

## **MCS-NX RANGE OF**

# Next Generation Control Units

ADVANCED CONTROL SYSTEMS FOR ALL YOUR EMERGENCY, RECOVERY AND UTILITY SERVICE VEHICLE EQUIPMENT





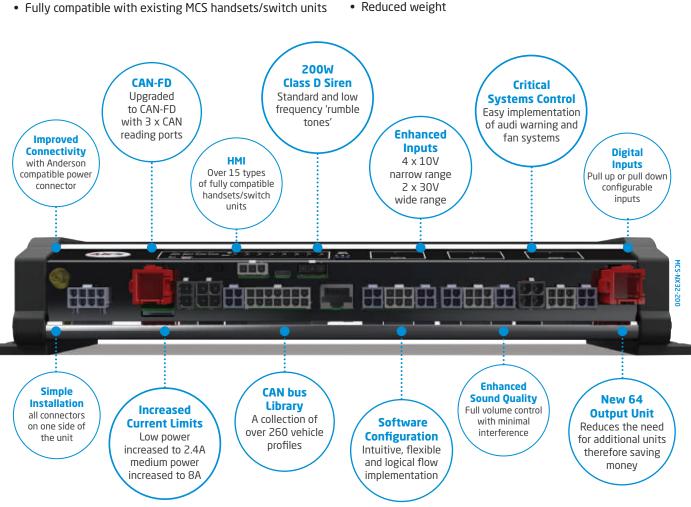
# The all new MCS-NX range

of next generation control units

#### PRODUCT ADVANTAGES

- · Reduced loom length
- Easier to install
- · Improved connectivity
- All new configuration software
- Easier diagnostic and fault finding
- · Reduced need for additional units
- Medium power outputs current limit increased to 8A
- Low power output current limit increased to 2.5A
- Greater scope during installation for product control allowing for increased load shedding capability
- Flash pattern selectable for group flashing
- Multifunction outputs priority based

- Familiarity for user interface
- 3 x CAN reading ports defined by user (not preset)
- CAN-2.0 (MCS) upgraded to CAN-FD (MCS-NX), allowing for larger data length along with faster BIT rate
- Vehicle CAN integration widened to pick up second CAN line if required
- Class D siren amp for enhanced sound quality with minimal interference (PA)
- Built-in low frequency capability
- Full volume control for workshop/city mode
- Dual voltage 12v and 24v operation
- · Reduced weight





#### **ADVANCED FEATURES AND FUNCTIONS**

#### Connections

- Single 70A Anderson power connection
- NX8 x 1
- NX16 x 1
- Multiples for larger models
- NX32 x 2
- NX64 x 4
- · All connections on one side of enclosure

#### Inputs

- Enhanced inputs
- Narrow Range x 4
- Pull up or pull down (configurable), 10V range
- Wide Range x 2
- Pull up or pull down (configurable), 30V range
- Inputs used for data input i.e. temperature sensors for dog kennels
- Digital inputs
- MCS-NX16 x 4
- MCS-NX32 x 12
- MCS-NX64 x 28

#### Outputs

- MCS-NX8
  - High power 20A x 4
  - Low power 2.4A x 4
- MCS-NX16
  - High power 20A x 4
- Medium power 8A x 8
- Low power 2.4A x 4

- MCS-NX32
- High power 20A x 8
- Medium power 8A x 20
- Low power 2.4A x 4
- MCS-NX64
- High power 20A x 20
- Medium power 8A x 40
- Low power 2.4A x 4

#### **Multi-Way Switch Options**

- CAN handsets/switch units
- Programmable button configuration
- 64 colour choices
- Multiple handset/switch unit setup
- Touch screen switch panel
  - Screen acts as a CAN switch unit
  - 4 x backup buttons
  - On screen buttons interact as per a standard switch unit
  - Fully configurable button/graphic layouts

#### CAN bus

- CAN-FD x 3
- CAN-FD x 2
- CAN-FD/RS485 x 1
- Vehicle CAN bus
  - Supports over 260 vehicle profiles

- MCS CAN
- Handsets/switch units
- Touch screen
- Expansion modules
- StandbyRSG CAN devices

#### Siren

- 100W Class D Siren (NX8 only)
  - Differential mic input
  - Full digital audio pathing allowing for full volume control
  - Full dynamic range standard siren tones and low frequency 'Rumbler Tones'
- Two optional channels (user defined)
- 200W Class D Siren
- Differential mic input
- Full digital audio pathing allowing for full volume control
- Full dynamic range standard siren tones and low frequency 'Rumbler Tones'
- Two optional channels (with selectable outputs)
- Playback and recording from an SD card
- Speed based volume

