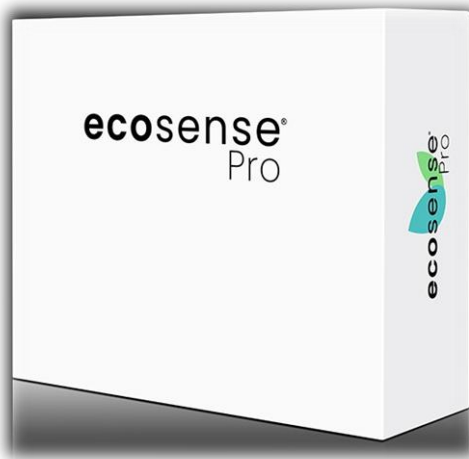

PIR Sensor

INSTRUCTION MANUAL

A Comprehensive Guide to Safe and Efficient Product Use

Installation & Instruction Manual – *Agent & Installer System Test Guide*



Welcome to the PIR Sensor

Welcome to your new Ecosense product ! This instruction manual has been designed to help you make the most of your purchase, ensuring both safety and optimal performance. Please read every section carefully before assembling, using, or maintaining your product. Keep this manual for future reference in case you need to revisit any information.

Before attempting to install this product or connect / hardwire to the cassette of your AC, please read the following instructions thoroughly. To complete the successful set-up procedure of your Ecosense Pro, each part of the step-by-step process must be completed in order.

Safety Information

General & Electrical Safety Guidelines

- Read all instructions before testing and installing your Ecosense Pro.
- Ensure the Pro Controller is placed on a stable, level surface during testing for set up procedures.
- Do not use the product outdoors.
- Do not overload electrical outlets.
- Do not immerse any electrical components or sensors in water or other liquids.
- Ensure all mains power is disconnected the product before hardwiring installation or performing maintenance.

Product Overview

This section introduces you to the key features and parts of your product. Familiarize yourself with each component before beginning assembly and installation.

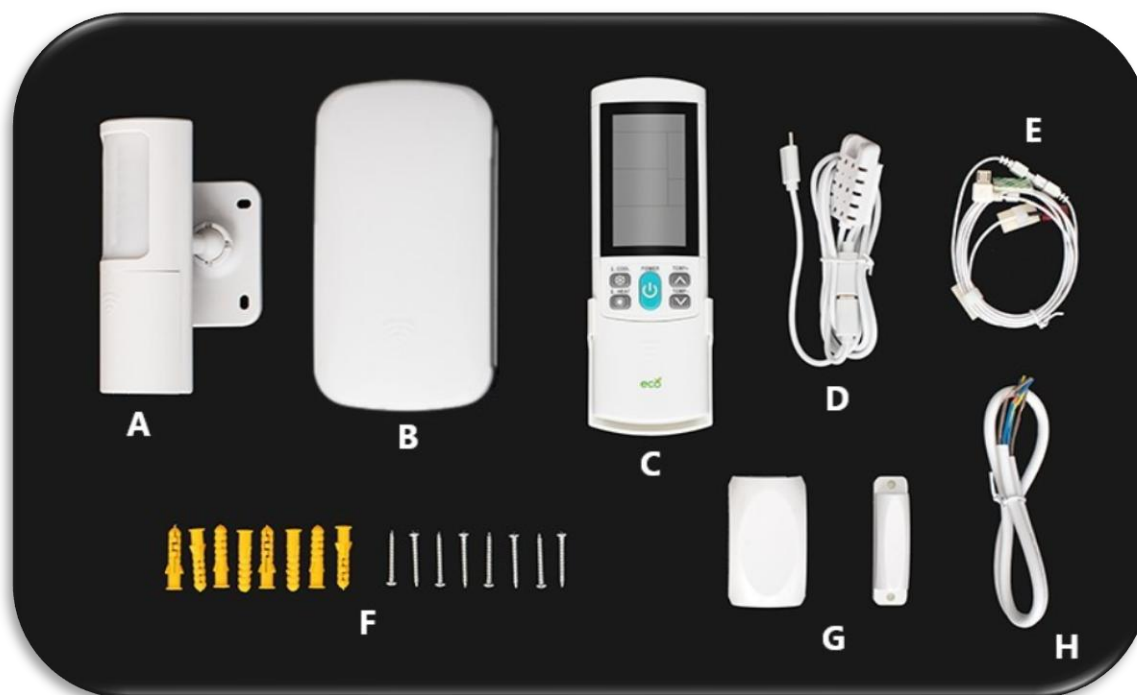


Fig.1

*** Parts included with your Ecosense Pro product.**

- **A** **Adjustable Room PIR Sensor.** *(requires x2 AA batteries- not supplied)*
- **B** **Ecosense Pro Controller.**
- **C** **Ecosense Pro Remote Control** - with wall mount bracket. *(requires x2 AAA batteries – not supplied)*
- **D** **Pro Thermal Sensor Cable (Extended)** *(Type C connector).*
- **E** **Infrared Transmitter Cable (Extended)** *(Micro-USB connector).*
- **F** **Fixing Kit** *(screws, raw plugs) for PIR Sensor and Pro Controller wall fitting. (Inc. reset pin tool).*
- **G** **Pro Door / Window Sensor** *(2 parts).* Includes pre-fitted button Battery.
- **H** **Insulated 3-core power cable.** 500mm *(length).* **Ecosense Controller Connection for AC Cassette**

Before starting assembly, ensure you have all components as listed in the **Product Overview**. *If any parts are missing, contact customer service immediately.*

- Open the box carefully and lay out all parts on a clean surface.
- Check for shipping damage and report any issues to your Ecosense retailer or agent.
- Refer to the diagram (*fig. 1*) provided, to identify each part.
- Do not attempt to force battery doors or openings when installing batteries.

Operating Instructions – Pre-Install Set-up Testing

This section provides detailed guidance on the testing, pre-installation and set-up procedures for the Ecosense Pro. Steps include downloading the Ecosense App and connecting your Pro Controller via Wi-Fi.

