

## DAEA80 Active Antenna for Wireless Thermostats

The DAE A83 is a high sensitivity and high selectivity receiving antenna in wireless systems for temperature control in rooms or offices. Operating on the LPD 868.35 MHz frequency it features all the advantages of this band, such as freedom from interferences and higher radiating efficiency.



### FEATURES

- High sensitivity and high selectivity internal radio receiver
- Self contained 868 MHz antenna
- Easy wiring to relay modules with pre-built data cables
- Compliant with directives EEC 89/336, 73/23 and 93/68, 99/05

Model Types	Model	Description
	<b>DAEA80</b>	DAEA80 Active Antenna for Wireless Thermostats
Technical Data	Frequency	868.35 MHz
	Modulation Type	ASK
	Antenna Type	Self-Contained
	Storage Temperature	-10°C .. +50°C
	Operating Temperature	0°C .. 40°C
	Protection Class	IP30
	Humidity Limits	20% .. 80% rH (non condensing)
	Enclosure	Material: ABS V0 self-extinguishing
	Colour	Signal white (RAL 9003)
	Agency Compliance	EEC 89/336, 73/23, 93/68, 99/05
	Size	85W x 85H x 31D mm
Weight	0.16kg	

**Mechanical Construction**

Fig. 1 Overall appearance

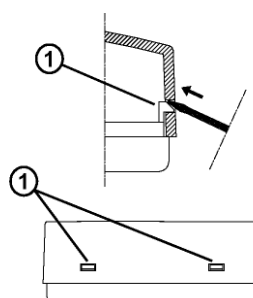


Fig. 2 Case opening

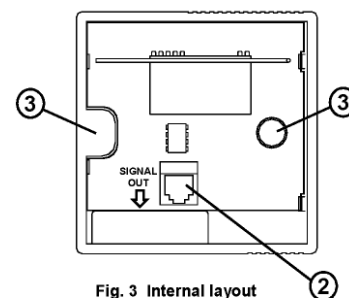


Fig. 3 Internal layout

In Fig. 1 is visible the external appearance of the DAE A83. To install the receiving unit it is necessary to access to the internal parts. To open the plastic case, remove the frontal panel using a small screwdriver to drive the plastic teeth (1) shown in Fig. 2. Apply a light pressure with the screwdriver between the tooth and the hole in the plastics, but do not push directly on the tooth in order not to break it.

The Fig. 2 represents also the plastic box section and shows how to handle the screwdriver correctly.

In Fig. 3 is shown the receiver's internal layout, and the location of the 'SIGNAL OUT' plug (2).

**Installation Instructions**

Electrical installation is very easy, simply connect in the 'SIGNAL OUT' plug the proper data cable. The data cable must then be connected to a relay module such as DLP 600 M or DLP 200 M. See the relay module's instruction sheet for more information. The best position where to install the DAE A83 antenna should be decided taking into account the following:

- 1) The antenna has been designed to fit in a small case to be easily installable in the best location for the radio signals to be received. Often the relay module's place is not a good place for the antenna too. The worst case is when the relay module is mounted inside a metal frame: the antenna must be definitely be placed outside the metal frame.
- 2) Since the radio signal are strongly attenuated by metal screens, the antenna should be placed as far as possible from metal grids and objects.
- 3) Care must be taken also at the wall, which the antenna will be fixed on. It must not be a metallic wall or have a metallic frame inside.
- 4) Radio signals inside a building are reflected by walls, floors, furniture and other objects, it might happen that some room's areas are bad for the signal reception, and some others might be good. Moving the antenna half a meter often determines a considerable different receiving performance.

Once the antenna's position is chosen, the system should be tested, to ensure that all the thermostat transmitters' signals are correctly received. See the thermostat's documentation how to do that. After the system has been successfully tested proceed with the definitive installation of the DAE A83 by fixing it on the wall with two screws, using the holes with distance between axes of 60 mm visible in Fig. 3 (3). While working with tools in the screw holes, be careful not to damage the internal circuits or any other component. Once the installation has been completed, close the plastic case by carefully positioning the front panel, then slightly press the panel in order to make the four plastic teeth snapping.

**WARNING !**

- To determine the correct position ensure that the radio signals transmitted are correctly received by the receiving unit.
- Installation and electrical wirings of this appliance must be made by qualified technicians and in compliance with the current standards.
- Before wiring the appliance be sure to turn the mains power off.

Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.