

Installation Guide

Introduction

These instructions are for the installation, connection and setting-up of 935 and 939 Lighting Control Panels.

These control panels are compatible with Helvar's 910 and 920 lighting routers.

The control panels cannot be programmed using Toolbox software.

It is assumed that a suitable mounting site has been chosen and prepared, and that all necessary connecting cables have already been installed to the correct specification.

Components

After unpacking, check that all of the following components have been supplied (as shown in Fig. 1-1):

- Control unit.
- Mounting plate.
- Extractor tool (part of mounting plate moulding – needs to be 'broken out' from cut-out section).

The pack should also contain the following items (not illustrated):

- Sheet of printed and blank scene identification labels.
- Bag of fixings: 2 x M3.5 screws
2 x M3.5 washers
1 x cable clamp plate
2 x self-tapping screws

Installing the Mounting Plate

The mounting plate can be fitted directly to all standard European single-gang (935) or double-gang (939) wall back-boxes, using the two M3.5 screws supplied.

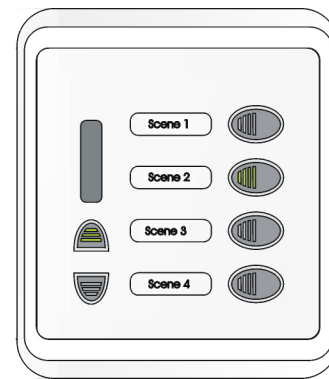
The plate may also be screwed to wooden or plaster-board partitions using suitable wall fixing plugs where appropriate.

Position the plate so that the connecting cables pass through the rectangular cut-out. Make sure there is sufficient space behind the plate to allow the cables to move back when the control unit is installed.

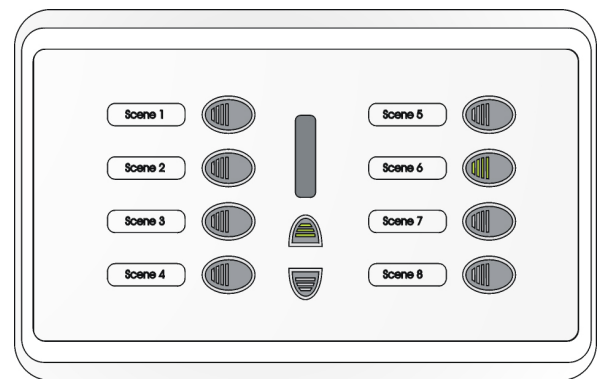
Place a washer under the screw heads.

Tighten the screws sufficiently to prevent the plate from moving, but avoid over-tightening as this could weaken or break the plastic moulding.

To avoid problems with cables becoming trapped when the control unit is fitted, they should not protrude more than about 150 mm from the mounting plate; cut them to length as required.



IMAGINE 935 Panel



IMAGINE 939 Panel

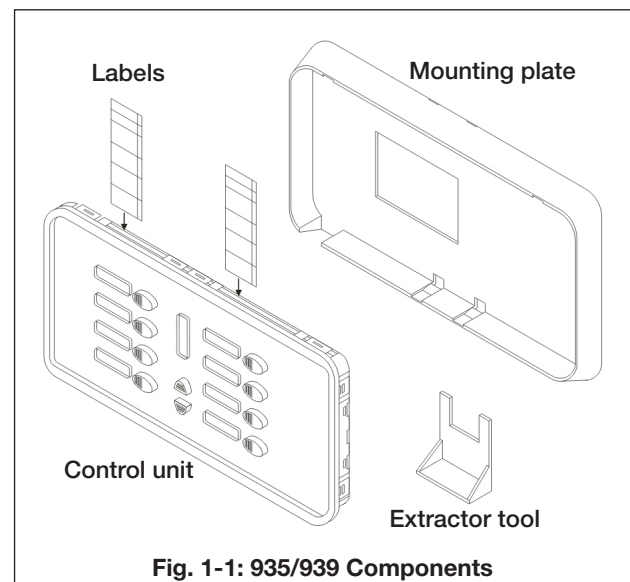


Fig. 1-1: 935/939 Components

Connecting the Control Unit

All wiring connections are made by a 5-way terminal block on the rear of the 935/939. The data cable should be mains rated, 2-wire 0.5 - 2.5 mm² stranded or solid core conductors. The terminal block has a pair of internally linked data connectors DA+ and DA-. This allows an easy method of continuing the data cables on to the next device.