For the purposes of testing and familiarisation of the configuration process, the Pro Controller can be temporarily powered by connecting a Micro-USB cable to the port found on the exterior edge of the controller case (*Port A – Fig. 3*). This can be powered from a portable battery / power bank, or from any USB power connection from mains power. ***Maximum voltage input 5v*.**



***To power the Pro Controller (for testing) via Micro-USB cable, the head that is inserted into the port on the controller must exceed 6mm in length, to ensure the required, adequate power connection* (Example - Fig. 2)**

Fig.2

- **A** **Micro USB Power Test input port.**
- **B** **Clear / Delete Memory for Room PIR Sensors & Door / Window Sensors. Hidden button Access.** This recessed button can be activated using the Pin tool (*Provided*). Insert into the small hole. Press and hold internal button until you see the red-light flash on the controller. (*light location A - Fig.5*).

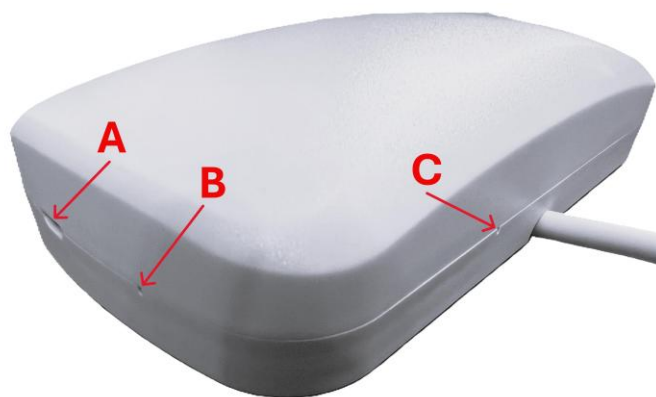


Fig.3

- **C** **Wi-Fi and App Connection.** Hidden button Access. (*detailed in Fig.5*).



- **Thermal Sensor Cable and Infrared Transmitter Cable Connection Location Points (Rear of Pro Controller).**

Plug in the temperature sensor cable, using the **Type C** port connection and the infrared sensor cable using the **Micro-USB** connection found in the recessed area at the rear / back of the Pro controller case (*Fig. 4*)

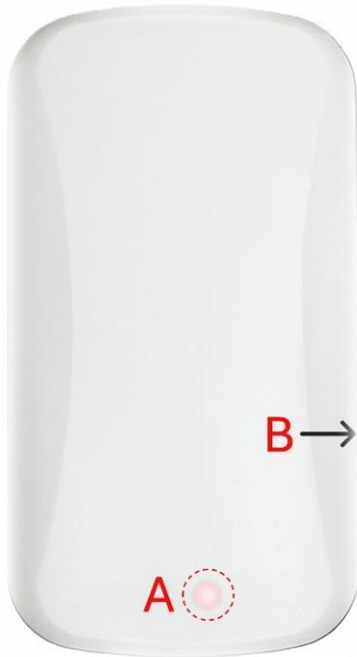
- **A** **Infrared Transmitter Cable Connection (*Micro-USB*)**
- **B** **Pro Thermal Sensor Cable / Temperature Sensor Cable Connection (*Type C*)**

Fig.4

- **Configuring the Ecosense Pro Controller to your Wi-Fi Network**

The Ecosense Pro App can be downloaded from **Google Play** for all android devices or the **App Store** for iPhone and iPad users. Once the app has been downloaded for the first time, register and activate a new account following the prompts provided.

- Once successfully registered, follow the directions on the app to **“Add a new device”**. It is important to only use and enter the same Wi-Fi router name and password details that your phone or device is connected to.



With power either temporarily or permanently connected to the Pro Controller, locate the **Metal Pin Tool** (provided with the bagged fixings). Insert the pin tool into the small pin hole found on the outside edge of the controller case (location C - Fig. 3). After inserting the pin approximately 5mm into the case with light resistance, the hidden internal button should be continually depressed - until the red light can be seen (Light location A – Fig. 5) rhythmically flashing. This places the controller into its “search” mode to initiate connection to the Ecosense App on your device via the selected Wi-Fi connection.

Once the light is confirmed as steadily flashing on the Pro Controller, click “next” on the app. A pop-up window will appear on the screen, showing a percentage countdown while the software connection is taking place. The app will then confirm that your connection has been successful and enable you to allocate a room location key for you to designate your Pro Controller and provide a unique name or reference for the device.

Fig.5

Go to the settings icon of the App (top right corner of the app display) scroll down and click on **Learn the AC remote code** (Fig. 6). Follow the prompt provided.

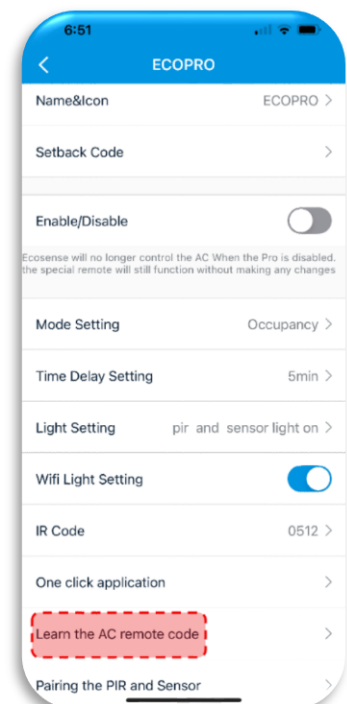
After you press the Manual input button, a red light will show at the Pro Controller, and a countdown timer will start. This means the unit is now ready to learn the infrared code of your existing Air Con remote controller. Point the original manufacturer's AC remote towards the red light of the Pro Controller and quickly press the power button of the remote (ensuring that the remote control is sending the **“On”** signal to your Air Con). After a short time, a 4-digit code will show on your app screen. Click on the displayed code, then click on “success”.

Make a note of the four-digit pairing code. This will be used later to pair your new Pro Remote-Control device.

***For the purposes of testing and familiarisation** when pre-installing Ecosense Pro, position the signal end of the red headed transmitter (cable E - Fig. 1), in such a way that the red coloured transmitter head is in close proximity (and direct line of sight) of the AC infrared receiver window of your split air-con unit (location B – Fig. 10).

