HNS636DT OWNER'S MANUAL

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PERFECT FOR DIMMABLE LED - DO NOT USE FOR FANS

AUSTRALIAN MADE

1. FEATURES

- Suits Clipsal Saturn™ style wall plates
- Rotary Digital Dimmer™ - perfect for dimmable LED
- Compatible with dimmable LED, Incandescent, 240V Halogen, LV Halogen - Electronic & Iron Core(2)
- Rugged - Over Current, Over Voltage and Over Temperature protection
- Retains dimming setting after power loss
- Patented ripple tone rejection
- Linear dimming response
- Separate ON/OFF switch required
- Compatible with CABAC 3-Wire Timers and Switches
- Programmable minimum brightness
- NOT SUITABLE FOR FANS AND MOTORS
- SUITABLE FOR DUAL SWITCHING

2. OPERATING CONDITIONS

- Operating Voltage: 230Va.c. 50Hz
- Operating Temperature: 0 to +50 °C
- Certified Standard: AS/NZS 60669.2.1, CISPR15, AS/NZS 3100
- Maximum Load: 350W @ 240V, 330W @ 220V
- Minimum Load: 5W
- Maximum Current capacity: 1.5A

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

3. LOAD COMPATIBILITY

LOAD TYPE	LOAD SYMBOL	MAXIMUM LOAD
Dimmable LED Lamps(1)		250W
Incandescent / 240V Halogen / Dichroic Lamps		350W
Low Voltage Halogen / Dichroic Lighting with Iron-Core Transformers(2)		250W
Low Voltage Halogen / Dichroic Lighting with Electronic Tranformers (2)		350W
Dimmable Compact Fluorescent Lamps		Not Compatible
Motors / Fans	M	Not Compatible
Non-Dimmable Fluorescent / Compact Fluorescent Lamps		Not Compatible

(1) Refer to lamp manufacturer's guidelines. Lamp compatibility chart available from cabac.com.au website.
(2) Compatible with Atco & Clipsal transformers when loaded to 75% of their rated output. Refer to the lamp compatibility chart.

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.

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4. INSTALLATION INSTRUCTIONS

The HNS636DT 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.

- No more than one dimmer can be connected to the single lamp circuit.

4.1 WIRING

- Disconnect power at the circuit breaker before any electrical work.
- Install the HNS636DT as per the wiring diagram in Figure 1 or Figure 2.
- Remove existing switch, retaining clip, button and silver ring from wall plate as per Figure 3.
- Install the new silver ring supplied to the wall plate as per Figure 4.
- Attach the HNS636DT to the back of wall plate, and attach knob to the unit, as per Figure 5.
- Affix Instruction Sticker behind wall plate.
- Reconnect power at the circuit breaker and affix Solid State Device Warning Sticker at switchboard.
- Turn ON the lights and adjust to maximum and minimum brightness to ensure the dimmer is operating correctly. Adjust the minimum brightness if required.

NOTE: The HNS636DT is designed for indoor use. It is not rated for outdoor installation. If the dimmer is loose in the wall plate, the wall plate should be replaced.

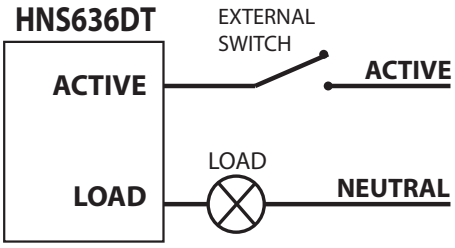

Figure 1: HNS636DT Single Switch Wiring Diagram

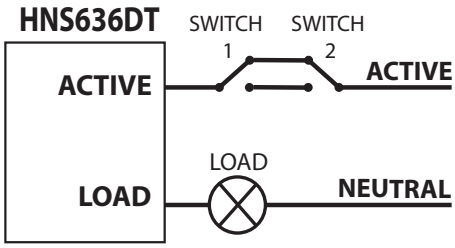

Figure 2: HNS636DT Dual Switch Wiring Diagram

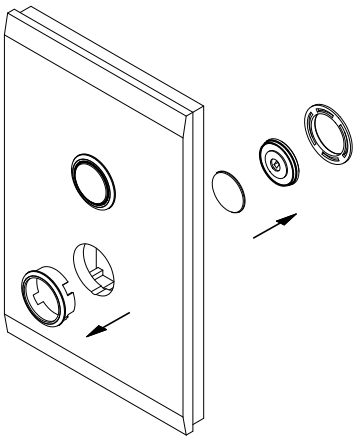

Fig 3: Remove existing switch, retaining clip, button and silver ring from wall plate

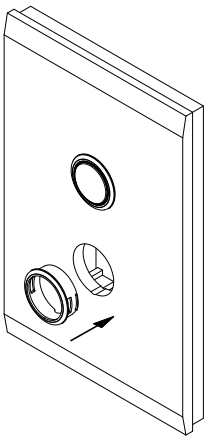

Fig 4: Insert supplied silver ring in wall plate

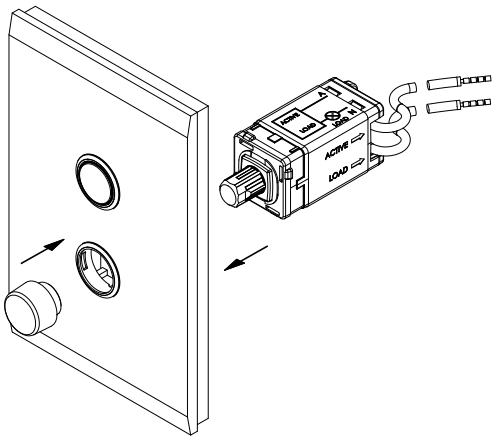

Fig 5: Attach HNS636DT and supplied silver knob.

