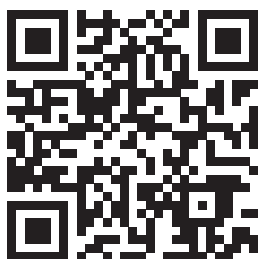


HNS610DT OWNER'S MANUAL



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



**PERFECT FOR
DIMMABLE LED
& CFL – DO NOT
USE FOR FANS**

1. FEATURES

- Push Button Digital Dimmer™ and ON/OFF switch in one - perfect for dimmable LED
- Compatible with dimmable LED and CFL, Incandescent, 240V Halogen, LV Halogen - Electronic and Iron Core⁽²⁾
- Rugged - Over Current, Over Voltage and Over Temperature protection
- Restarts OFF after power loss
- Retains dimming setting after power loss
- Patented ripple tone rejection
- Linear dimming response
- World's lowest standby power - 100mW
- Programmable minimum brightness
- Suits both HPM and Clipsal wall plates –buttons included
- NOT SUITABLE FOR FANS AND MOTORS
- NOT 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 Transformers ⁽²⁾		350W
Dimmable Compact Fluorescent Lamps ⁽³⁾		150W
Motors / Fans		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.

⁽³⁾ Refer to lamp manufacturer's guidelines

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 HNS610DT 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.

- The two dimmer connections are not polarity sensitive.
- No more than one dimmer can be connected to the same switch.

4.1 WIRING

- Disconnect power at the circuit breaker before any electrical work.
- Install the HNS610DT as per the wiring diagram in Figure 1.

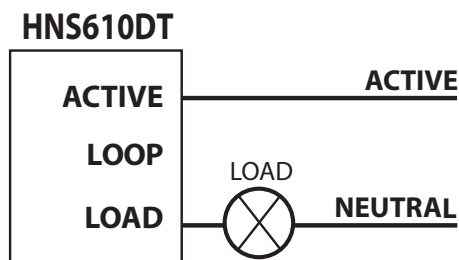


Figure 1: HNS610DT Wiring Diagram

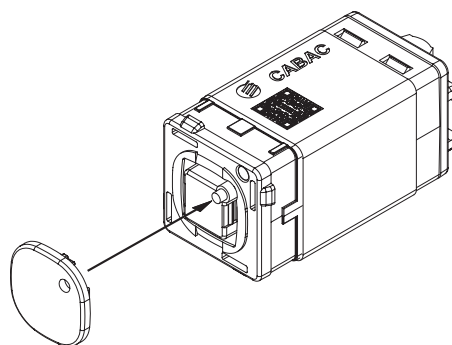


Figure 2: Attach button to HNS610DT

- Clip the button on to the HNS610DT. Ensure that the button is oriented so that the LED light pipe is aligned with the hole in the button, refer to Figure 2, before attaching it to the wall plate.
- Affix Instruction Sticker behind wall plate.
- Reconnect power at the circuit breaker and affix Solid State Device Warning Sticker at switchboard.

NOTE: The HNS610DT 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. The wire strip length is 6.5mm.

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 ON / OFF SWITCH

- A quick tap of the button will turn the lights ON or OFF. When turning the lights ON, they will adjust to the last used brightness setting.
- **KICK START:** Compact Fluorescent lamps require a 'kick start' to ensure they start correctly. The HNS610DT 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 DIMMING

- Press and hold the button to increase the lamp brightness. Release the button to stop.
- On the first press and hold the dimmer will increase the brightness of the lights. On the next press and hold, the dimmer will decrease the brightness of the lights. On each subsequent press and hold, the dimmer will alternately increase or decrease light brightness.
- The dimmer takes approximately 4 seconds to adjust the lights from minimum to maximum or maximum to minimum brightness.
- After a period of inactivity greater than 10 seconds the dimmer will default to increasing the brightness on the next press and hold of the button.

5.3 SETTING THE MINIMUM BRIGHTNESS

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

- Press and hold the button 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, tap the button to increase the brightness. Each tap will increase the brightness by a small amount.
- Continue until the lights are stable and not flickering.
- After 10 seconds without a button press, 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 tap the button once, then wait 10 seconds to exit programming mode.

Minimum brightness for Compact Fluorescent, CFLs

If you are adjusting the minimum brightness setting for Compact Fluorescent, it is best to adjust the minimum brightness by a small amount, wait 10 seconds for that value to be stored, then turn the dimmer OFF then ON to see if the lamp starts and doesn't flicker on the minimum brightness setting.

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 HNS610DT 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.

6.3 LOW READING DURING INSULATION BREAKDOWN TEST

- The HNS610DT 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.

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.
- The dimmer may have been damaged and needs to be replaced.

7.2 LIGHTS DO NOT TURN ON, LED INDICATOR FLASHES 5 TIMES WHEN BUTTON PRESSED TO TURN LIGHTS ON

- The short circuit protection is operating.
- Ensure the lamp(s) is not damaged or broken.
- The HNS610DT may not be installed correctly.

7.3 LIGHTS TURN OFF, LED INDICATOR FLASHES 5 TIMES WHEN BUTTON PRESSED TO TURN LIGHTS 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 FAIL TO TURN OFF COMPLETELY

- Some very low power LED lamps may glow or flicker even when the dimmer is off. Try another type of lamp.

7.5 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.

7.6 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.

7.7 LIGHTS TURN OFF SOON AFTER BEING SWITCHED ON DIMLY

- The minimum brightness setting is set too low for the lamp, try increasing the brightness.

7.8 LIGHTS STAY ON AT FULL BRIGHTNESS OR FLICKER CONTINUOUSLY

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

7.9 LIGHTS FLASH BRIEFLY BEFORE DIMMING TO LAST BRIGHTNESS

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

7.10 DIMMER TURNS OFF WHEN ENTERING SETTING MINIMUM BRIGHTNESS

- In rare instances when the light is at high brightness the dimmer may turn OFF when entering 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.

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.