A total package to complete virtually any vent fan project

The **WhisperControl** and **ecoswitch** line of products provide quality and performance to meet a variety of residential and commercial applications.

Our advanced and easy to use intelligent controls are a perfect complement to any vent fan project for controlling moisture and complying with the latest ventilation codes and standards.

The Panasonic ecoswitch line of products provide commercial grade quality at residential grade pricing. Our attractive switches are available in single, double, triple and quad functions and provide a complete package that supports virtually any ventilation fan project.



Condensation Sensor Plus



Preset Countdown & Hourly Timer



Switch \*





<sup>\*</sup> Representative of the ecoswitch line, also available in single, triple and quad functions.

#### **Condensation Sensor Plus**

The **Condensation Sensor Plus** makes your bathroom cleaner and healthier...automatically. It works with any single speed fan and fan/light models, automatically turning the fan 'on' before condensation forms, and off when the room returns to the optimum dryness level.

Unlike competitive units that only monitor humidity levels, the Condensation Sensor Plus features a patent-pending sensor with built-in intelligence that monitors both temperature **and** humidity — actually anticipating the dew point — making it the most effective, proactive solution on the market.

The Panasonic Condensation Sensor Plus also has advanced, easy-to-use features that allow you to customize its operation, including a Moisture Sensitivity Selector that allows fine tuning for dry or moist environments, and an Adjustable Minutes Per Hour(MPH) Fan Timer for ASHRAE 62.2 compliance.

Additional features include a blue LED light to indicate when the fan is on and a matching wall plate for a decora style design.



FAN ONLY
FV-WCCS1-W (White)
FV-WCCS1-A (Light Almond)



FAN/LIGHT FV-WCCS2-W (White) FV-WCCS2-A (Light Almond)



#### **Condensation Sensor Plus**

#### **Key Features**

- Helps control bathroom condensation to prevent mold and mildew
- Intelligent and advanced sensor technology monitors humidity and temperature to anticipate dew point, automatically turning the fan On to control moisture
- Automatic seasonal adaptability with optional Moisture Sensitivity Selector allows fine tuning for dry or moist environments
- Adjustable Minutes Per Hour Fan Timer (0-60mins) for compliance with ASHRAE 62.2
- Automatic and manual On/Off fan control
- Commercial Grade 8 Amp max load, 2 year limited warranty\*
- May be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® 3.0 and CALGreen





<sup>\*</sup> One year additional fan warranty available when a Panasonic WhisperCeiling/Lite, WhisperValue or WhisperFit/Lite fan is controlled by the Panasonic Condensation Sensor Plus.

#### **Condensation Sensor Plus**

#### **Detailed Features & Benefits**

#### **Dual Sensing Moisture Control Technology**

Automatically turns on exhaust fan to control moisture. Intelligent and advanced patent pending sensor technology monitors humidity *and* temperature for superior accuracy. Fan automatically turns off when the optimum dryness level is met, in all climate zones and for all seasons.

#### **Moisture Sensitivity Selector**

Adjust the unit's sensitivity based on your regional climate, the size of your bathroom and your preferred dryness level. The Moisture Sensitivity Selector tracks temperature and humidity over several weeks to determine the level of dryness your room needs to return to. When the Condensation Sensor Plus turns on, the room will be dried out to the level that was averaged over this period of time. It is not affected by daily or seasonal changes in your room's climate so you can set it once and forget it.

#### Adjustable Minutes Per Hour (MPH) Fan Timer

Automatically turns the fan On for a set amount of time every hour (0-60 mins) for compliance with ASHRAE 62.2. The MPH fan timer provides constant and controlled ventilation every hour, and will credit any manual use time to the next hours operation(up to 3 hours ahead). This credit for manual use saves energy by conserving heated or cooled air.

#### **Automatic & Manual Fan Control**

A 20 minute countdown timer initiates once the fan is *manually* turned on. During automatic operation, a 30 minute countdown timer initiates after moisture levels in the room return to a normal range.

#### Commercial Grade – 8 Amp Max Load

Tough and rugged, with a max load capacity of 8 amps, the Condensation Sensor Plus can even handle high performance DC motored fans and LED lighting. It also comes with a 2 year limited warranty\*.