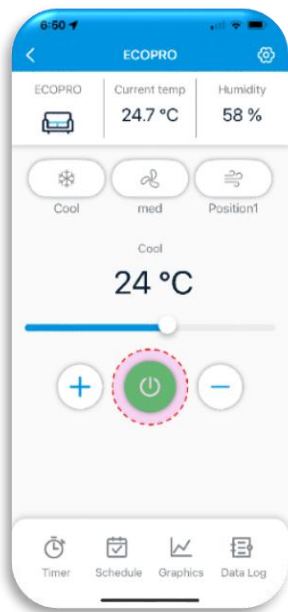
***When completing full installation and wiring of Ecosense Pro**, the red headed transmitter (cable E – Fig. 1) will need to be fitted inside the AC casing, positioned in close proximity to the AC Infrared receiver.

Fig.6



- **How to find the AC's Infrared Receiver (when completing full installation of the Pro)**

There are two likely locations for your AC's infrared receiver. Older style AC's that have a small window in the bottom right corner of the cassette, can be accessed by simply removing the AC outer casing assembly. The receiver is likely to be black and circular in shape. For newer machines that have a more central or off-centre LCD display panel, access by lifting the front hinged cover / casing of the AC unit where you will find a small box screwed to the underside of the lid itself, containing the infrared receiver. *Release the box from its fixing to access the receiver.* The receiver is likely to be black and oblong in shape.



- **Quick test**

As per the App screen (fig. 7), click on the power button in the centre of the screen. The power button will change colour from **grey** to **green** - to signify that the AC is switched on. Press the power button again, the button will change colour back to grey and the AC will switch off and power down.

Fig.7

- **Pairing the Pro Eco-Remote to your AC**

(Once x2 AAA Batteries have been fitted – Not Supplied) - Quick press the blue power button in the centre of the new Eco-Remote Controller and the screen will illuminate. Slide down the front cover of the Pro remote to reveal the function button keypad. Press and hold the number **5+** button until the content of the screen of the remote turns blank, then release the button. Quick press the **S** (Select) button at the bottom of the keypad and a 4-digit number will be displayed. Using the numbered keypad, enter the 4-digit pairing code that was specified and displayed upon carrying out the “**Learn the AC remote code**” process. Once you have successfully entered the code, press on. *Test the Pro Eco-Remote to confirm you have full operational control of the AC.*

- **Configuring the Pro Eco-Remote Control**

Slide down the front cover of the Pro remote to reveal the function button keypad. Press the central blue power button and the screen will illuminate. Press and hold the number **5+** button until the screen of the remote goes blank, then release the button. As per the example screen image (Fig.8), in the top section of the screen, **SET** is displayed next to the temperature in the top half of the screen. Press and hold the **S** button at the bottom of the panel and the number 2 button (button denotes the swing function) **at the same time until SET disappears from the screen**. Press OK. Again, test the remote to confirm you have full control of the AC. ***If after removing SET from the screen you no longer have control of the AC, contact the technical support team for assistance.*** Information on how to input energy saving settings to the remote can be found later in this manual.

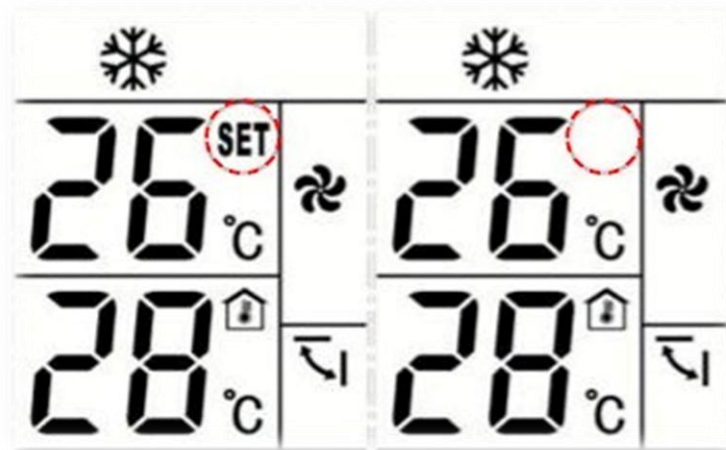


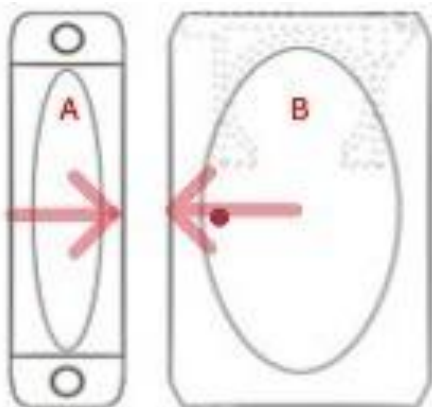
Fig.8

- **Pairing the Pro Room PIR Sensor & the Pro Door / Window Sensor**

Go to the settings Icon (top right corner of the app display) scroll down and click on Pairing The PIR and Sensor. Follow the prompt provided by the app for step-by-step instructions.

The Pro Room PIR Sensor casing has a small hole to accommodate the “Pin Tool”, located on the back of the PIR sensor at the top of the case. The Pro Door / Window Sensor has a similar pin tool access hole located at the opposite end of the recessed button-battery tray. To access the battery bay of the Pro Room PIR Sensor, press down lightly on the raised Wi-Fi icon and pull downwards at the same time. PIR Sensor requires x2 AA Batteries (*not supplied*). The Pro Door / Window Sensor is supplied with a button-battery already fitted / installed. *Remove the plastic pull-tab to activate power for the Door / Window Sensor.*

Fig.9



When pairing is completed, start the AC using the power button on the App in the centre of the screen (power “on” signified by the power button turning green – Fig.7), or by turning on via the Eco Remote. Place the two parts of the Pro Door / Window Sensor side-by-side (as shown in Fig.9).

Move the smaller magnet part away (Part A – Fig 9) from the main sensor (Part B – Fig.9) and a solid red light will be illuminated on the Pro Controller, to signify the sensor is sending the “open” signal. The sensor open light will only illuminate when the AC is switched on.

