

AREA CONTROL UNIT

ECS8110.00

The 8110 is a dedicated Area Control Unit (ACU) for use in ECS Lighting Management Systems.

It provides automatic switching of luminaires controlled by the system, based on the time and selected events. It can accept volt-free inputs from external sources (such as a BMS) and use these as a trigger for programmed switching functions.

The Area Control Unit consists of a stand alone wall mounted enclosure with a PC interface. The unit incorporates a real time clock/calendar and battery backed memory protection of at least one year in the event of mains failure.

The Area Control Unit is suitable for controlling a large lighting control system. It is capable of signalling to 200 independent Lighting Control Unites (LCU's). Each LCU can be selected to receive signals from any one of 200 addresses.

Programming

The Area Control Unit is designed to hold and issue programmed instructions generated by ECS Light Command software. For ease of programming, the user compiles the programme on a standard IBM compatible PC, running Microsoft Windows (Versions 95 or above). The user may also view the programme in a user friendly graphical format, and to print out hard copies.

When the programme is complete, it is uploaded to the Area Control Unit. This is done by connecting the RS232 port of the computer to the corresponding port on the Area Control Unit.

Once the system is programmed the PC may be disconnected. The Area Control Unit will then run the programme of events specified by the user. Programmes can be uploaded from the ACU to a PC if required.



Corridor Linking

The corridor link function, when invoked, will allow Lighting Control Units (and the luminaires connected to them) to be designated as OFFICE lighting or CORRIDOR lighting. Whilst OFFICE lighting is ON, all CORRIDOR lighting connected to the ACU will be held ON by the system. When the last OFFICE light is switched OFF the CORRIDOR lights will switch OFF after a pre-set period.

Software

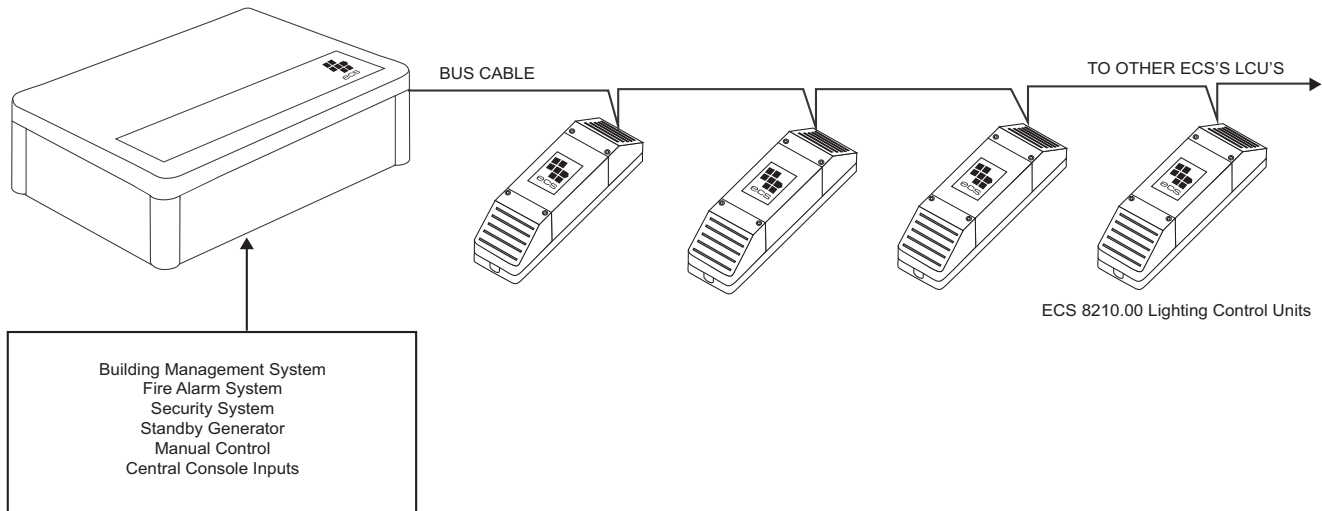
The user is guided through the process by the user friendly LightCommand software that is provided with the Central Control Unit.

The software enables:

- Direct manual operation of the system
- Automatic operation by time of day
- Programming of volt free inputs (BMS etc.)
- Programming of Load Shed inputs
- Set-up of the System Clock
- Set-up of Holiday Periods
- Setup of Auto daylight savings adjustment
- Set-up of Solar Inputs
- Inspection of previous programmes

High level interface to propriety BMS units can be facilitated for use with the 8110 ACU.

Interconnection



Inputs

Volt-free Input Terminals

A maximum of Thirty Two volt-free inputs may be connected to the Controller, to facilitate switching from external sources. These inputs may include BMS Out-stations, Solar Controllers, Security or similar alarm systems, Load-Shed devices or simple switches. The function of each input is programmed in software, thus providing flexibility of application through the building.

Mounting Details

The wall mounted Area Control Unit is usually installed in an Electrical Riser Cupboard at approx. 1.5m above the floor. The user will require access to plug in the serial interface cable.

The 8110 is housed in a rigid moulded ABS enclosure.

Technical Information

Overall dimensions	200mm x 250mm x 65mm
Temperature range	0-55 deg. C
Battery Memory Retention	1 year minimum
PC Interface	RS232, 9 pin D connector
Voltage	240 Volt 50Hz
Maximum Current Rating	3 Amp
Weight	2 kg

Outputs

Maximum number of LCM's	200
Bus Cable (No Corridor Linking)	2 core 1.0mm ² PVC/PVC
Bus Cable (with Corridor Linking)	3 core 1.0mm ² PVC/PVC
Max.Bus length	1000m

Inputs

Number of inputs	32 volt free inputs
Input cable	2 core 1.0mm ² PVC/PVC

Ordering Information

Catalogue Number	Description
ECS8110.00	Area Control Unit in Enclosure
ECS8100.00	Area Control Unit PCB