



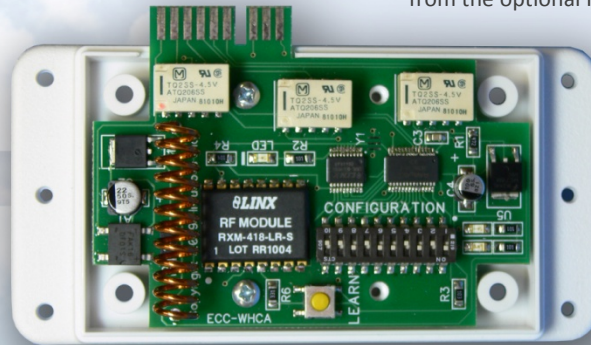
## Intuitious Wireless HVAC & Lighting Controller

## ECC-WHCA

The Intuitious Wireless HVAC & Lighting Controller (ECC-WHCA) is essentially a small computer with a software application that runs continuously listening for data from Intuitious wireless 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 Intuitious 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, open door restrictions, 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 within the HVAC enclosure where thermostat wiring connections are made.

The controller can also be mounted on the wall beside the thermostat or anywhere else along the path of the low voltage wire that runs from the thermostat to the HVAC unit. The controller receives power from the HVAC unit's 24VAC supply or from the optional Intuitious relay transformer (ECA-RT) if the HVAC equipment has 110-240VAC controls.



## Applications

### HVAC

The Intuitious ECC-WHCA Wireless HVAC & Lighting Controller can be field wired to any thermostatically controlled HVAC system. The Intuitious *Wireless 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 Intuitious Relay Transformer accessory (ECA-RT).

### Lighting

The ECC-WHCA also has integrated capability to switch lighting loads through a set of SPDT relay contacts. The Intuitious 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.

Intuitious also manufactures wired energy conservation products. The "Wired" family of products is best suited for new construction or retrofit installation into buildings with easy access to control wiring through T-bar style ceilings and open areas.

### Other Products in the Intuitious Wireless Family

ECS-WD	Wireless Door Sensor
ECC-WOL	Wireless Occupancy Sensor
ECC-WO	Wireless Lighting Controller
ECA-WHxxx	Wiring Harness (available pre-made or kit)
ECA-RT	Relay Transformer
ECA-IKEY	Installer Key

## Specifications

Operating Voltage	16-28VAC, 18-32VDC
Supply Current	75mA @ 5VDC
Microprocessor speed	4Mhz
Onboard memory	2KB Flash (non-volatile) memory
Wireless Communication	Map to up to 40 sensors @ 418MHZ
Relays	(3) - Heating, Cooling, Lighting
Relay Contacts	Dry contacts rated 2A @ 30VDC
Programmed Logic 1	Occupancy & Temperature 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
Programmed Logic 6	Open Door Setback
Temperature sensing	Wired digital sensor +/-0.5C
Mounting location	HVAC encl. or within 50M of sensors
Operating Temperature	-20C ~ 50C (4F ~ 122F)
Dimensions	118mm x 69mm x 29mm



### Wiring Harness

Plug and Play wiring harnesses are available for a variety of manufacturer's HVAC equipment. A snap together wiring harness kit is also available for rapid on-site custom wiring.