When movement is detected by the Pro Room PIR Sensor, a light will also flash at the Pro controller to signify that its signal has been received.

*The **Red Dot** visible to the left of the case on Part B (Fig.9) signifies the small, raised circle that determines the **correct side** of the sensor - to recognise the Magnet (Part A Fig.9). The smaller magnet part of the Pro Door / Window Sensor **MUST** be fixed to the correct side of the larger part for correct functionality.

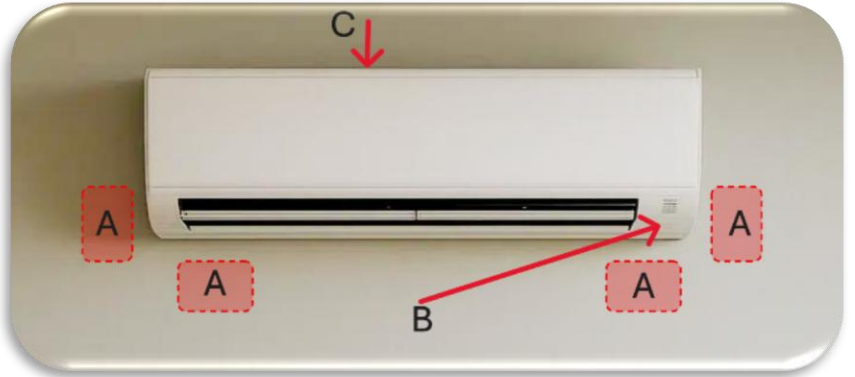
- If the Pro Room PIR Sensor registers continuous movement, the light will not flash continuously. There needs to a period of no movement detection for a minimum of 5 seconds before the light will flash again.

Eco Controller Installation – Wiring & Fixtures

This section provides detailed guidance on the hard-wiring and installation of the Pro Controller. Including Connection to the AC's internal power supply junction and wall fitting location for optimum use and connectivity.

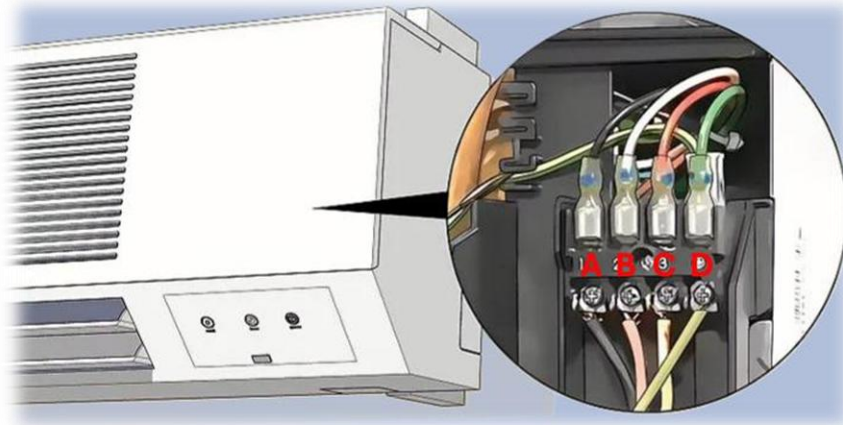
- Safe & efficient installation and hardwiring your Eco Controller to your AC is easily achievable with only a simple level of home DIY experience – including a simple understanding of wiring and power connections.
- Before undertaking any electrical works, including removing the AC casing to install the Pro Controller, please ensure that all mains power to the AC has been isolated and turned off. **It is imperative that all electrical equipment has been disconnected from the power supply and confirmed to be safe to work on.** Confirm that safety measures are in place where necessary to prevent the power from being switched back on while work is in progress.
- Installation of your Pro Controller requires the temporary removal of your AC's casing, to allow access to the power supply connector block and the AC's infrared receiver sensor. Familiarise yourself (*where possible*) with any fixing clips or screws that attach the exterior casing to the wall mount of the AC to make removal as simple as possible. The majority of Split AC systems have a main hinged panel (*the length of the entire cassette*) that lifts to access the removable filter. Lifting this panel usually provides access to the retaining screws and clips that will allow the entire casing to be removed. **Please note that the entire AC machine does not need to be removed from the wall, only the plastic casing**

Fig.10

- **A** Optimum **Eco Controller** wall mounting locations - relative to the Split AC Cassette.
 - **B** Commonplace AC exterior case **Infrared receiver window** location
 - **C** Discreet location for laying the **Pro Thermal Sensor** (*can be discreetly laid along the top of the AC exterior case*)
- 
- The diagram shows a top-down view of a rectangular AC unit. Label 'C' with a red arrow points to the top edge of the unit. Label 'B' with a red arrow points to the front panel of the unit. Label 'A' with red dashed boxes indicates four optimal wall mounting locations: one at the top left, one at the top right, one at the bottom left, and one at the bottom right of the unit.
- After removing the AC casing, you will find the main AC electrical terminal connection block(s) are most commonly located in the bottom right hand corner of the machine. This is the most likely place you will find a permanent live feed to connect to the Pro Controller. After removing the AC casing, you will find that the main AC electrical terminal connection block(s) are most commonly located in the bottom right hand corner of the machine. Confirm the location of the permanent **Live**, **Neutral**, and **Earth** terminals. **If unsure of your connection locations, consult your manufacturer AC manual - to confirm the power feed connections.**

*Fig 11. Represents **just one example** of how the electrical terminal connection block can appear once exposed within the AC cassette. Keys A, B ,C & D in Fig.11 is only noted to explain common cable colour representations. Ensure that you have sourced the correct terminals and connections for your AC before proceeding.

Fig.11



- **A** **Black / Blue Cable**
Commonly **NEUTRAL**
- **B** **Brown / Red Cable**
Commonly **LIVE / POWER**
- **C** **Yellow / Green Cable**
Commonly **EARTH**
- **D** ***Miscellaneous* – Control Cable.** Sends signal & commands to the external AC compressor unit.