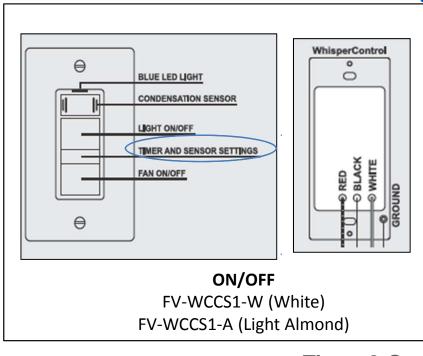


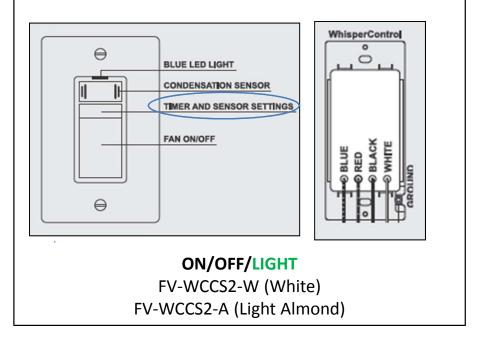


<sup>\*</sup> One year additional fan warranty available when a Panasonic WhisperCeiling/Lite, WhisperValue or WhisperFit/Lite fan is controlled by the Panasonic Condensation Sensor Plus.

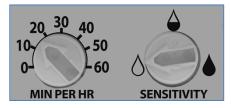
#### **Condensation Sensor Plus**

**Detailed Features & Benefits (cont'd)** 





#### **Timer & Sensor Settings:**









Low Sensitivity - Least sensitive setting, used in hotter and more humid climates.

Plus comes factory set to this most common setting.





# **Condensation Sensor Plus Specifications**

| WhisperControl Condensation Sensor Plus | FV-WCCS1-W/A            | FV-WCCS2-W/A            |
|---|-------------------------|-------------------------|
| Ground                                  | Grounding               | Grounding               |
| Feature                                 | Blue LED                | Blue LED                |
| Amperage                                | 15 Amp                  | 15 Amp                  |
| Maximum Fan Load                        | 8 Amp                   | 8 Amp                   |
| Voltage                                 | 120 Volts               | 120 Volts               |
| Dry Contact Switching                   | 24 Volt AC Input/Output | 24 Volt AC Input/Output |
| Termination                             | 6" Leads                | 6" Leads                |
| Connections (Copper Wire Connections)   | Use #14 or #12          | Use #14 or #12          |
| Max. Fluorescent Light Load             | NA                      | 400 Watt                |
| Standard Certifications                 | UL/CSA Listed           | UL/CSA Listed           |
| Warranty                                | 2 Year Limited          | 2 Year Limited          |





#### **Condensation Sensor Plus - Competitive Advantages**

- Technology: Humidity and temperature detection anticipates dew point, automatically turning the fan on before condensation forms
- Does not need to be adjusted as weather changes
- Continually monitors room conditions and runs fan until optimum dryness level is achieved
- Commercial grade quality 8amp max load, 2 year limited warranty
- Fan/Light control option available



