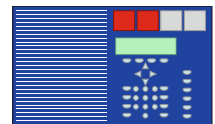# The Esser Driver

The Esser driver connects to an Esser System 8000 series fire detection panel. Available for ObSys and Commander.

This document relates to Esser driver version 1.0

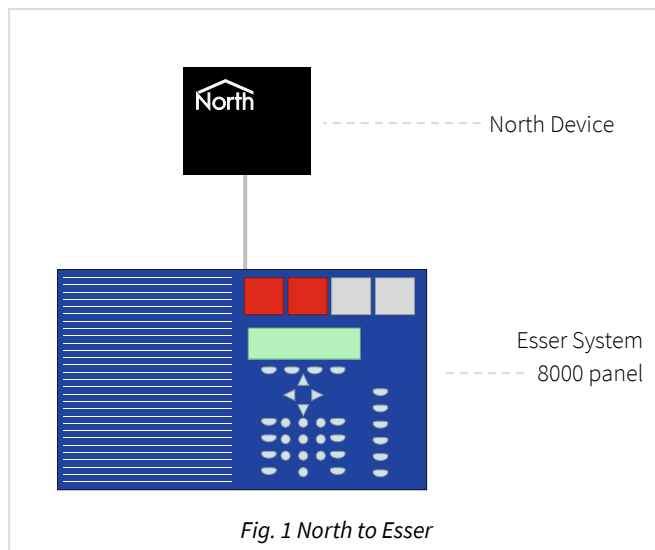Please read the *Commander Manual* or *ObSys Manual* alongside this document, available from *www.northbt.com*

Contents

Compatibility with the Esser System

The Esser driver allows North to interface with an Esser System 8000 series fire detection panel.

The driver connects to an Esser 8000 fire panel via an RS232 interface module (Fig. 1).

Fig. 1 North to Esser

Equipment

Esser fire detection panels compatible with the driver include the System 8000 series.

Values

The driver can typically access the following values:

- Panel state
- Zone state
- Zone device state
- Group state

States for fire, fault, and isolation are available.

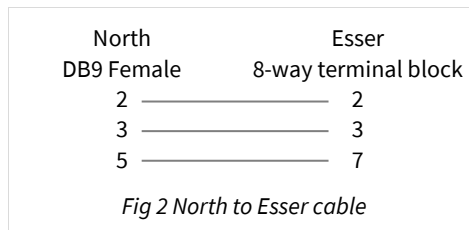Fire panels can send alarms to the Esser driver.

Prerequisites

The Esser panel's RS232/TTY interface module should be configured, using Esser engineering tool, for RS232 mode.

Using the Driver

On ObSys, the Esser driver is pre-installed. On Commander, the driver is available to download in the file 'Bank7 Esser.cdm'. On all of these North devices, you can use the driver to create an interface to Esser. Once started, you will need to set up the driver before it can communicate with the Esser system.

Making the Cable

Using the RS232 cable specification, connect the North Device COM port to Esser panel's RS232 interface module. Connector types at each end of the cable are shown.

```
        North                      Esser
      DB9 Female          8-way terminal block
        2 ———————————————— 2
        3 ———————————————— 3
        5 ———————————————— 7
```

Fig 2 North to Esser cable

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

Cables are available from North, order code CABLE/ESSER.

Starting the Interface

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

→ **Start Engineering** your North device using ObSys

→ Navigate to **Configuration, Interfaces,** and set an unused **Interface** to 'Esser' to start the particular interface

→ Navigate to the top-level of your North device, then rescan it

The driver setup object (M*c*), labelled **Esser 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 **Esser Setup** object (M*c*). 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 Esser fire panel.

Checking Communications

You can check that the interface is communicating by reading the **Comms OK** object (DS). A value of 'yes' indicates the driver has received data from the fire panel.

Alarms

When the Esser system reports an event to the driver, the driver sends a North-format alarm to the device's alarm processing.

Format

North-format alarms contain six text fields. The Esser driver places the following information into these fields:

System – copied from System Label object (DL) within driver setup

Point – see Point Field section below

Condition – see Condition and Priority Field section below

Priority – see Condition and Priority Field section below

Date & Time – from North Device

Examples

System	Point	Condition	Priority	Date	Time
Esser Fire	Zone 1 Dev 3	Fire	1	01/03/20	14:29:48
Esser Fire	Zone 1 Dev 3	Fire Reset	1	01/03/20	14:55:12
Esser Fire	Panel	Supply Fault	3	11/03/20	11:26:26

Point Field

The Point field can be:

Panel

Group a

Zone b

Zone b Dev c

Condition and Priority Field

The following alarm conditions can be sent by the driver:

Active Condition	Cleared Condition	Priority
Fire	Fire Reset	1
Technical Alarm (TAL)	Technical Alarm (TAL) Cleared	2
Isolated	De-Isolated	3
Fault	Fault Cleared	3
Supply Fault	Supply Fault Cleared	3
Communications Lost	Communications Regained	3

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 Esser system (S1) contains Zone 1 (P.Z1) which contains a Device (D1) which itself gives a value (V). Therefore, the complete object reference is 'S1.P.Z1.D1.V'.

