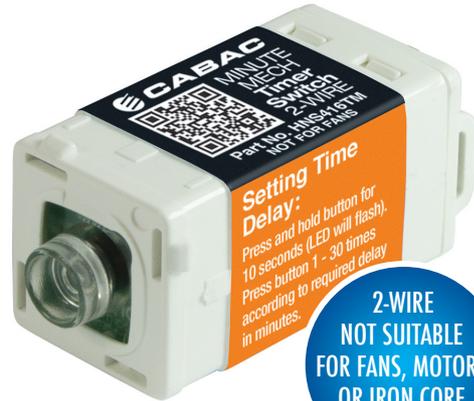


**HNS416TM  
OWNER'S MANUAL**



Scan our QR code with your phone to go directly to our website for technical information



**2-WIRE  
NOT SUITABLE  
FOR FANS, MOTORS  
OR IRON CORE  
BALLASTS**

**1. FEATURES**

- Suits Clipsal Saturn™ style wall plates
- Supports Timer and Untimed ON modes of operation
- Blue LED indicates device status
- User programmable time-out period
- Programmable in 1 minute increments from 1 to 30 minutes
- When ON - Quick tap turns power OFF
- Quick LED indicator flashing within 10 seconds of time out provides expiry warning
- Retains setting even after loss of power
- Remote switch compatible
- Time set to 30 minutes out of the box

**2. OPERATING CONDITIONS**

- Operating Voltage: 220 – 240Va.c. 50Hz
- Operating Temperature: 0 to +50°C (refer to ambient temperature de-rating graph on Section 4.2)
- Certified Standards: CISPR15, AS/NZS 3100
- Maximum Load: 400VA<sup>(1)</sup>
- Minimum Load: 10VA
- Maximum Current Capacity: 1.7A

Note: Operation at temperature, voltage or load outside of the above specifications may cause permanent damage to the unit.

**3. LOAD COMPATIBILITY**

Incandescent / 240V Halogen		✓
Fluorescent Tube with electronic ballast		✓
Compact Fluorescent Lamps <sup>(2)</sup>		✓
Electronic Transformer		✓
LED <sup>(2)</sup>		✓
Wirewound Transformer		✗
Fan Motors		✗
Fluorescent Tube with iron core ballast		✗

<sup>(1)</sup> Check the manufacturer's recommendation when putting lamps in parallel.

<sup>(2)</sup> Subject to manufacturer's recommendations, lamps suitable for electronic switches only.

Note: Please go to CABAC's website to see a complete list of tested compatible lamps under "Technical Data"

Saturn™ is a registered trademark of Schneider Electric (Australia) Pty Limited.

**Note: This manual was correct at the time of manufacture. For the latest version of the manual and any technical or safety updates refer to the website:- cabac.com.au, cabac.co.nz or scan the QR code with a mobile phone.**

## 4. INSTALLATION INSTRUCTIONS

The HNS416TM is to be installed as part of a fixed wire electrical installation. By law such installations must be made by an electrical contractor or similarly qualified person. Avoid excessive force on terminal block during installation.

### 4.1 WIRING

- Disconnect power at the circuit breaker before any electrical work.
- Install the HNS416TM as per wiring diagram in Figure 1 or 2 below.
- Remove the old switch from the back of the wall plate. The silver ring and button remain in place.
- Attach the HNS416TM to the back of wall plate as per Figure 3.
- Affix Instruction Sticker behind wall plate.
- Reconnect power at the circuit breaker and affix the Solid State Device Warning Sticker at switchboard.

**Note:** The HNS416TM is designed for indoor use. It is not rated for outdoor installation, If the unit is loose in the plate, the wall plate should be replaced. The wire strip length is 6.5mm.