### **Condensation Sensor Plus - Competitive Benchmark**

| Moisture Control Type                                   | Condensation and RH Humidity  | Condensation and RH<br>Humidity   | RH Humidity   | RH Humidity                               | RH Humidity                             |
|---|---|---|---|---|---|
|   | PANASONIC   | DEW STOP  | Leviton IPHS5<br>Humidistat   | Honeywell H908B<br>Manual Dial Humidistat | Broan DL-100 Manual<br>Dial Humidistat  |
| Models  |   | 1 A   | 55 XX   |   | a Total                                 |
| Sensor Type   | Condensation and<br>Humidity detection,<br>Patent Pending   | Condensation and<br>Humidity detection,<br>Patent Pending   | RH Humidity ONLY  | RH Humidity Only                          | RH Humidity Only                        |
| Technology  | Humidity and<br>temperature detection<br>with Patent software<br>tracking temperature<br>and humidity | Humidity and<br>temperature detection<br>with Patent software<br>tracking temperature<br>and humidity | RH Humidity set point<br>detection and humidity<br>rise over time detection | RH Humidity set point<br>detection only   | RH Humidity set point<br>detection only |
| Must be Adjusted as<br>Weather Changes                  | NO  | NO  | YES   | YES                                       | YES                                     |
| Adjustable Sensitivity                                  | Condensation and<br>Humidity  | Condensation and<br>Humidity  | RH Humidity ONLY  | RH Humidity ONLY                          | RH Humidity ONLY                        |
| Room Drying Mode  | YES   | YES   | NO  | NO  | NO                                      |
| ASHRAE 62.2 Run Per<br>Hour Timer                       | YES with 3 hour credit<br>for manual and<br>condensation use  | NO  | Hour run timer with NO credit for manual use time                           | No  | NO                                      |
| Can Sensors be used while in ASHRAE Per Hour Timer Mode | YES   | NO  | NO  | No  | No                                      |
| ASHRAE 62.2 Run Per<br>Hour Timer Settings              | 60 Settings<br>0 - 60 minutes   | No  | Four settings<br>10, 20, 30, 45 min   | No  | No                                      |
| Timer   | YES   | YES   | YES   | NO  | NO                                      |
| Fan and Light<br>Combination Available                  | YES   | YES   | NO  | NO  | NO                                      |
| LED Indicator Light                                     | Blue, illuminated when fan is ON  | Blue, illuminated when fan is ON  | Green LED, illuminated<br>when fan is OFF                                   | NONE                                      | NONE                                    |
| Areas of Use  | ALL DAMP AREAS OF<br>THE HOME   | ALL DAMP AREAS OF<br>THE HOME   | All Humid Areas   | All Humid Areas                           | All Humid Areas                         |
| Load  | 8 AMP   | 3 AMP   | 3 AMP   | 8 amp                                     | 8 amp                                   |
| Voltage   | 24V-120V / 50-60HZ  | 24V-120V / 50-60HZ  | 120/60HZ  | 24V-120V                                  | 24V-120V                                |
| 3-Way   | Yes up to 50 in series  | Yes up to 50 in series  | NO  | NO  | NO                                      |
| Warranty  | 2 Year Limited *  | 1 Year Limited  | 5 YR LTD  | 1 YR PARTS ONLY                           | 1 YR PARTS ONLY                         |

<sup>\*</sup> One year additional fan warranty available when a Panasonic WhisperCeiling/Lite, WhisperValue or WhisperFit/Lite fan is controlled by the Panasonic Condensation Sensor Plus.

### **Pre-Set Countdown and Hourly Timer**

The Pre-Set Countdown and Hourly Timer allows you to pre set the fan to run for a specific period of time. It will then shut the fan Off automatically for you, making it an ideal product for tenant and family use.

The Panasonic Pre-Set Countdown and Hourly Timer also includes an advanced, easy-to-use Adjustable Minutes Per Hour(MPH) Fan Timer for ASHRAE 62.2 compliance. It also carries a Commercial Grade quality designation, which allows it to even handle high performance DC motored fans and LED lighting.

Additional features include a blue LED light to indicate when the fan is on and a matching wall plate for a decora style design.



FAN ONLY
FV-WCD01-W (White)
FV-WCD01-A (Light Almond)



FAN/LIGHT
FV-WCD02-W (White)
FV-WCD02-A (Light Almond)



#### **Pre-Set Countdown & Hourly Timer**

#### **Key Features**

- □ Pre-set countdown fan timer (5-15-30-45 or 60 mins.) automatically turns the fan off to help minimize excessive run time
- Adjustable Minutes Per Hour Fan Timer (0-60mins) for compliance with ASHRAE 62.2
- Manual On/Off fan control
- Commercial Grade 8 Amp max load, 2 year limited warranty
- May be used to comply with ASHRAE 62.2, LEED and ENERGY STAR® 3.0



#### **Pre-Set Countdown & Hourly Timer**

#### **Detailed Features & Benefits**

#### **Pre-Set Countdown Timer**

Pre-set the fan timer to 5-15-30-45 or 60 minutes. When the fan is manually turned ON, the timer will run the fan for the selected period of time then shut the fan OFF automatically for you.