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.P.Z1.D1.V) – therefore the complete object reference is 'IP.CDIP.S1.P.Z1.D1.V'.

Device Top-Level Objects

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

Esser Driver Setup

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

The Esser driver contains the following objects:

Description	Reference	Type
System Label	DL	Obj\Text: 20 chars; Adjustable
RS232 COM Port	RS.COM	Obj\Num:1…8; Adjustable
Comms OK A value 'yes' indicates the driver has received a message from the panel in the last two minutes	DS	Obj\NoYes

Esser System

Object Type: *[Esser v10]*

The Esser System is an Esser system 8000 compatible fire panel, containing the following objects:

Description	Reference	Type
Panel in access	P.AC	Obj\NoYes
Panel Value List List of value states	P.V	Obj\Text List of values from the numbers listed below in object Va. E.g. '22|15'
Panel Value a The value index, a, is in the range 1…8	P.Va	Obj\ENum Values: 0=OK, 5=Detectors in Test, 13=Panel Supply Fault, 15=Detector Fault, 20=Devs Isolated, 21=Technical alarm (TAL), 22=Devs in Fire
Test active	P.F5	Obj\NoYes
Fault active	P.F15	Obj\NoYes
Isolation active	P.F20	Obj\NoYes
Technical Alarm (TAL) active	P.F21	Obj\NoYes
Fire active	P.F22	Obj\NoYes
Panel Supply Fault	P.F13	Obj\NoYes
Zone z The zone number, z, is in the range 1…12955	P.Zz	Fixed Container: *[Esser v10\Zone]*
Group x The group number, x, is in the range 1…12995	P.Gx	Fixed Container: *[Esser v10\Group]*

Zone

Object Type: *[Esser v10\Zone]*

A Zone is a zone of detectors within the Esser fire detection panel.

Description	Reference	Type
Value List List of value states	P.V	Obj\Text List of values from the numbers listed below in object V*a*. E.g. '22|15'
Value *a* The value index, a, is in the range 1…5	P.V*a*	Obj\ENum Values: 0=OK, 5=In Test, 15=Device Fault, 20=Device Isolated, 21=Technical alarm (TAL), 22=Fire
Zone in Test	P.F5	Obj\NoYes
Devices in Fault	P.F15	Obj\NoYes
Devices Isolated	P.F20	Obj\NoYes
Technical Alarm (TAL)	P.F21	Obj\NoYes
Devices in Fire	P.F22	Obj\NoYes
Action: Isolate Set to 'yes' to isolate zone, 'no' will reset isolation	I	Obj\NoYes; Adjustable
Action: Test Set to 'yes' to enable zone test, 'no' will reset test	T	Obj\NoYes; Adjustable
Action: Reset Set to any value to reset isolate and test states for the zone. Alternative to using objects I and T	R	Obj\NoYes; Adjustable-only
Device *y* The device number, *y*, is in the range 1…63	D*y*	Fixed Container: *[Esser v10\Device]*

Device

Object Type: *[Esser v10\Device]*

A Device is a device within the Esser fire detection panel.

Description	Reference	Type
Value List List of value states	P.V	Obj\Text List of values from the numbers listed below in object V*a*. E.g. '22|15'
Value *a* The value index, a, is in the range 1…4	P.V*a*	Obj\ENum Values: 0=OK, 15= Fault, 20= Isolated, 21=Technical alarm (TAL), 22= Fire
Fault	P.F15	Obj\NoYes
Isolated	P.F20	Obj\NoYes
Technical Alarm (TAL)	P.F21	Obj\NoYes
Fire	P.F22	Obj\NoYes
Action: Isolate Set to 'yes' to isolate zone, 'no' will reset isolation	I	Obj\NoYes; Adjustable

Group

Object Type: *[Esser v10\Group]*

A Group is a control group within an Esser fire detection panel.

Description	Reference	Type
Value List List of value states	P.V	Obj\Text List of values from the numbers listed below in object V*a*. E.g. '22|15'
Value *a* The value index, a, is in the range 1…3	P.V*a*	Obj\ENum Values: 0=OK, 15=Fault, 20=Isolated, 22=Fire/Activated
Fault	P.F15	Obj\NoYes
Isolated	P.F20	Obj\NoYes
Fire/Activated	P.F22	Obj\NoYes
Action: Isolate Set to 'yes' to isolate zone, 'no' will reset isolation	I	Obj\NoYes; Adjustable

Driver Versions

Version	Build Date	Details
1.0	25/02/1999	Correct decode of zones >100
1.0	14/05/1999	Fixed issue when unable to decode zone/device number
1.0	27/11/2000	Reworked driver's database of events, and tuned with size of Esser panel's buffer
1.0	12/01/2001	Added 'Communications Lost' alarms
1.0	14/12/2011	Released for Commander

Next Steps…

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

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