Holding the controller with two hands, use your thumbs to gently press and pull the front of the case downwards (*Part B – Fig.12*). The fixing clips allow the top of the case to slide down approx. 10-15mm , that frees the case lid and can be lifted upwards and away from the main body of the Pro-Controller.

(The controller case lid is refitted by simply reversing the same instructions).

The Eco Controller power connection block is sealed separately underneath a protective fascia (*Part A – Fig. 12*). Remove the 2 cross head screws to reveal the electrical connections and the access hole - to allow the Insulated 3-core power cable to exit the controller through the rear of the device.

Fig.12

Cable Colours (*Fig.13*) connections - denote the use of the Insulated 3-core power cable provided with the Eco Pro Box contents.

- **A** **Brown Cable** – Eco Controller **LIVE / POWER** Connection.
- **B** **Blue Cable** – Eco Controller **NEUTRAL** Connection.
- **C** **Yellow Cable** – Eco Controller **EARTH** Connection.
- **D** Access Hole to allow cable to exit through the back.

With the facia removed, 4 screw hole access points are now accessible, to allow correct wall fitting of the Pro Controller. Use a pencil to mark 4 locations to drill / fix to the wall securely using the screws provided (6mm Drill Bit required to use the supplied raw plugs).

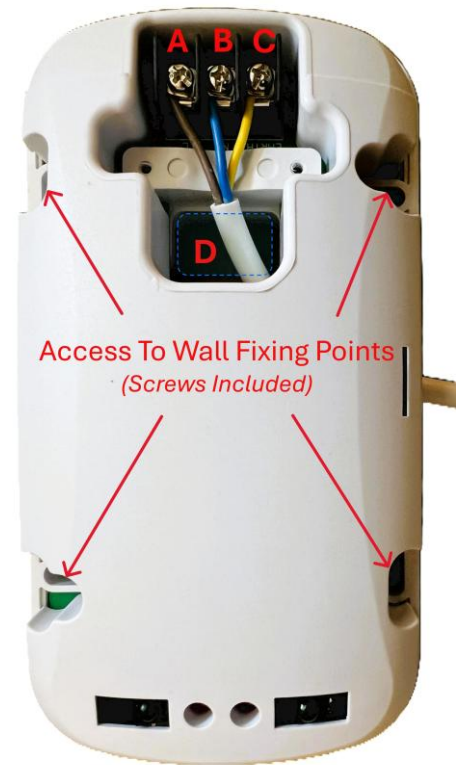


Fig.13

- Once the power cable has been fixed & connected to the Pro controller, re-fit the plastic protection cover (*Part A – Fig. 12*) and re-fix the two screws to shield the electrical connection block.
- With the power cable now exiting through the rear of the controller, connect both the **Pro Thermal Sensor cable** and the **Infrared Transmitter cable** (*Parts D & E Fig. 1*) into their respective locations on the back of the Pro Controller (*Locations A & B Fig. 4*).
- All 3 cables (*Power Cable & 2 Sensor Cables*) can exit the rear of the Pro Controller together (& can be secured in place with the retaining plastic hook-clips on the rear of the case) and feed directly into the side access of the AC (*with the AC case removed*). AC units have various access and feed point locations that will allow the cables to be fed to their desired locations. Both the **Pro Thermal Sensor Cable** and the **Infrared Transmitter Cable** are supplied with their own micro-break connection fittings that make it easier to feed through more difficult or tighter locations within the AC machine. Once fed through any gaps or holes necessary (*internally*) ensure these micro-connections are reattached and secure.

When feeding the Pro Controller cables through the internals of the AC unit to their desired locations, be sure to avoid any moving parts, including fans or motorised louvers or deflectors.

- **There are 2 likely locations for the AC infrared receiver.** Once you have located the AC infrared receiver, position the red headed transmitter in the closest possible proximity to the receiver. Fix in place with the small (*double-sided tape secured*) cable-clips provided (*it may be necessary to use a small strip electrical tape to assist in holding the transmitter head more securely in the correct position, depending on the location and orientation of your AC's infrared receiver*).

- Feed the **Pro Thermal Sensor cable** (*Part D, Fig. 1*) through the internals of the AC machine, so that the cable exits through the top of the unit. Once the casing of the AC is re-attached upon completion of the install process, allow for some excess cable and the sensor end to be accessible, so that it can be laid across the top of the case itself (*externally*). This will allow for optimum temperature and humidity readings for the room - that will be displayed through the App. The sensor head is supplied with 3M double-sided pad to allow the sensor to be fixed in place, where it will be discretely hidden from view.
- With all cables fitted and secured in their necessary locations in the AC Unit, choose your preferred location to fix and secure the Pro Controller to the wall (*Options A – Fig. 10*) using the 4 screws provided, directly next to the AC. The optimum wall location for the controller that allows for the most efficient Infrared signal reception - is directly to the side and slightly below the bottom line of the AC unit itself. Close proximity to the AC unit also allows for minimum cable visibility and ensures a clean and contemporary aesthetic install.
- With the Pro Controller fixed to the wall in position, final cable tidying can be completed, with any access cable looped and secured within the internals of the AC. Before finally replacing the AC casing, test operation of the **Ecosense APP** and the **Eco Remote** to ensure full control of the system. Once confirmed successful control of the AC functions, the machine's casing can then be fully re-attached and fitted by simply reversing the steps taken when removing the case & lid. Secure all clips and screws in place to ensure proper fitment. The front casing the Eco Controller can now also be fitted (*steps show in Fig. 12*). This completes the hardwire install of the Pro Controller. Mains power can now be turned back on.

Adjustable Room PIR Sensor – Fitting / Installation

This section provides detailed guidance on the installation of the Adjustable Room PIR Sensor. Including wall fitting location and parameters for optimum use and connectivity.

- The Pro Room PIR Sensor (*Part A – Fig. 1*) doesn't require any wiring and once batteries are fitted, can be easily secured to any wall or ceiling location using strong double-sided pads or tape. It is recommended however, that the base of the sensor be secured with screw fixings where possible, to avoid potential tampering by guests or clients.
- Up to 4 Pro Room PIR Sensors can be linked to a single Pro Controller. (*Additional sensors can be purchased separately*).