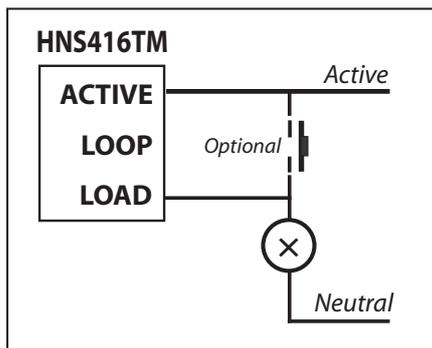


Figure 1

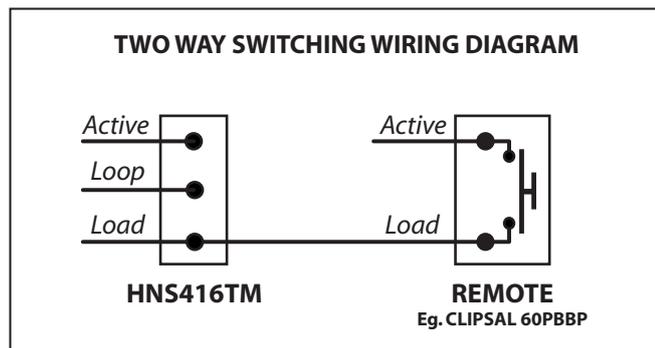


Figure 2

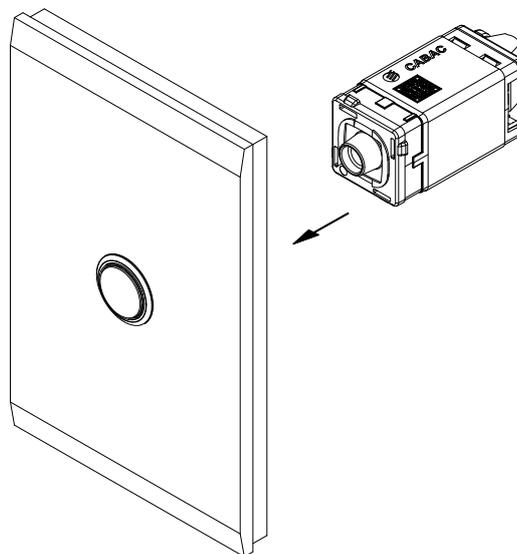


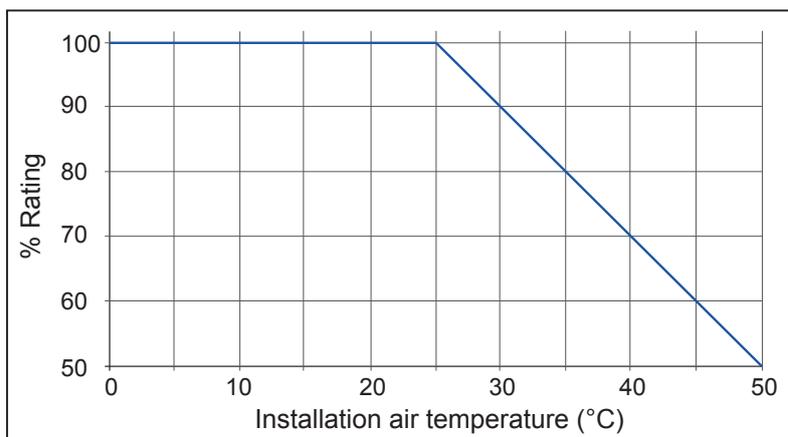
Figure 3

### 4.1 REMOTE SWITCH

- The remote switch must be normally open, 240Vac, momentary switch. Eg. CLIPSAL 60PBBP
- Remote wiring should not exceed 50m.
- Holding the remote switch for over 1 second will cause the HNS416TM to restart the timer delay function.
- Multiple remote buttons can be wired in parallel provided total cable length does not exceed 50m.
- When using the remote switch to turn the HNS416TM off-lights will flash once momentarily then switch OFF.
- The HNS416TM cannot be programmed using remote switch.

## 4.2 AMBIENT TEMPERATURE

Where the HNS416TM is used in high temperatures, the maximum load rating should be reduced according to the derating graph below.



## 5. OPERATING INSTRUCTIONS

The HNS416TM employs a soft touch switch operation.

While the power is OFF there are two modes of operation that can be entered.

### 5.1 TIMER

- A short press of the button (local or remote) will turn the unit ON.
- The LED indicator will flash indicating the number of minutes the power will be ON before being automatically turned OFF.
- The LED indicator will blink every 5 seconds to indicate that timer mode is operating.
- During the last 10 seconds of operation, the LED indicator will flash indicating imminent time out.
- Any time during operation, the button (local or remote) may be given another short press to cancel the timer and turn the power OFF.

