The SafegardM Driver

The SafegardM driver connects to Safegard Systems or Actionair V3 smoke fire dampers control and monitoring system. Available for ObSys and Commander.

This document relates to SafegardM driver version 1.0

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

Contents

Compatibility with the Safegard System

The SafegardM driver allows North to interface with a Safegard Systems or Actionair smoke fire dampers control and monitoring system.

The driver uses the Modbus protocol and connects, via RS232, to a Safegard V3 control panel (Fig 1). Only damper states are available, it is not possible to adjust damper positions.

The Safegard driver is also available, connecting to non-Modbus Safegard V3 control panels.

For the latest range of control panel, Safegard V5, use the Modbus driver.

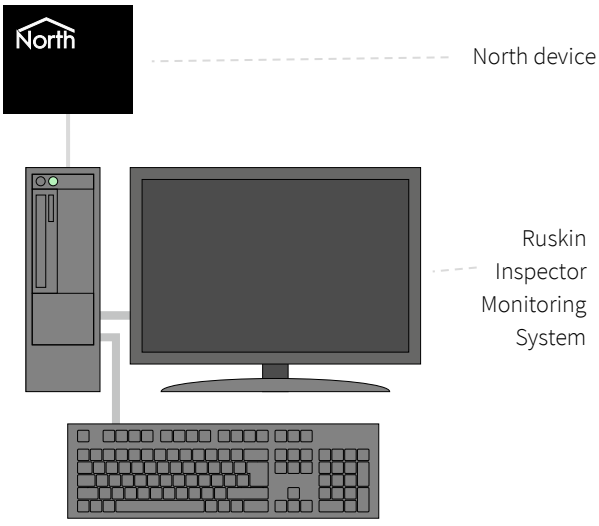

Fig. 1 North to Safegard

Equipment

Smoke fire dampers control and monitoring systems compatible with the driver include:

- Safegard Systems V3
- Ruskin Actionair inspector

Values

The driver can typically access the following values:

- Damper state

Prerequisites

Configure the Serial Communication options on the damper control panel as follows: 2400 baud, 8 data bits, no parity, 1 stop bit, RTU transmission mode, no flow control, DTR and RTS lines enabled, silent interval character time = 4.

Using the Driver

On ObSys, the SafegardM driver is pre-installed. On Commander, the driver is available to download in the file 'Bank15 SafegardM.cdm'. On all of these North devices, you can use the driver to create an interface to Safegard. Once started, you will need to set up the driver before it can communicate with the Safegard system.

Making the Cable

Using the RS232 cable specification (Fig. 2), connect the North device COM port to the Safegard COM port. Connector types at each end of the cable are shown.

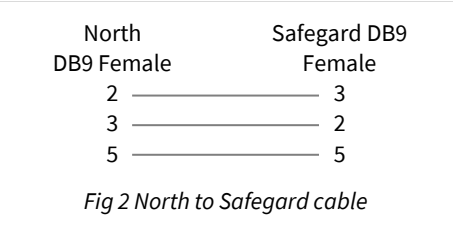

Fig 2 North to Safegard cable

The maximum RS232 cable length is 15m.

Cables are available from North, order code CABLE/DB9/SAFEGARDM.

Starting the Interface

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

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

The driver setup object (Mc), labelled **SafegardM 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 **SafegardM 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 SafegardM device.

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 Engineering Software.

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 SafegardM System (S1) contains Damper 01 Status (D1001). Therefore, the complete object reference is 'S1.D1001'.

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.D1001') – therefore the complete object reference is 'IP.CDIP.S1.D1001'.

Device Top-Level Objects

When an interface is started using the SafegardM 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
SafegardM Setup Set up the SafegardM driver, started on interface *c* (*c* is the interface number)	M*c*	Fixed Container: On the Commander platform this will be *[CDM v20\SafegardM v10]* On the ObSys platform this will be *[OSM v20\SafegardM v10]*
SafegardM System Access SafegardM system connected to interface *c* (*c* is the interface number)	S*c*	Variable Container: *[SafegardM v10]*

SafegardM Driver Setup

Object Type: *[OSM v20\SafegardM v10]*
Object Type: *[CDM v20\SafegardM v10]*

The SafegardM driver contains the following objects:

Description	Reference	Type
System Label Label displayed when scanning the system	DL	Obj\Text: 20 chars; Adjustable
RS232 COM Port	RS.COM	Obj\Num: 1…8; Adjustable

SafegardM System

Object Type: *[SafegardM v10]*

The SafegardM system contains the following objects:

Description	Reference	Type
Damper *y* Status The Damper Status object number, x, is a number in the range 1000…1120. The Damper Handle, y, is assigned by the Ruskin Inspector software and is in the range 00..120	**D*x***	Obj\ ENum: Values: 0=Open and OK, 1=Closed and OK, 2=Balanced and OK, 3=Closed and Missing, 4=Closed and Feedback Fault, 5=Travelling and OK

Driver Versions

Version	Build Date	Details
1.0	01/07/2012	Driver released

Next Steps…

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

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