Quick Placement Checklist - Best practice for optimum infrared detection for the **Pro Room PIR Sensor**.

- **Mounting location:** Corner of the room, about 2.1–2.4 m (7–8 ft) above the floor is optimum (*wall-mounted*) or on the ceiling near the corner of the room. This gives the best wide-angle coverage. *Corner placement maximizes sweep across the room.*
- **Orientation:** Point the sensor diagonally across the room to cover both the longest dimension of the room and any entry / exit points. **Do not point directly at heat sources** (*radiators, air vents, ceiling fans, direct sunlight, or air-conditioning outlets*). Do not place in the same corner of the room where the AC is fitted - to avoid the sensor detecting air movement when the AC is operational.
- **Sensitivity & Range:** Pro Room PIR Sensor is set to detect human walking distance (*typically 6–12 m*). PIR detection can be visually confirmed by the small red pin-hole LED located above the infrared sensor window. Red light confirms that detection has been signalled to the Pro Controller.
- **Avoid obstructions:** Keep the Pro Room PIR Sensor's field of view clear of shelving, curtains, blinds, shutters, plants or furniture that could block motion or where movement could create false detection.
- **Temperature Considerations:** PIRs detect differences between body heat and background. If room temperature is similar to body temp (e.g., *very hot rooms*), detection range will reduce.
- **Test After Install:** Walk through room at typical walking speed along common paths to confirm coverage; mark blind spots and adjust angle/position if needed.
- **Movement detection Logic:** There are movement detection indicators (LEDs) visible on both the Pro Room PIR Sensor and the Pro Controller. It should be noted that the Room PIR Sensor needs to register NO MOVEMENT for a minimum of 5 seconds before it will flash again to signify movement. If the Pro Room PIR Sensor registers continual movement in the room without a 5 second break, the light will not flash.

Conduct annual battery maintenance and replace batteries every 12 months for optimum performance.

Pro Door / Window Sensor – Fitting / Installation

This section provides detailed guidance on the installation of the Pro Door / Window Sensor(s). Including fitting locations and parameters for optimum use and connectivity.

**Please note that during the set-up process and once the Pro Controller has been successfully installed (or has been powered to test) and is Wi-Fi connected, the Pro Door / Window sensors can be tested before fitting in their permanent locations. Lay both parts of the sensor in their correct positions, side-by-side on a flat surface. (Ensure the larger, part B is facing the correct side to part B, as shown in Fig.9). When moving them apart is detected, the red light will be displayed at the bottom of the Pro Controller (Light A – Fig.5).*

- The Pro Door / Window Sensors (Parts G – Fig. 1) don't require any wiring and are provided with batteries fitted. They can be easily secured to any door or window frame locations (*allowing tolerance and utilising existing recesses where viable*). Both parts of the sensor are supplied with 3M double sided pads for easy fitting.
- Up to 8 Pro Door / Window Sensors can be linked to a single Pro Controller. (*Additional sensors can be purchased separately*).
- Mount the sensor (*larger Part B – Fig.9*) on the fixed frame of the door or window and the magnet (*smaller part A – Fig.9*) on the moving leaf (*door/window*). You can check / confirm adequate signal range of the Door / Window Sensor (*before permanent fitting*), by standing near the Pro Controller's fixed location and operate separating of the sensor in typical locations, to ensure stable reporting and signal reception.
- When installing the Door / Window Sensors keep the two parts directly aligned (*Fig.9*), so they meet along the same plane when closed. Maximum gap tolerance between sensor and magnet is typically 3–5 mm for optimum connection. For correct orientation, the sensor (*larger part B – Fig.9*) has a small, raised circle that signifies the side that the magnet (*smaller part A – Fig.9*) that needs to connect to the sensor for the device to operate. *The sensor will not work if the smaller magnet part is located to the wrong side of the device*.
- For secure install, avoid mounting the sensors over paint blisters, loose wood / timber, or heavy metal trim (*metal can reduce wireless range*).
- **Testing checklist** (*do this after fitting*) Open / close door or window multiple times while watching to confirm activation of the red LED on the Pro Controller (*Light A – Fig.5*). Confirm signal detection immediately when door / window opens.

Check for false positives (*sensor reports open when closed*) — *usually due to misalignment*.

Do not paint or decorate over the sensors. This can reduce magnetic detection and reduce the sensor's capability to operate and send adequate signal information to the Pro Controller.

Conduct annual battery maintenance and replace battery every 12 -18 months for optimum performance.

App Settings Page

This section provides detailed guidance on the various settings and options available to configure through the Ecosense Pro App.

- **Name and Icon**

This enables you to edit the personal identification of your Ecosense Pro.

- **Setback Code**

In the top right corner is an Enable/disable button. Swipe to the right and it will change colour to blue, to indicate Enabled. Swipe to the left and it will turn grey, to indicate Disabled. To use setback, choose a setting option, enable, then click confirm at the bottom of the page. When setback is enabled, the chosen signal will be transmitted when standard mode or occupancy mode parameters have been met. If the Door / Window sensor is open, or if the room PIR sensor does not sense occupancy for more than three minutes, the off signal will be transmitted and the AC terminated. If Setback is disabled, the off signal will be transmitted when any parameters are met, including Door / Window sensors being “open”.

- **Enable/Disable Eco**

When the Pro is switched to disabled, settings will no longer affect the status of the AC. The Pro remote will continue to function as normal.

- **Mode settings** (*Detailed explanation of the options below can be found in the notes section at the end of this manual*).

Occupancy This mode is not suitable for rooms that can be entered or exited without passing through a door that has a Pro Door / Window Sensor fitted, including open plan kitchens & dining rooms, or a living room that can be exited via a staircase. Also not recommended for bedrooms occupied by babies or young children. Ideal for hotel rooms or studio apartments and bedrooms occupied by adults. The entry / exit doors must have a Pro Door / Window Sensor fitted for correct protocols for the programme to function. Provided the room is occupied (*day or night*), the AC will run continuously without the necessity of motion being detected. When the room is vacated, the AC will be terminated (*or setback if required*) in accordance with the time delay setting that have been programmed. *Recommended time delay setting of 5, or 15 minutes.*

Economy The same rules as the **Occupancy Mode** apply - except that if the room is in darkness / night-time and the AC has run for more than 2 hours without detecting movement via the Pro Room PIR Sensor (*Infrared*), the running of the AC will be terminated (*or setback if required*).