The terminal marked SC must be connected to a local earth point.

1. Strip back the overall sleeving of the input and output cables by about 40 mm.
2. Strip the insulation of each of the data conductors back by 6 mm.
3. Insert each data conductor into the appropriate terminal (see Fig.1-2) and tighten the terminal screw.
4. Finally, secure the data cables in the cable clamp next to the terminal block using the metal plate and self-tapping screws provided.

Scene Identification Labels

A sheet of pre-printed and blank scene identification labels is supplied which can be cut to size and inserted into the slot at the top of the control unit (see Fig.1-3). A Microsoft® Excel template (part no. 7860163) is available on the website.

Control Unit Fitting and Removal

Ensure that the cables are pushed back through the cut-out in the mounting plate to avoid trapping them and locate the top edge of the control unit into the mounting plate. Then push the bottom edge of the control unit in until it 'clips' positively into position.

To remove the control unit, use the extractor tool supplied. Insert the extractor into the two slots on the bottom edge of the mounting plate (Fig.1-4) and push the extractor in as far as it will go.

Technical Data

Cable (DALI):	2-wire: 0.5 to 1.5 mm ²
DALI supply input:	14 - 22.5 V
DALI consumption:	935: 20 mA 939: 35 mA
Dimensions and weight:	935: 89 x 114 x 18 mm (100 g) 939: 190 x 114 x 18 mm (245 g)
IR Frequency:	36 kHz
IP rating:	IP 10
Operating temperature:	> 0°C; < 50°C
Relative humidity:	Max 90%, non-condensing
Storage temperature:	> -10°C; < 70°C
Isolation:	Double insulated from DALI when fitted within the frame carrier and correctly installed

Terminal	Function
DA -	Data line -
DA -	Data line -
SC	Screen / Earth
DA +	Data line +
DA +	Data line +

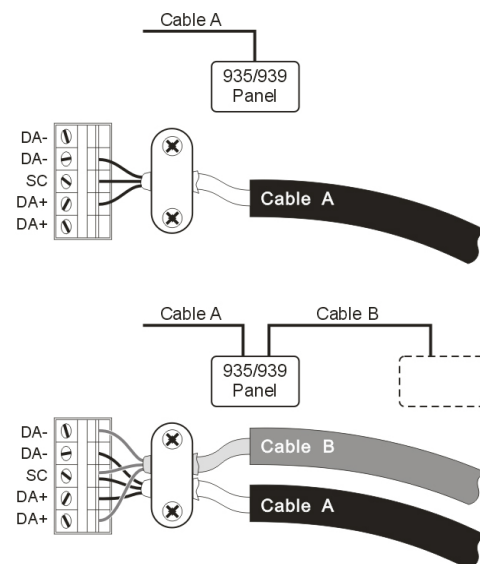


Fig.1-2 Cable connection details

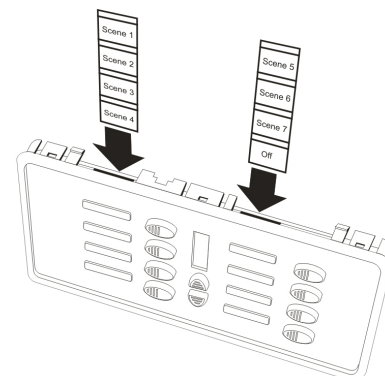


Fig.1-3 Scene identification labels

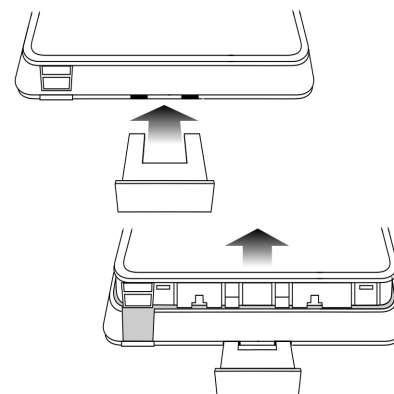


Fig.1-4 Using the extractor tool