

EN

## Multi-function Time Switch 1 Channel Bluetooth®



Additional information is available by scanning the displayed QR code with your mobile terminal.



Complies with  
IMDA Standards  
DA101847

## EGN100AU



- Device to be installed only by a qualified electrician according to the installation standards applicable in the country.
- Not suitable for controlling SELV loads.

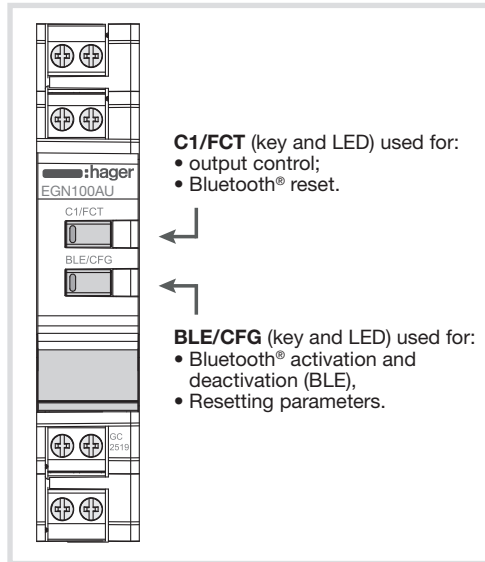


Before connecting the cell, or before carrying out any operations on it, cut the 230 V power supply to the clock.

### Product Presentation

The EGN100AU time switch is a clock with weekly and annual electronic programming that automatically controls different loads. Examples of applications: street lighting, neon signs, shop windows, monuments, facades etc. The integrated astronomical clock can be set to switch loads according to sunset and sunrise times. The connection of an EEN002 / EEN003 twilight sensor (optional) makes it possible to switch the loads according to brightness. Programming is performed with a mobile terminal via Bluetooth® technology using the configuration application (iOS and Android) available as a free download.

### The keys



**C1/FCT** (key and LED) used for:

- output control;
- Bluetooth® reset.

**BLE/CFG** (key and LED) used for:

- Bluetooth® activation and deactivation (BLE),
- Resetting parameters.

Image 1: Presentation of keys

### Main features

- Product delivered with updated time and day.
- Programming by application via Bluetooth® technology:
  - automatic daylight savings time change;
  - astronomical mode;
  - programming by day or group of days;
  - 100 program steps On, Off, pulses  $\square$ .
- Permanent overrides On or Off.
- Temporary overrides On or Off.
- Exceptions (temporary, permanent or delayed) can be activated remotely using a push button.
- Twilight switch function via an EEN002 or EEN003 wired brightness sensor.

### Connection diagram

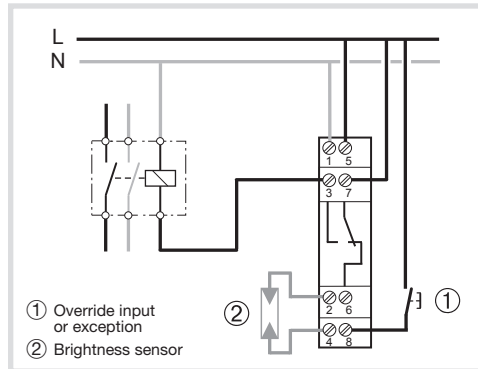


Figure 2: EGN100AU connection diagram (1 output)

### Technical specifications

#### Electrical specifications

- Supply voltage: 230 V~ +10/-15% and 240 V~ ± 6%
- Network frequency: 50/60 Hz
- Consumption: < 170 mW
- Output 1 non-insulated changeover contact
- Max. breaking capacity: AC1  $\mu$  10A 230 V~
- Incandescent light bulbs:
  - Power relay with normally open contact/2300 W
  - Power relay with normally closed contact/1500 W
- Halogen lamps: 230 V~ 2300 W
- Fluorescent tubes, compensated // (max. 45  $\mu$ F):
  - Power relay with normally open contact/400 W
  - Power relay with normally closed contact/300 W
- Fluorescent tubes, uncompensated, series compensated: 1000 W
- Compact fluorescent lamps and LED lamps:
  - Power relay with normally open contact/400 W
  - Power relay with normally closed contact/300 W
- Min. breaking capacity: AC1 100 mA 230 V~
- Rated shock voltage: 4 kV
- Maximum switching speed at full load: 6 switching cycles/minute