### 5.2 NO TIMER

- A long press of the button (local only) will turn the unit ON.
- The LED indicator will be ON while the button is held in and turn OFF after 2 seconds. After the LED indicator has been extinguished, release the button.
- The LED indicator will turn back ON and stay ON indicating that the power has no time out period and shall NOT turn OFF automatically.
- Any time during operation, the button (local or remote) may be given a short press to turn the power OFF.

**NOTE:** When replacing a lamp or when power is connected, the unit will be automatically turned ON in timer mode. The power will turn OFF after the time-out period has expired or alternatively the time-out period may be cancelled with a short press of the button.

## 6. PROGRAMMING INSTRUCTIONS

- Programming mode may be entered at any time by pushing and holding the button down for 10 seconds. The LED indicator will flash quickly to indicate that programming mode has been entered.
- To program, press the button between 1 and 30 times according to the desired delay in minutes. For example, 10 presses will result in a delay of 10 minutes. More than 30 presses will result in a delay time of 30 minutes being stored.
- Programming mode expires 10 seconds after the last button press. At this time the new delay is stored in memory. If no button presses were detected the delay time will be unchanged.
- It is only possible to enter programming mode using HNS416TM button.

## **7. IMPORTANT SAFETY WARNINGS**

### **7.1 LAMP RELACEMENT**

The HNS416TM is a two wire solid state device. It should be assumed that even when OFF, mains voltage will still be present at the lamp fitting. Mains power should therefore be disconnected at the circuit breaker before replacing faulty lamps.

### **7.2 INSTALLATION**

The HNS416TM is to be installed as part of a fixed wire electrical installation. By law such installations must be made by an electrical contractor or similarly qualified person.

### **7.3 LOW READING DURING INSULATION BREAKDOWN TEST**

The HNS416TM is a solid state device. Therefore a low reading may be observed when conducting insulation breakdown testing on the circuit.

### **7.4 CLEANING**

Clean only with a damp cloth. Do not use abrasives or chemicals.

## **8. TROUBLESHOOTING**

### **8.1 POWER DOES NOT TURN ON WHEN THE BUTTON IS PRESSED**

- Ensure that the circuit has power by checking the circuit breaker.
- Check the load in another circuit to ensure it is working (the load may be incompatible with electronic switches).
- Check for a short circuit (call an electrician). The internal, non-servicable protection fuse may have blown and if so, the HNS416TM may be damaged and should be replaced.

### **8.2 POWER DOES NOT TURN OFF WHEN THE BUTTON IS PRESSED**

- If the LED indicator is ON, check to see if it blinks every 5 seconds. Check that the button on the main unit is not being held down by dirt or grime behind the switch. If this fails to resolve the problem, cycle the power at the circuit breaker.
- If the LED indicator is OFF and if applicable, check that the remote push button is not stuck ON. If not the HNS416TM may be damaged and should be replaced.

### **8.3 POWER DOES NOT TIME-OUT**

- Check that the remote push button is not stuck ON.

### **8.4 LAMP TURNS BACK ON AUTOMATICALLY AFTER TIMING OUT.**

- Have an electrician check for sufficient mains voltage.
- Lamp is not compatible with the HNS416TM. Replace with a lamp that is suitable for electronic switches.
- Please visit CABAC's website to see a complete list of tested compatible lamps under "Technical Data".

### **8.5 LAMP FLICKERS WHEN THE BUTTON IS PRESSED BUT DOES NOT STAY ON.**

- Lamp is not compatible with the HNS416TM. Replace with a lamp that is suitable for electronic switches.
- Please visit CABAC's website to see a complete list of tested compatible lamps under "Technical Data".

## **9. WARRANTY AND DISCLAIMER**

CABAC warrant the product against manufacturing and material defect from the date of invoice to the initial purchaser for a period of 12 months. During the warranty period CABAC will replace products that prove to be defective where the product has been correctly installed and maintained and operated within the specifications defined in the product data sheet and where the product is not subject to mechanical damage or chemical attack. The warranty is also conditional on the unit being installed by a licensed electrical contractor. No other warranty is expressed or implied.

CABAC shall not be liable for any direct, indirect, incidental or consequential damages.