XBOXER XBC 10-85 (CO Control)

Supply & Extract Ventilation Unit with Heat Recovery

Quick Control Setup Guide

1.0 INTRODUCTION

This guide provides basic set up procedure to allow control commissioning of Nuaire's Ecosmart Connect control software and should be read in conjunction with Nuaire's XBC10-65 with EcoSmart Connect Control (CO) installation and maintenance manual, document number 671748.

Before commissioning the unit, ensure that all equipment has been assembled in accordance with the installation procedures detailed in the unit installation and maintenance manual.

2.0 BASIC COMMISSIONING

The Ecosmart Connect system can only be commissioned by modifying the controller BACnet object values (in software). This can be done by connecting to the controller across the network using any BACnet compatible software.

If a BACnet compatible network is not available, an ESCO-LCD is required to commission the system. The ESCO-LCD can be permanently connected on the FC bus (with a separate power supply), or a special RJ11 connection cable (ESCO-LCD-3M) is supplied for connection directly to the controller (self-powered). All values will be retained by the controller once the LCD is disconnected.

2.1 Priority and writing of values

The ESCO-LCD can browse all devices and objects on the network. By default, it writes variables (BV, AV, MSV) at level 16 and outputs (BO, AO) at level 8. No BACnet device can write inputs (BI, AI). It is highly recommended that the write levels are left at the default settings of 16 for Adjust Priority and 8 for Override Priority.

It is not recommended to change or write to any of the outputs (BO/AO) directly as doing so may cause undesirable results and override the software permanently. If overridden ensure all values are relinquished correctly.

2.2 Relinquishing

The ESCO-LCD allows the relinquishing of values by selected an empty value for analogue values or the '---'value for discrete values. Setting an analogue value to "0" does not relinquish the command. The relinquish command will only apply to the priority level set in the settings.

2.3 Navigation of ESCO-LCD

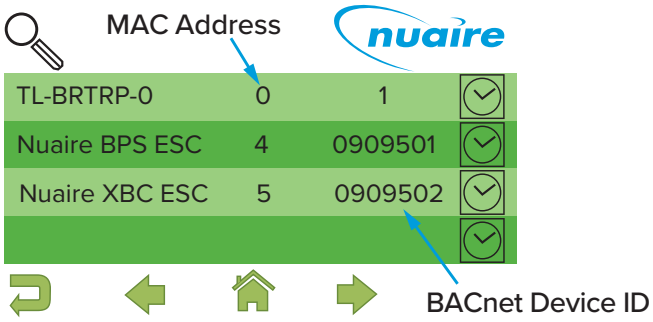
To gain access to the controllers set points via the ESCO-LCD please select the network page in the top right hand corner of the controller shown below. Once access is gained select the correct unit by checking the MAC address. The mac address can be checked via the dip switches on the front of the connect control (e.g. if 4 and 1 are selected, the mac address equals 5).

1 ESCO-LCD Menu Screen

2 ESCO-LCD Navigation Buttons

	Cancel – Quit and moves to the previous section
	Home – Shortcut to the configured Home Page
	Back – Moves to the previous page in the same section
	Forward – Moves to the next page in the same section
	Enter – Applies changes

3 ESCO-LCD Navigation Buttons



3.0 ENABLING THE UNIT

The unit can be enabled via multiple methods as listed below. For commissioning purposes the software enable can be utilised. Ensure the enable is removed after commissioning if enabling from another method after commissioning.

- Software switch (ENABLE) via local display or network.
- Switched live (230VAC) input.
- Volt free input contacts.
- Night Cooling / Summer free-cooling strategy.
- Scheduled via weekly calendar.
- Fan speed override.
- Room module PIR sensor.
- Room module 3-fan speed button.
- 0-10v signal via IN5 (if configured).

The software enable is located on page number 33 of the LCD browser or bacnet object ID number 10218.