#### Approvals

- ECE R10 Approved
- Home Office Spec 5 approved
- VCA approved manufacturing facility

#### **COMPARISON CHART**

	NX RANGE				MCS RANGE		
	NX8	NX16	NX32	NX64	MCS-8	MCS-16	MCS-32
High Power Outputs	4 x 20A	4 x 20A	8 x 20A	20 x 20A	4 x 20A	8 x 20A	16 x 20A
Medium Power Outputs	N/A	8 x 8A	20 x 8A	40 x 8A	N/A	4 x 2.5A	4 x 2.5A
Low Power Outputs	4 x 2.4A	4 x 0.5A	12 x 0.5A				
Weight	1.38kg	1.46kg	2.38kg	3.64kg	1.51kg	1.79kg	1.93kg
Dimensions (with siren)*	201x142x57mm	240x142x57mm	335x142x57mm	452x142x56mm	172x142x58mm	210x142x58mm	305x142x58mr

<sup>\*</sup> Versions without a siren are 29mm shorter in width

#### **HUMAN MACHINE INTERFACE**

The MCS-NX control units are fully compatible with the existing range of MCS handsets and switch units for the operation of rooftop lighting, secondary lighting and power management.

In addition it has been developed to work with the vehicle OEM touch screen to provide and economical control system that will not compromise on features and functions.



#### **200W SIREN OPTIONS**

Unlike the original range of MCS control units, the NX16, NX32 and NX64 are available with 200W siren output.

2 channels, each having 2 selectable outputs allows the unit to produce two different siren tones at the same time giving a 'two vehicle' effect via 2 x 100 Watt speakers, or, scrolled siren sounds via 1 x 200 Watt speaker, plus, either 'simultaneously or separately' a low frequency rumble sound via 1 or 2 x low frequency 100w rumble speakers.

LSP-108 100W Low Frequency Digital Rumble Speaker



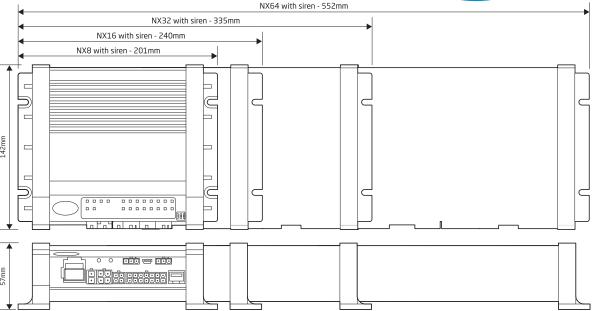
#### **SOFTWARE CONFIGURATION**

Improving the intuitiveness of the configuration software was key to the development of the NX range. Incorporating new features and functions in a logical order has greatly enhanced the user experience making the software easier to navigate and understand.

- An intuitive user interface that allows users to interact with the logical flow and modules easily.
- A library of pre-built basic functions and specialized modules that users can drag and drop.
- Drag-and-drop functionality to enable users to place modules in the desired order within the logical flow.
- The settings panel provides a clear and concise interface for configuring module settings.
- Users can define the execution order of modules to ensure the desired logical flow.
- Allows users to define custom modules by specifying inputs, outputs, and the underlying code or functionality.
- Modules have clear labels and icons for easy identification and differentiation.

### Modules ing Name Canlib Vame Ligi Canlib Maximum Brightness CAN Lost Default (B Frequency 1000 CAN Lost Controller Adjust Step Speed Minimum Brightness 20 Fade On Step Speed MCS-NX 16 Butto ade Off Step Speed Shutdown n Hold Fade Time i inputs Low Power Outputs (B) High Power Outputs (A) Medium Power Outputs (D) MCS Legacy Handset

#### PRODUCT DIMENSIONS (WITH SIREN)\*



<sup>\*</sup> Versions without a siren are 29mm shorter in width

#### **CURRENT MODEL AVAILABILITY**

MCS-NX CONTROL UNITS									
Part Number	Model	Outputs	Audio Intercom	Siren	GPS	Voltage			
MCS-NX8-NG0	MCS-NX8 Control Unit	8	×	X	~	12/24			
MCS-NX8-SG1	MCS-NX8 Control Unit	8	×	100W	~	12/24			
MCS-NX16-NG0	MCS-NX16 Control Unit	16	×	X	~	12/24			
MCS-NX16-SG2	MCS-NX16 Control Unit	16	×	200	~	12/24			
MCS-NX32-NG0	MCS-NX32 Control Unit	32	×	X	~	12/24			
MCS-NX32-SG2	MCS-NX32 Control Unit	32	×	200	~	12/24			
MCS-NX64-SG2	MCS-NX64 Control Unit	64	~	200	<b>V</b>	12/24			