#### **Adjustable Minutes Per Hour (MPH) Fan Timer**

Set the MPH fan timer to have the fan come ON for a set amount of time every hour (0-60 mins) for compliance with ASHRAE 62.2. The MPH fan timer provides constant and controlled ventilation every hour. It also sees when you've used the Pre-Set Countdown Timer and will temporarily suspend fan operation to avoid excessive run times. If you want to manually shut the fan off when the MPH timer is running, simply press the fan On/Off button.

#### **Manual On/Off Fan Control**

Simply push the switch button for manual on/off operation when immediate ventilation is needed.

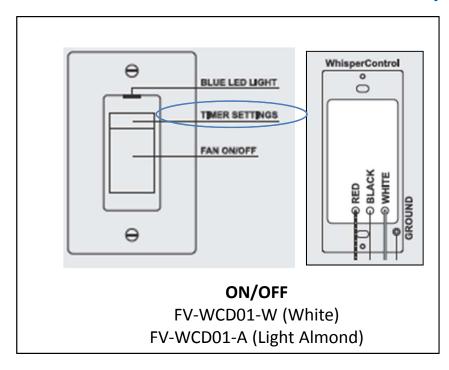
#### **Commercial Grade – 8 Amp Max Load**

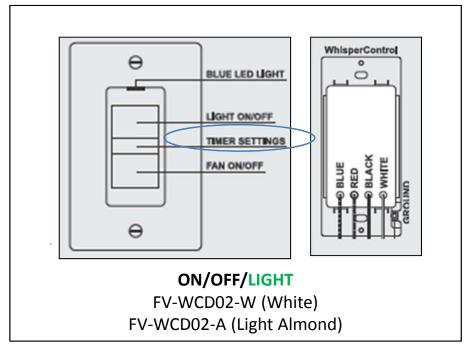
Tough and rugged, with a max load capacity of 8 amps, the Pre-Set Countdown Timer can even handle high performance DC motored fans and LED lighting. It also comes with a 2 year limited warranty.



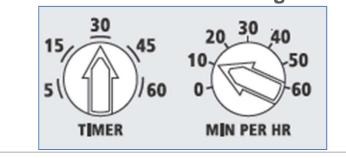
**Pre-Set Countdown & Hourly Timer** 

**Detailed Features & Benefits (cont'd)** 





#### **Timer & Sensor Settings:**





# **Pre-Set Countdown & Hourly Timer Specifications**

| Preset Countdown and Hourly Timer | FV-WCD01-W/A        | FV-WCD02-W/A        |
|-----------------------------------|---------------------|---------------------|
| Ground                            | Grounding           | Grounding           |
| Feature                           | Blue LED Light      | Blue LED Light      |
| Amperage                          | 15 Amp              | 15 Amp              |
| Maximum Fan Load                  | 8 Amp               | 8 Amp               |
| Dry Contact Switching             | 24V AC input/output | 24V AC input/output |
| Max. Fluorescent Light Load       | N/A                 | 400 Watt            |
| Termination                       | 6" Leads            | 6" Leads            |
| Standard Certifications           | UL/CSA Listed       | UL/CSA Listed       |
| Warranty                          | 2 Year Limited      | 2 Year Limited      |



The Panasonic ecoswitch line of products provide commercial grade quality at residential grade pricing. EcoSwitch is available in single, double, triple and quad functions to provide a complete package for all of your residential and commercial application needs.

#### 1 Function Switch: On/Off – Ideal for Fan



FV-WCSW11-W (White) FV-WCSW11-A (Light Almond)

- Fan On/Off Switch
- Engineered to efficiently control current LED lighting and DC motor loads
- Back and side wiring terminals accept both solid and stranded wire to ease installation
- Full-rated current capacity with fluorescent or resistive loads. Motor capacity is 80% of switch rating
- Fits single gang box / Includes matching wall plate
- Commercial Grade

| Specifications             | FV-WCSW11-W/A                          |  |  |
|----------------------------|--|--|--|
| Ground                     | Grounding                              |  |  |
| Feature                    | Single Pole                            |  |  |
| Amperage                   | 15 Amp                                 |  |  |
| Voltage                    | 120 Volt                               |  |  |
| Terminations               | Quickwire Push-in, and Side Connection |  |  |
| Standards & Certifications | UL/CSA Listed                          |  |  |
| Warranty                   | 2 Year Limited                         |  |  |