Child Friendly The same rules as **Occupancy Mode** applies - except when the room is in darkness / night-time, the entry / exit door that is monitored with a Pro Door / Window Sensor can be left open. 2 after light (*day time*) is detected, normal **Occupancy Mode** rules will resume and apply.

24/7

Suitable for all rooms or areas that are not used for sleeping. The control of the AC is based entirely on movement detection by the Pro Room PIR Sensor (*Infrared*). If no movement is detected in accordance with the time delay setting, at either 15-, 30- or 60-minute intervals, the running of the AC will be terminated (*or setback if required*).

Comfort Plus

Suitable for all bedrooms, whereby the rules of **24/7 Mode** apply during daylight / daytime hours. When darkness is detected by the Pro Controller, it will allow the AC to run uninterrupted for 2 hours. If no movement is detected by the Pro Room PIR Sensor the AC will be terminated (*or setback if required*). If movement is detected within 2 hours, the timer is zeroed and re-starts automatically.

Night Setting

Suitable for all bedrooms. During daylight / daytime hours, the **24/7 Mode** rules apply. When the room is in darkness / nighttime, the AC will be able to run continuously.

Sensor control only

Using this option, the AC will be allowed to run continuously regardless of the occupancy status of the room. The only intervention being if a door or window sensor is open for more than three minutes, the AC will then be terminated.

- **Time Delay Setting**

The chosen or preferred and selected time delay options will be applied to the relevant mode setting.

- **Light Settings**

There are three options to choose from:

Room PIR and Door / Window Sensor light **ON**

Room PIR Light **OFF**, Door / Window sensor light **ON**

Room PIR and Door / Window Sensor light **OFF**

- **Wi-Fi Light Setting**

This controls the Wi-Fi indicator light to be either On or Off on the Ecosense Controller. *If while the light is switched On, and the Wi-Fi connection is lost, the light will flash indicating that it is attempting to reconnect.*

- **IR Code**

This enables the option to manually input a preferred or required Infrared code.

- **One Click Application**

If you have more than one Ecosense Pro unit to install and you wish to replicate all the same settings as the first initial device, you can create a template that can be used across multiple Pro Controllers. When you have completed all the settings, click on “**Save Template**”. When you have configured an additional Pro controller, go to “One click application” and click on Load Template (*selecting the template you want to copy*).

- **Learn the AC remote code**

Using a sample signal from the original AC remote controller, the built-in software of the Ecosense Pro can automatically search its database, to match the correct AC system infrared code-packet and download it to the Pro controller.

- **Pairing the PIR and Door / Window Sensor**

Follow the step-by-step instruction guide as shown on the app. The PIR sensor casing has a small hole in the rear of the PIR. The door/window sensor has a similar hole located at the opposite end to the battery tray. To access the battery bay of the PIR, press down lightly on the raised Wi-Fi icon and pull downwards at the same time. PIR sensor requires x2 AA Batteries (*not supplied*).

- **Clear Door / Window Sensors**

Follow the instruction guide as shown on the app. This will clear all Door / Window Sensors ONLY - but will not automatically clear any configured Room PIR sensors. To clear any existing Room PIR sensors, use the reset “Pin Tool” (*provided*) and insert into the small reset button hole on the Ecosense controller unit (*located by the arrow marked **B** on page 4*) Press and hold the tool on the internal reset button, until you see a rapid flashing light on the controller. Pro Door / Window sensors can be paired to more than one Ecosense Pro controller, as can a Room PIR sensor be paired to multiple Pro devices.

A maximum of x4 Room PIR Sensors & x8 Door / Window Sensors can be paired to any single Ecosense Pro controller.

- **Update ECO Clock**

The ECO clock will automatically update to the current time setting of your phone / device. It can also be manually updated if required.

- **Link to Instruction Manual**

This provides a link to this manual & set-up instructions.

App Settings Page / Data Applications

Located at the bottom of the of the app screen on your device, are four separate icons that allow access to various and unique data logging settings for your Ecosense Pro AC Controller.

- **Timer**

Timer settings can be easily configured to switch the AC either ON or OFF at your desired times.

- **Schedule**

Multiple daily and weekly schedules can be created and enabled. When an “ON” signal is used to start the AC within a predetermined schedule, the “ON” settings will be shown on the remote page.

- **Graphics / Data Refresh Status**

This is a graph-based display that identifies real-time activity in terms of temperature and humidity recorded over the previous twenty-four-hour period through your Ecosense Pro controller. Below the graph screen, is a scrolling log of activity data, denoting when and if the AC has been started or adjusted or if settings have been updated. All actions are date and time logged for future reference. ***Please note** - that on occasion, it is necessary to close down & re-open the App on your device – to allow the data logging to refresh itself and provide fully up to date record and display of all AC actions, commands and operation.

- **Data Log**

This is a record of activity that logs the performance of your Ecosense Pro controller and the length of time the AC has run - from the start date of the installation of your device. The Log can be viewed over the past 90, 30 or 7 days. *There is a bin icon located in the top right corner that can be used to clear any unwanted data logs.*

Setting Control Parameters In The Eco-Pro Remote Control



AUTO



COOL



DRY / HUMIDITY



FAN



HEAT

The Eco-Pro remote can be configured in such a way as to prevent users accessing the lower temperatures in Cool Mode and higher temperatures in Heat Mode.

We would advise (*for more economical running of the AC*), the recommended lowest temperature setting available in cool mode to be no lower than 21 degrees.

- **Tamperproof Keypad**

Keypad lock option prevents unauthorised access to all Set Up Functions for the Eco-Remote.

- **Fast Pairing with any Air Conditioner**

Pairing (*syncing*) with any AC brand / manufacturer is reliable, quick and efficient.