4.2 AMBIENT TEMPERATURE

- Where the dimmer is used in high temperatures, the maximum load rating should be reduced according to the derating table below.

AMBIENT TEMPERATURE	MAXIMUM LOAD
25°C	100%
50°C	75%

4.3 MULTIPLE DIMMER DERATING

- Where multiple dimmers are used in the same wall plate, the maximum load rating should be reduced according to the derating table below.

NUMBER OF DIMMERS	MAXIMUM LOAD PER DIMMER
1	100%
2	75%
3	55%
4	40%
5	35%
6	30%

5. OPERATING INSTRUCTIONS

5.1 DIMMING

- Turn the knob anti-clockwise to dim the lights (decrease brightness).
- Turn the knob clockwise to brighten the lights (increase brightness).
- **KICK START:** Some LED lamps require a 'kick start' to ensure they start correctly. The HNS636DT will start the lamp at a mid-brightness setting before adjusting to the last used brightness. On some lamps this may be visible as a brief flash when the lights are turned ON.

5.2 SETTING THE MINIMUM BRIGHTNESS

Some lamps do not work well at low brightness settings and may not start or flicker. Adjusting the minimum brightness to a higher setting will ensure the lamps start and help eliminate flickering.

NOTE: Remove the knob so the white LED is visible during programming. Re-install the knob once programming is complete.

- Press and hold the knob for 10 seconds until the LED indicator flashes indicating programming mode. The light brightness will decrease to the factory minimum brightness setting.
- If the lights are not operating correctly, turn the knob clockwise to increase the brightness.
- Continue until the lights are stable and not flickering.
- After 10 seconds without turning the knob, the brightness setting will be stored as the minimum brightness and the dimmer will exit programming mode.
- Turn the dimmer OFF then ON to ensure the lamp starts and doesn't flicker on the minimum brightness setting.
- To set the minimum brightness to the factory minimum brightness, enter programming mode and turn the knob anti-clockwise, then wait 10 seconds to exit programming mode.

6. IMPORTANT SAFETY WARNINGS

6.1 LOAD REPLACEMENT

- It should be assumed that even when OFF, mains voltage will still be present at the lamp fitting. Mains power should be disconnected at the circuit breaker before replacing faulty lamps.

6.2 DIMMER INSTALLATION

- The HNS636DT 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 during installation.

6.3 LOW READING DURING INSULATION BREAKDOWN TEST

- The HNS636DT is a solid state device. Therefore a low reading may be observed when conducting insulation breakdown testing on the circuit.

6.4 CLEANING

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

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7. TROUBLESHOOTING

7.1 DIMMER AND LIGHTS DO NOT TURN ON

- Ensure that the circuit has power by checking the circuit breaker.
- Ensure the lamp(s) is not damaged or broken.

7.2 LIGHTS DO NOT TURN ON, LED INDICATOR FLASHES 5 TIMES WHEN THE LIGHTS ARE TURNED ON AGAIN

- The short circuit protection is operating.
- Ensure the lamp(s) is not damaged or broken.
- The HNS636DT may not be installed correctly.

7.3 LIGHTS TURN OFF, LED INDICATOR FLASHES 5 TIMES WHEN THE LIGHTS ARE TURNED ON AGAIN

- Over temperature, Over voltage or Overload protection operated.
- Ensure the lamp(s) is not damaged or broken.
- Ensure the dimmer is not overloaded or operating in high ambient temperature.
- Check the lamp(s) is suitable for dimming.

7.4 LIGHTS CANNOT BE ADJUSTED TO MAXIMUM BRIGHTNESS

- Ensure the lamp(s) is not damaged or broken.
- Ensure the dimmer is not overloaded or operating in high ambient temperature.
- Check the lamp(s) is suitable for dimming.

7.5 LIGHTS FLICKER OR CHANGE IN BRIGHTNESS FOR SHORT PERIODS

- This is caused by fluctuations in the power supply and is normal operation. If it is too severe try another type of lamp.

7.6 LIGHTS TURN OFF SOON AFTER BEING SWITCHED ON DIMLY

- Minimum brightness setting is too low on the lamp, try increasing the minimum brightness.

7.7 LIGHTS STAY ON AT FULL BRIGHTNESS OR FLICKER CONTINUOUSLY

- The lamp may not be suitable for dimming. Refer to the lamp manufacturer information.

7.8 LIGHTS FLASH BRIEFLY BEFORE DIMMING TO LAST BRIGHTNESS

- This is the Kick Start feature. It is normal operation. Refer section 5: Operating Instructions.

7.9 DIMMER TURNS OFF WHEN ENTERINGSETTING MINIMUM BRIGHTNESS

- In rare instances when the light is high brightness the dimmer may turn OFF when entring the minimum brightness setting mode. In this case, switch the dimmer ON and dim down to the lowest brightness then enter the minimum brightness setting mode.

8. 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.

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