Dim Level by 1% Set 'yes' to decrements a channel in an area by 1% level. Set 'no' to stop fading.	D	Obj/NoYes; Adjustable
Stop Fade Set to 'yes' to stop fading	F	Obj/NoYes; Adjustable

Driver Versions

Version	Build Date	Details
1.0	19/03/2003	Driver released
2.0	01/06/2010	Add support for 3-digit parameters
2.0	23/03/2011	Add Tx message queue
2.1	06/10/2020	Set default values for baud rate, fade time, etc. Moved objects to adjust level from scene to channel (adding Cx.A, Cx.R, Cx.D, Cx.F) Object Sx.S now readable

Next Steps…

If you require help, contact support on 01273 694422 or visit *www.northbt.com/support*

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