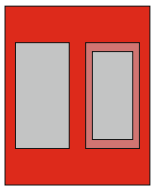
North



The AndAC8 Driver

The AndAC8 driver interfaces to an Andover Controls AC8 plus or an Andover Nucleus AC256 controller. Available for ObSys and Commander.

This document relates to AndAC8 driver version 1.0

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

Contents

Compatibility with the AndAC8 system

The AndAC8 driver allows North to interface with an Andover Nucleus AC256 or Andover Controls AC8. The Andover controller contains a set of engineer-defined variables and executes one or more control programs.

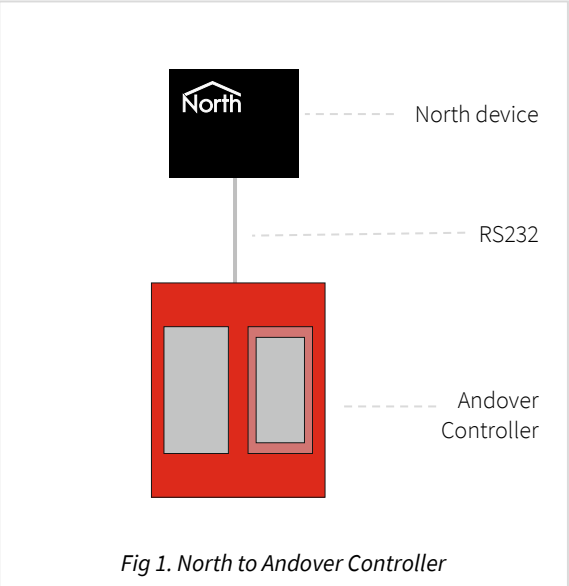


Fig 1. North to Andover Controller

Equipment

Andover controllers compatible with the driver include:

- Andover Controls AC8 plus
- Andover Nucleus AC256

Values

The driver can typically access the value of engineer-defined variable within a single controller.

Prerequisites

Both Andover AC8 and AC256 do not have a fixed list of variables within in, and it cannot be scanned to determine the list of objects – The object database must therefore me generated manually.

Using the Driver

On ObSys, the AndAC8 driver is pre-installed. On Commander, the driver is available to download in the file 'Bank3 AndAC8.cdm'. On all of these North devices, you can use the driver to create an interface to OmromPLC. Once started, you will need to set up the driver before it can communicate with the AndAC8 system.

Making the Cable

Using the RS232 cable specification, connect the North Device COM port to the Andover 'RS232' port labelled 'CONSOLE'. Connector types at each end of the cable are shown.

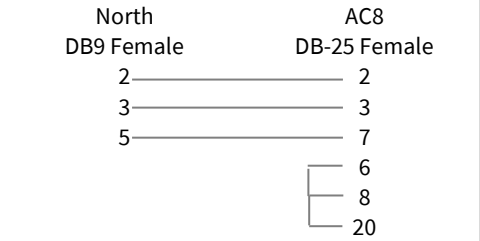


Fig 2. North to AndAC8

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

Cables are available from North, order code CABLE/AndAC8.

Starting the Interface

To start an interface using the AndAC8 driver, follow these steps:

- **Start Engineering** your North device using ObSys
- Navigate to **Configuration, Interfaces,** and set a unused **Interface** to 'AndAC8' to start the particular interface
- Navigate to the top-level of your North device, then rescan it

The driver setup object (Mc), labelled **AndAC8 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 **AndAC8 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 Andover device
- Set **Baud Rate** (RS.BR) to match the DIP switches inside the Andover Controller
- Set **Logon Name** (LN) and **Logon Password** (LP) to match the authentication required.

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 AndAC8 (S1) contains the point name 'X1', which itself contains a Value (V). Therefore, the complete object reference is 'S1.X1.V1

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.X1.V) – therefore the complete object reference is 'IP.CDIP. S1.X1.V'

Device Top-Level Objects

When an interface is started using the AndAC8 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
AndAC8 Setup Set up the AndAC8 driver, started on interface *c* (*c* is the interface number)	M*c*	Fixed Container: On the Commander platform this will be *[CDM v20\AndAC8 v10]* On the ObSys platform this will be *[OSM v20\AndAC8 v10]*
AndAC8 System Access AndAC8 system connected to interface *c* (*c* is the interface number)	S*c*	Variable Container: *[AndAC8 v10]*

AndAC8 Driver Setup

Object Type: *[OSM v20\AndAC8 v10]*
Object Type: *[CDM v20\AndAC8 v10]*

The AndAC8 driver contains the following objects:

Description	Reference	Type
RS232 COM Port	RS.COM	Obj\Num:1…8; Adjustable
Baud Rate	RS.BR	Obj\Num; Adjustable Values: 1200, 4800, 9600, or 19200
Device Label	DL	Obj\Text: 20 chars; Adjustable
Logon Name Name to authenticate with the AC8 controller. Typically the first character is the controller id, the following characters (typically three) are the serial number e.g. 'C070'. If unsure of these values, please consult Andover Controls. When this object is adjusted, the driver will re-authenticate.	LN	Obj\Text: 8 chars; Adjustable
Logon Password Password to authenticate with the AC8 controller. When this object is adjusted, the driver will re-authenticate	LP	Obj\Text: 16 chars; Adjustable

AndAC8 System

Object Type: *[AndAC8 v10]*

The AndAC8 system does not have a fixed list of variables within it, and it cannot be scanned to determine the list of objects. The object database of a particular Andover AC8 must therefore be generated manually.

Objects have the following format:

Description	Reference	Type
***Point-name* – Value** The point name, *p*, is a text string of up to 16 chars. E.g. Reading the object 'X1.V' returns the current value of point 'X1' in the AC8	*p*.V	Obj\Float; Adjustable
***Point-name* – Status** Status is used to convert point values returning 'OFF' or 'ON' to a '0' (off)/'1' (on) value	*p*.S	Obj\OffOn; Adjustable

Driver Versions

Version	Build Date	Details
1.0	03/09/2003	Driver released

Next Steps…

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

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