# FL

## Flashing Lamp

Before operating the device, be sure to read this user manual carefully. Follow the steps described in the installation, electrical connection, and initial startup sections with attention. After completing these steps, the product owner/user must keep this manual in a known and easily accessible location for the entire service life of the product.

- Store the product in a dry environment. Otherwise, malfunctions may occur.
- In battery- or accumulator-powered products, batteries and accumulators are not covered under warranty. Similarly, failures caused by battery discharge or leakage in products that have exceeded their shelf life are not covered under warranty.
- All service and repair operations must be carried out exclusively by Kontal Elektronik technical service. The product must not be tampered with by unauthorized personnel.
- The operating voltage of each product is indicated on the label. Do not supply the device with a voltage different from the specified value.

✓ Failure to comply with the above-mentioned conditions may result in fire, serious personal injury, or damage to the product or the structure in which it is installed. In such cases caused by user negligence or misuse, **Kontal Elektronik San. ve Tic. Ltd. Şti.** assumes no responsibility.

✓ This symbol will be used to highlight important notes in the following sections.

✓ Do not touch the power supply terminals of the device with bare hands.

✓ This symbol will be used to indicate warnings related to voltage in the following sections.

✓ This symbol on the label indicates that the device operates with a DC supply voltage.

✓ This symbol on the label indicates that the device is equipped with reinforced insulation.

✓ This symbol on the product or its packaging indicates that the product must not be disposed of as household waste. Instead, it should be delivered to designated collection points for the recycling of electrical and electronic equipment. Improper disposal or destruction of the product may have adverse effects on the environment and human health.

✓ This document and its revisions are the legal property and responsibility of **KONTAL ELEKTRONİK SAN. VE TİC. LTD. ŞTİ.** Any unauthorized modification or alteration is strictly prohibited.

✓ Ensure that the system is properly grounded for the device to operate reliably.

# 1. DEFINITION

The **FL** is a high-visibility signal flasher designed to support safe passage in automatic doors, barrier systems, and industrial access control points. With dual voltage support for both **220V AC** and **24V DC**, it integrates seamlessly into a wide range of systems. Its **IP42 protection rating** ensures safe operation in indoor environments and outdoor settings not directly exposed to water.

The **UV-resistant acrylic light surface** and **impact-resistant housing** provide long-lasting performance even under challenging environmental conditions. Thanks to its LED-based structure, the device offers **maximum light intensity with minimal energy consumption**.With its **compact and aesthetically pleasing design**, the FL serves as both a functional and stylish alert solution, ideal for applications ranging from turnstile entry systems to in-factory guidance.

## 1.1 BOX CONTENT

The contents of the **FL – Flashing Lamp** package are listed below:

| | |
|---|---|
| **1x** FL- Flashing Lamp | **1x** FL User Manual |

**For custom orders, the package contents may vary depending on the project requirements or customer specifications.*

# 2. TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Model** | FL |
| **Product Code** | K009-01 |
| **Working Voltage** | 24V DC / 220V AC |
| **Working Current** | 6mA @ 220V AC / 50mA @ 24V DC |
| **Light Surface** | UV Akrilik |
| **IP Rating** | IP42 |
| **Mounting Surfaces** | Flat Surface / 25mm Diameter Pipe |
| **Weight** | 192gr |
| **Dimensions** | 145 x 150 x 70 mm |

# 3. ADJUSTMENT COMPONENTS

### A. FL – Flashing Lamp User Adjustment Components

a. JMP1: This component allows you to configure the operating mode of your device. (See also: Adjustment Of FL Operatıng Modes)
b. JMP2: This component allows you to configure the operating mode of your device. (See also: Adjustment Of FL Operatıng Modes)

# 4. FL CONTROL BOARD

The control board of the FL – Flashing Lamp is shown in Figure 4.1.

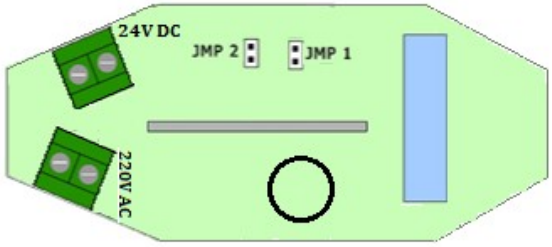


***Figure 4.1**- FL control board*

**4.1 FL Control Board Installation and Initial Startup**

a. First, remove the top cover of your device. (See also: Installation Figures 1-2-3*)*

b. Determine the operating mode of your device using JMP1 and JMP2. (See also: Adjustment of FL Operating Modes)

c. Connect the power supply of your device according to the desired voltage level.

