



## Intuitous HVAC & Lighting Controller

The Intuitous Wired HVAC & Lighting Controller (ECSC-OLTC) is essentially a small computer with a software application that runs continuously listening for data from its built-in sensors and optional remote sensors. The controller processes input from the sensors, monitors ambient temperature and disables heating, cooling and lighting systems to conserve energy. The software application, otherwise known as firmware, is programmed into a chip on the controller during the testing process at the Intuitous factory. The software is configured for each zone by a combination of 10 small switches on the controller board thus defining a unique Energy Conservation plan. The conservation plan may include any combination of the following conservation options; vacant space setback,

long term setback, night time setback, high & low limiting, and lighting control. The Controller is a low voltage device that uses relay contacts to invoke setback by opening the circuits that call for heating and cooling. The ideal location for the controller in most installations will be on the ceiling where it can be tapped into the thermostat's low voltage control line. The controller receives power from the HVAC unit's 24vac supply. Lighting can be controlled with the ECSC-OLTC via a set of low voltage dry contacts. The ECSC-OLTC provides an ideal "all-in-one" solution for single room zones such as classrooms, boardrooms and hotel rooms. Up to 10 wired remote occupancy sensors can be connected to cover large multi-room zones.



## ECSC-OLTC

## Applications

### HVAC

The Intuitous ECSC-OLTC Wired HVAC & Lighting Controller can be field wired to any thermostatically controlled HVAC system. The Intuitous *Wired Products Installation Guide* provides detailed deployment information for a vast number of manufacturers, equipment types and control schemes. Systems with 120-240V control circuits will require the Intuitous Relay Transformer accessory (ECA-RT).

### Lighting

The ECSC-OLTC also has integrated capability to switch lighting loads through a set of SPDT relay contacts. The Intuitous Relay/Transformer (ECA-RT) can be used to switch lighting loads up to 240VAC @ 10A. 347VAC lighting systems and larger loads can be switched using 3rd party relay/transformers.

Intuitous also manufactures wireless energy conservation products. The "Wireless" family of products are best suited for retrofit installation in multi-unit residential properties, hotels and any application where running control wires from the sensors to the controller would prove challenging.

### Other Products in the Intuitous Wired Family

ECSC-OC	Lighting Controller
ECS-O	Remote Occupancy Sensor
ECA-RT	Relay Transformer
ECA-IKEY	Installer Key

## Specifications

Operating Voltage	16-28VAC, 18-32VDC
Supply Current	56mA @ 24VDC
Microprocessor speed	4Mhz
Onboard memory	2KB Flash (non-volatile) memory
Relays	(3) - Heating, Cooling, Lighting
Relay Contacts	Dry contacts rated 2.0A @ 30VDC
Programmed Logic 1	Occupancy & Temp. based setback
Programmed Logic 2	Occupancy based control (Lighting)
Programmed Logic 3	Night-time setback (light-based)
Programmed Logic 4	High & low limit restrictions
Programmed Logic 5	Long Term Setback
Temperature sensing	Integrated digital sensor +/-0.5C
Human presence detection	Dual element, 38 zones, 7m dia.
Light sensor	Cds photocell
Mounting location	Round ceiling mount enclosure
Operating temperature	-20C ~ 50C (4F ~ 122F)
Dimensions	40mm x 100mm dia.



### Installer Key

The Occupancy Sensor Installer Key (ECA-IKEY) can be inserted into the side of the sensor to test the detection area and tune the light sensor.