- **Energy Saving**

The Energy Saving capability of Eco Remote will operate with any AC brand.

- **Programmable Temperature Ranges for Cool and Heat**

The Eco Remote is preset to allow the AC to operate at an energy saving 21° - 30° for Cooling and 17° - 23° for Heating. By using the Set-Up Function, you can change or adjust these preset temperature ranges to your own requirements.

It is possible to separately preset both Heat and Cool settings to operate at any range between 17° - 30°. For example, you may prefer 23° - 30° range for Cool and 17° - 24° for Heating.

- **Optional Placebo Effect™**

The Placebo Effect™ makes the AC appear to the user - to operate with a wider temperature range than the owner settings allow. This guarantees the owner economic and efficient operation of the AC and creates power savings without generating negative feedback from users / property guests.

- **Additional Features**

The Pro Eco-Remote operates with the full range of features you would expect to see on any high-end AC remote control device. Including, High Visibility Back-Lit LCD Screen, Mode Control, Fan Speed, Louvre Direct & “Swing” Function, Room Temperature Display & Desired / Selected Temperature, with choices of Celsius or Fahrenheit. Also, a Smart Button "Fast Start" function for powerful "Instant Cooling" and "Instant Heating" (*The room temperature display is disabled when the placebo effect is activated.*)

Set-Up Instructions for The Pro Eco-Sense Remote

Troubleshooting

- **Blank Display Screen / Dim Screen Display**

Replace Eco-Remote batteries. (*Never mix new and old batteries together – always replace with new batteries*). If, after replacing the batteries the screen remains blank, the remote may need to be reset / rebooted manually. Reset the Eco-Remote unit by pressing and holding the recessed "RESET" button for 3 seconds (*access hole located on the keypad*), using the "Pin Tool" (*Supplied*). The remote will not lose its settings or temperature range presets when you change batteries, or if you use the reset button, however, you will need to reset the clock - if required to operate the **Time of Day Off Timer**.

Incorrect LCD Display Or Unusual Operation(s)

- Reset the Eco-Remote unit by pressing and holding the recessed "RESET" button for 3 seconds (*access hole located on the keypad*), using the "Pin Tool" (*Supplied*). The remote will not lose its settings or temperature range presets when you change batteries, or if you use the reset button, however, you will need to reset the clock - if required to operate the **Time of Day Off Timer**.

(During Set-Up) If The Eco-Remote Is Not Operating The AC Correctly, Or If The AC Won't Turn "OFF"

- Some AC brand infrared codes / signals are quite similar in how the remote control communicates its commands to the AC unit. During the Set-Up process of the Pro Eco-Remote, the AC unit may recognise only a partial code from the signal it has sent, and you may find that only some functions will work correctly. In such an instance, continue following the pairing steps (*page 5*) until the correct 4-digit code is found. If a particular code turns the AC "On" but not "Off", it may be necessary to turn the AC "Off" by using the AC's original remote control (*if available*). Alternatively, use the AC manual Override "**Off**" button (*usually located under the filter cover on the front of the AC wall unit - Please refer to your AC owner's manual*). You may turn the main power supply to the AC "Off" and "On" again at the mains or circuit breaker for the AC unit. Once the AC is back in standby mode, continue the code search steps. Repeat Pairing steps until the correct code is found and the AC works normally.

-

(During Set Up) Keypad Inputs Not Working

- During set-up, if the Eco-Remote keypad does not respond to any input, it may be because the keypad has become locked. Unlock the Set-Up Function (*following the steps found on Page 10*).

Maintenance and Cleaning

Regular / Annual Maintenance

Proper maintenance ensures a longer lifespan and safer operation.

- Inspect the product regularly for signs of wear, external damage or tampering.
- Tighten loose screws or fasteners / fixings as needed.
- We recommend replacing batteries every two years however, in extreme climates it may be advisable to replace the batteries annually.

Door / Window Sensors

CR2032 (*button battery*)

Adjustable PIR Sensors

x2 AA Batteries.

Ecosense Remote Control –

x2 AAA Batteries.

- Replace worn or defective parts only with genuine manufacturer components.

Cleaning

- Wipe surfaces with a soft, damp cloth; avoid harsh chemicals or abrasive products.
- Clean any air vents or filters according to the maintenance schedule recommended for your AC system.

Warranty and Support

Your Ecosense Pro comes with our standard, Ecosense manufacturer's warranty, covering manufacturing defects for parts and components.

- Keep and retain your proof of purchase for all warranty claims.
- Ecosense Warranty does not cover misuse, accidental damage, visible signs of tampering, incorrect installation or unauthorised repairs.
- For all warranty issues or technical support, contact Ecosense by phone, email, or through our website.

Disposal and Recycling

To minimise environmental impact, dispose of your product according to local regulations.

- Do not dispose of electrical or electronic devices with household waste.
- Take the product to an authorised recycling centre if possible.
- Follow all local guidelines for the disposal of batteries, plastics, or metals.

Frequently Asked Questions (FAQ's)

- **Q: Can I use third-party accessories?**
- **A:** Only use accessories and parts recommended by Ecosense to ensure safety and performance.

- **Q: Is the product suitable for outdoor use?**
- **A:** Ecosense Pro is designed and developed for internal / interior use only and is not weatherproofed.

- **Q: How often should the product be serviced?**
- **A:** No servicing maintenance is necessary. Users are notified directly of periodic software (APP) updates as and when required.

- **Q: Where can I find replacement parts / additional Room PIR Sensors or Door / Window Sensors ?**
- **A:** Order from the Ecosense website store, or authorised Ecosense retailers / agents only.

Technical Support

- **Phone (Tel):** 0044 (0) 1621 841073
- **WhatsApp:** 0044 (0) 7775 893956
- **Email:** info@ecosense.uk.com
- **live Chat:** www.ecosense.uk.com

Technical Specifications

Controllable distance: Greater than 8 meters

Power supply voltage: DC 3 V

Battery model: Battery 2xAAA (UM-4,R03)

Dimension:L165mm×W55mm×D25mm

Weight: Approx 100g (Excl. Batteries)

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.