

## SCH0410

## 4 Channel x 10 Amp HF Ballast Source Controller

## Key Features

- 40 Amp total box load on 4 circuits
- 1-10 volt, DSI and DALI ballasts
- 128 Scene Memory
- Multiple choice of circuit protection
- Security door for MCBs
- Optional RCBO per channel
- Fail to full safety feature
- iCAN network inputs
- Audio Visual Port (RS485)
- Panic/Fire alarm input
- Emergency Lighting Terminals
- Configuration stored in Non Volatile EEPROM
- Firmware storage in reflashable FLASH memory over iCAN network
- CE compliant to all relevant standards
- Designed and manufactured to IS09001:2015 standards


## Overview

This compact HF Ballast controller is a 4 channel device that provides 4 switched power circuits with 4 channels of scene set dimming for 1-10 volt, Tridonic DSI or DALI digital HF Fluorescent ballasts. Its 10 Amp power relays make it suitable for independent non-dimmable loads as well.
In addition to the iLight iCANnet ${ }^{\text {TM }}$ network connectivity, it also has an audio visual port. It is suitable for controlling other $0-10$ volt devices, such as a motorised Iris in a projector and 0-10 and DSI / DALI controlled transformers and cold cathode. It is typically used on its own in small areas that need manageable and controlled light, such as meeting rooms, cinema and entrance lobbies, or as part of a comprehensive network in large building complexes.


## Mechanical

## Weight: 4kg

Mains Cable Access:
$4 \times 22.5 \mathrm{~mm} / \mathrm{PG} 16$ knockouts, $4 \times 25.5 \mathrm{~mm} / \mathrm{M} 25$ knockout \& $1 \times 28.5 \mathrm{~mm} / \mathrm{PG} 21$ knockout
Control Cable Access:
$1 \times 22.5 \mathrm{~mm} /$ PG 16 knockout $\& 1 \times 25.5 \mathrm{~mm} / \mathrm{M} 25$ knockout
Climate Range:
Temperature: $+2^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
Humidity: +5 to $95 \%$ non condensing
Control Inputs:
Two sets of terminals for the iCANnet ${ }^{\text {TM }}$ network. One RJ12 socket for programming iCANnet ${ }^{\text {TM }}$ network One set of terminals for the Audio Visual Port, RS485 One set of terminals for the panic/fire alarm input

## Dimensions



SCH0410 D versions $-400 \times 220 \times 155 \mathrm{~mm}$
SCH0410 RCBO \& RCBOX versions $-340 \times 255 \times 155 \mathrm{~mm}$

## Electrical

Maximum Load: 40 Amp single phase @ $40^{\circ} \mathrm{C}$
Maximum Channel Current: 10 Amp
Supply: 230 volts -/+ $10 \% 50 / 60 \mathrm{~Hz}$ (optionally, 127 volt 60 Hz )
Protection: 10 amp MCBs Type C, 6KA rated
Options:
SCH0410S - Single pole, no isolator
SCH0410N - Neutral disconnect, no isolator
SCH0410D - Double Pole, no isolator
SCH0410RCBO - RCBO Breakers with isolator
SCH0410RCBOX - As SCH0410S but with isolator (For field fit of RCBOs)
Load Types:
$1-10$ volts HF Fluorescent, 100 per channel. Tridonic DSI HF Fluorescent Ballast, 32 per channel. DALI HF Fluorescent Ballast (Broadcast mode only), 32 per channel, max 128 per unit. $0-10$ volt Iris control (20K Ohm input).
1-10 volt Multi-Load transformers 1000 (Control only)
Dimmed Outputs:
$4 \times 1-10$ volts at 0.1 Amp sink current per channel
$4 \times$ Tridonic DSI outputs (uses electronic power switching in ballasts)
$4 \times$ DALI outputs (uses electronic power switching in ballasts)
The output types above are selectable within iCANedit for each circuit
Switched Outputs: $4 \times 230 \mathrm{v} 10 \mathrm{Amp}$ (inductive or resistive)
Terminal Sizes:
Incoming supply, max cable size: $10 \mathrm{~mm}^{2}$
Ballast output, max cable size: 4 pairs $\times 2.5 \mathrm{~mm}^{2}$
Loads, max cable size: $1 \times 4 \mathrm{~mm}^{2}$ or $2 \times 2.5 \mathrm{~mm}^{2}$ per circuit
iCANnet ${ }^{\text {TM }}$ network cable size: $5 \times 1 \mathrm{~mm}^{2}$
Audio Visual Port: RS485 $2 \times 1 \mathrm{~mm}^{2}$
Panic/fire alarm input: $2 \times 1 \mathrm{~mm}^{2}$
Memory:
FLASH memory to be able to upgrade firmware
EEPROM for 128 scene memory
Fade Times: 0.1 seconds to 60 minutes
Other HF Ballast controllers: SCH1210, SCH1220, SCMH0410 and the SCH1200T

Typical Schematic


## Contact your local Eaton office

T: +44 (0)1923 495495<br>F: +44 (0)1923 228796<br>E: enquiries@iLight.co.uk<br>www.iLight.co.uk

Eaton Lighting Systems
20 Greenhill Crescent,
Watford Business Park,
Watford, Herts, WD18 8JA. UK eatonlightingsystems.com
© 2018 Eaton
All Rights Reserved
Powering Business Worldwide

Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions

Eaton is a registered trademark.
All other trademarks are property
of their respective owners.