#### 2 Function Switch: On/Off – Ideal for Fan/Light



FV-WCSW21-W (White) FV-WCSW21-A (Light Almond)

- Multi-switch combination devices save space and add convenience
- Engineered to efficiently control current LED lighting and DC motor loads
- Common feed shunted internally to all switches
- Elegant decorator styling provides multiple controls in a single-gang wall box
- Fits single gang box / Includes matching wall plate
- Commercial Grade

| Specifications             | FV-WCSW21-W/A             |  |
|----------------------------|---------------------------|--|
| Ground                     | Grounding                 |  |
| Feature                    | Single Pole / Single Pole |  |
| Amperage                   | 15 Amp                    |  |
| Voltage                    | 120 Volt                  |  |
| Terminations               | Side Connection           |  |
| Standards & Certifications | UL/CSA Listed             |  |
| Warranty                   | 2 Year Limited            |  |



#### 3 Function Switch: On/Off – Ideal for Fan/Light/Night Light



FV-WCSW31-W (White) FV-WCSW31-A (Light Almond)

- Multi-switch combination devices save space and add convenience
- Engineered to efficiently control current LED lighting and DC motor loads
- Common feed shunted internally to all switches
- Elegant decorator styling provides multiple controls in a single-gang wall box
- Fits single gang box / Includes matching wall plate
- Commercial Grade

| Specifications             | FV-WCSW31-W/A                           |  |  |
|----------------------------|---|--|--|
| Ground                     | Grounding                               |  |  |
| Feature                    | Single Pole / Single Pole / Single Pole |  |  |
| Amperage                   | 15 Amp                                  |  |  |
| Voltage                    | 120 Volt                                |  |  |
| Terminations               | Quickwire Push-In, and Side Connection  |  |  |
| Standards & Certifications | UL/CSA Listed                           |  |  |
| Warranty                   | 2 Year Limited                          |  |  |



#### **4 Function Switch**



FV-WCSW41-W (White)

- Single pole/double throw on-off-on top switch, two single pole on-off switches
- Multi-switch combination devices save space and add convenience
- Common feed shunted internally to all switches
- Elegant decorator styling provides multiple controls in a single-gang wall box
- Includes matching wall plate
- Commercial Grade

| Specifications             | FV-WCSW41-W   |  |
|----------------------------|---|--|
| Ground                     | Grounding   |  |
| Feature                    | Single pole / double throw on-off-on top switch,<br>two single pole on-off switches |  |
| Individual Switch Amperage | 15 Amp  |  |
| Total Switch Amperage      | 20 Amp  |  |
| Voltage                    | 120 Volt  |  |
| Terminations               | Quickwire and wire leads  |  |
| Standards & Certifications | UL/CSA Listed   |  |
| Warranty                   | 2 Year Limited  |  |



### **Key Communication Platforms**

NEW Condensation Sensor Plus "Clearly Superior" \* Full Package Offering "Complete Control" \*



### **Key Media Outlets**

#### **Targeted FY2014 Q2-Q4 Media Placements:**

| <b>PRINT</b> | T:                   |
|--------------|----------------------|
|              | ACHR The News        |
|              | JLC                  |
|              | Professional Builder |
|              | tED                  |
|              | Hotel Business       |
|              | Lodging              |
|              | Hotel Management     |
|              |                      |
| DIGIT        | AL:                  |
|              | Custom Builder       |
|              | tED                  |



| Targe | t Markets   | 1 10         | 5013.  |
|-------|---|--------------|--|
|       | Custom/Production Single Family Multi-Family Bathroom Renovation/Remodeling Hotel/Lodging |              | New Construction ASHRAE 62.2 Energy Star 3.0 LEED for Homes Green building programs California Title 24 CalGreen Federally funded weatherization Assisted Living |
| Targe | et Audience   |              |  |
|       | Builders  | <b>Distr</b> | ibution  |
|       | Remodelers  |              | HVAC Wholesalers   |
|       | Designers   |              | Electrical Wholesalers   |
|       | Architects/Engineers  |              | Kitchen & Bath   |
|       | Homeowners  |              | Online   |
|       |   |              |  |

Projects:

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