#### Functional features

- Programming capacity: 100 steps
- Min. time between 2 steps: 1 minute
- Precision of operation:  $\pm$ 0.25 s/day
- Bluetooth® radio frequency: 2.4 - 2.483 GHz
  - Max. transmitting power: 10 mW
  - Range: 10 m in free field
  - Version: 4.2
- Mobile/PC terminal configuration
  - iOS version equal to or greater than 8
  - Android version equal to or greater than 5.1
  - Windows version equal to or greater than 10
  - Bluetooth®: version equal to or greater than 4.2
- Insulation class: 2
- Action type: 2B
- Software class: Class A
- Ball test T°: 75 °C

- Upstream protection: 10 A circuit breaker
- Stated voltage and current for EMC emissions testing: 230 V~ / - 0.5 A
- Protection class: IP20 (case), IP30 (case under faceplate)
- Impact resistance: IK04

#### Battery

- Power reserve: 10 years
- Non-replaceable and non-rechargeable

#### Case

- Dimensions: 18 mm / 1 module
- DIN rail mounted independent product according to EN 60715

#### Environment

- Operating T° -5 °C to +45 °C
- Storage T° -25 °C to +70 °C
- Relative humidity: 95 % to 20 °C
- Pollution category 2

#### Connection with screw terminals

- Rigid 0.2 to 4 mm<sup>2</sup>
- Flexible 0.2 to 2.5 mm<sup>2</sup>
- Screw recess: PH1

### Initial set-up

#### BLUETOOTH

To program and set the clock with a mobile terminal, the Bluetooth® function must be activated. Each time the BLE key is pressed (> 2 s) the function is enabled or disabled.

BLE	LED status / Operation	
	off	Bluetooth® disabled
		Bluetooth® enabled
		Bluetooth® assembled and connected

Figure 3: LED operation and status

#### CONFIGURATION APPLICATION

To set the clock, use the application and perform the installation as described below.

1. Directly access the application's download link by scanning the **QR code** printed on the instructions with a mobile terminal.
2. Download and install the configuration application.
3. Check that Bluetooth® is enabled (see **Initial set-up / BLUETOOTH**).
4. Pair your mobile terminal and your clock via the Bluetooth® application.
5. Program your product via the application. To do this, follow the application instructions to configure the clock.

#### Settings via the configuration application:

Settings for the use of your clock are available via the application as settings of:

- date and time;
- astronomical clock;
- wired input;
- daylight savings time change;
- twilight sensor.

## LED status - Override - Exception



- Bluetooth® must be disconnected.

Each time the **C1** key is pressed briefly, the output status will change according to the following cycle:

C1	LED status / Operation
	off "OFF /" exception on OFF of the output with regard to the current program; return to automatic mode will occur at the next program step
Yellow	The OFF override function forces an output when in OFF status. No other lower priority command is taken into account if the override is active. Only cancelling the override or a manual command via the front panel will authorize other commands again.
Orange	Manual on OFF of the output (command only available if the product has an FCT button)
Red	"ON /" exception on ON of the output with regard to the current program; return to automatic mode will occur at the next program step
Yellow	Override on ON of the output (permanent command): the ON override function forces an output when in ON status. No other command is taken into account if the override is active. Only cancelling the override authorizes other commands again
Orange	Manual on ON of the output (command only available if the product has an FCT button)

Figure 4: LED operation and status



Priority:  
Manual mode > Override > Exception

## Key lock

The key lock / unlock function can be accessed via the configuration application or locally on the clock via the **BLE/CFG** and **C1/FCT** keys (Bluetooth® must be disconnected).

To enable or disable this function locally, simultaneously press (> 2 s) both keys, **CFG + FCT**, (both LED(s) will flash quickly until released).



The time during which both CFG + FCT keys are pressed must not be > 10 s; otherwise, the product settings and programming may be deleted (see Reset).

## Reset

Reset is accessible via the configuration application or locally on the clock via the **BLE/CFG** and **C1/FCT** keys (the Bluetooth® must be disconnected).

- To reset the Bluetooth® settings (installation key), press and hold (> 10 s) the **FCT** key until the LED flashes. Other settings and programs will be preserved.
- To reset the product settings and programs to factory settings, simultaneously press (> 10 s) both keys, **CFG + FCT**, (both LED(s) will flash quickly until released). The "Bluetooth®" and modules will be preserved.

## Update

The clock firmware is updated via the configuration application. A new "version" of the clock firmware is proposed when:

- the application starts on your mobile device;
- the mobile terminal and the clock are connected together via Bluetooth®.



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Hager Controls hereby declares that this EGN100AU Time Switch radio equipment complies with the essential requirements and other relevant provisions of Directive 2014/53/EU.

The EC declaration can be consulted on the website:  
[www.hager.com](http://www.hager.com)