Enable

LCD Browser Page	BACnet Object	Description	Point Type	Instance Number	Default Value	Range
2	Unit Enable	Enable the Unit	MSV	28511	Off	Off / On

3.1 Setting Minimum and Maximum Airflows

To set the minimum and maximum fan speeds configure the following set points:

- Extract fan minimum speed located on page number 51 of the LCD browser or object ID 28623.
- Extract fan maximum speed located on page number 51 of the LCD browser or object ID 28624.
- Supply fan minimum speed is located on page number 51 of the LCD browser or object ID 28621.
- Supply fan maximum speed is located on page number 51 of the LCD browser or object ID 28622.

Fan Commissioning

LCD Browser Page	BACnet Object	Description	Point Type	Instance Number	Default Value	Range
51	EF Max Demand	Extract Fan Maximum Demand	AV	28623	100	0-100
51	EF Min Demand	Extract Fan Minimum Demand	AV	28624	20	0-100
51	SF Max Demand	Individual Fan Maximum Demand	AV	28621	100	0-100
51	SF Min Demand	Supply Fan Minimum Demand	AV	28622	20	0-100

To simulate the maximum speed and check air volumes the fan boost will have to be enabled. The fan boost is located on page number 16, object ID 28629. Please ensure this is disabled after commissioning.

Fan Boost

16	Fan Boost	Enable Fan Boost	MSV	28629	Off	Off / On

3.2 Setting Trickle Operation

Enabling the trickle set point will run the fan at minimum speed when there is no enable signal present. To enable trickle configure the following set point.

- Trickle mode is located on page number 19 if the LCD browser or BACnet object ID 28656.

Trickle Mode

19	Trickle Mode	Trickle Mode Enabled	MSV	28656	Off	Off / On

3.3 Setting the Run-on Timer

Once the enable is removed the unit will run on for the time set by the run on set point.

- Run-on set point is located on page number 50 of the LCD browser or BACnet object ID 28617.

Run-on Enable

50	Run-on	Run-On speed	AV	28617	0	0-120

3.4 Setting Inlet / Outlet Dampers

If inlet or outlet dampers are fitted to the unit as ancillary items, ensure the following set points are configured:

- The Inlet outlet damper fitted is located on page number 3 of the LCD browser or object ID 28524.

Inlet / Outlet Dampers

3	IO Damper Fitted	IO Damper Fitted	MSV	28524	No	No / Yes

3.5 Setting Temperature Control

There are two methods of temperature control available with Ecosmart Connect controls:

- Temp Control Mode is located on page number 15 if the LCD browser or BACnet object ID 28615.

Temperature Control

15	Control Type	Temperature Control Selection - State 0 (Supply Temp Control / State 1 (Return Temp Control)	MSV	28615	State 0	State 0 / State 1

If there is a heater battery or a cooling coil fitted to the unit ensure the following set points are configured as a minimal requirement to suit the unit type and site requirements:

- The heating type is located on page number 1 of the LCD browser or object ID 28509.
- The cooling type Is located on page number 1 of the LCD browser or object ID 28510.
- Software set point Is located on page number 56 of the LCD browser or object ID 28654.
- Set point operation is located on page number 14 of the LCD browser or object ID 28612 (if there are no room sensors installed it is recommended that this is set to software only).

1	Heating Type	Selection of Heating Type - State 0 (None) / State 1 (LPHW) / State 2 (Electric Heater) / State 3 (3rd Party)	MSV	28509	State 0	State 0 / State 1 / State 2 / State 3
1	Cooling Type	Selection of Cooling Type - State 0 (None) / State 1 (Chilled Water) / State 2 (3rd Party) / State 3 (Reverse Cycle DX)	MSV	28510	State 0	State 0 / State 1 / State 2 / State 3
56	Network Setpoint	Network Temperature Setpoint	AV	28654	22	12-28
14	Setpoint Operation	Setpoint Input Operation - State 0 (Last Changed) / State 1 (Software Only) / State 2 (Last Changed with timeout)	MSV	28612	State 0	State 0 / State 1 / State 2

4.0 AFTER SALES ENQUIRIES

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

Telephone 02920 858 400
aftersales@nuaire.co.uk

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