**Do not touch the connection points under any circumstances after making the power connections to the device!**

d. Close the top cover of your device. (*See also: Installation Figure 6.3*)

# 5. ADJUSTMENT OF FL OPERATING MODES

| JUMPER STATE | OPERATING MODE |
|---|---|
| JMP 2 (1, 2) JMP 1 (1, 2) | When the jumper connectors are in the open position (without jumper caps installed), the LED units on the front and rear surfaces operate by flashing sequentially at high speed. |
| JMP 2 (1, 2) JMP 1 (1, 2) | When the JMP1 connector is closed (jumper cap installed) and JMP2 is in the open position, all LEDs operate synchronously, flashing at 1-second intervals. |
| JMP 2 (1, 2) JMP 1 (1, 2) | When the JMP2 connector is closed (jumper cap installed) and JMP1 is in the open position, all LEDs operate synchronously, flashing at high speed. |
| JMP 2 (1, 2) JMP 1 (1, 2) | When both jumper connectors are closed (jumper caps installed), the LEDs on the front and rear surfaces operate in a sequential flashing mode with 1-second intervals. |

# 6. INSTALLATION

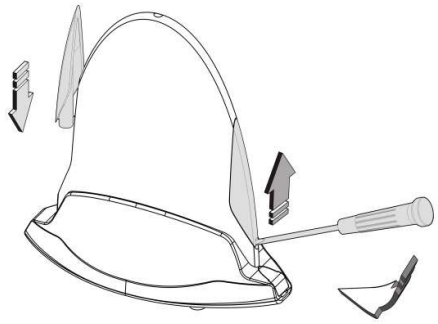

***Figure 6.1*** *– Removal and Attachment of SFL Side Brackets*

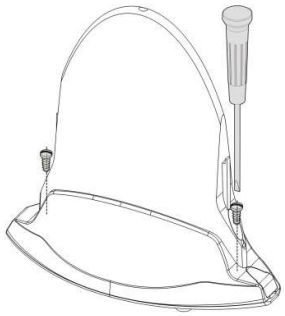

***Figure 6.2*** *– Removal and Attachment of SFL Screws*

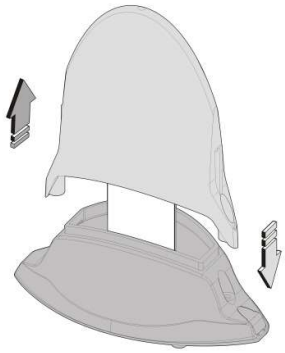

***Figure 6.3*** *– Removal and Attachment of the SFL Top Cover*

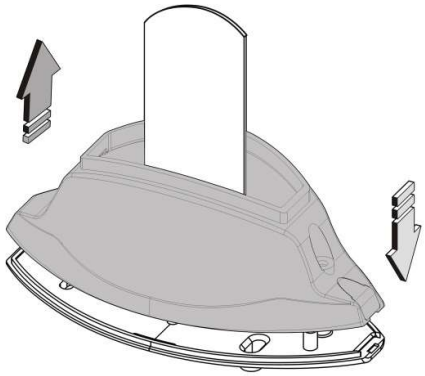

***Figure 6.4 –*** *Removal and Attachment of the SFL Plastic Bottom Cover*

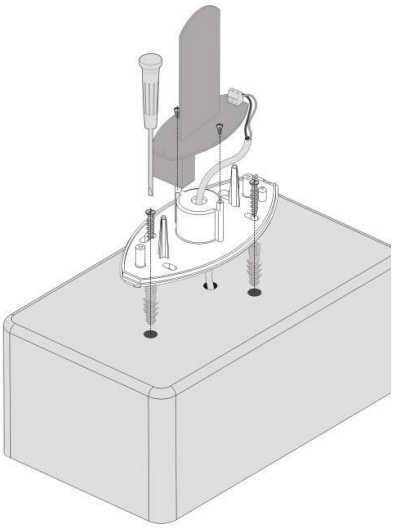

***Figure 6.5*** *– SFL Cable Connections and Surface Mounting*

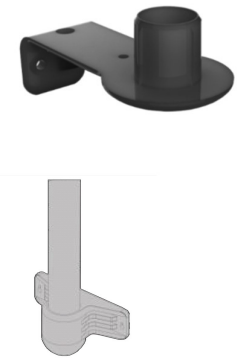

***Figure 6.8 –*** *SFL Pipe Mounting Brackets ****

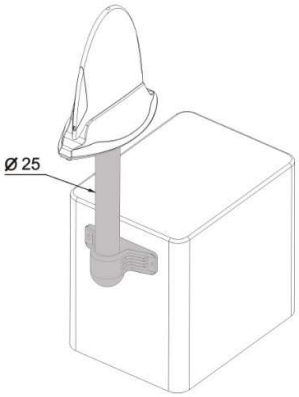


***Figure 6.9 –*** *Mounting the SFL on a Pipe Surface*

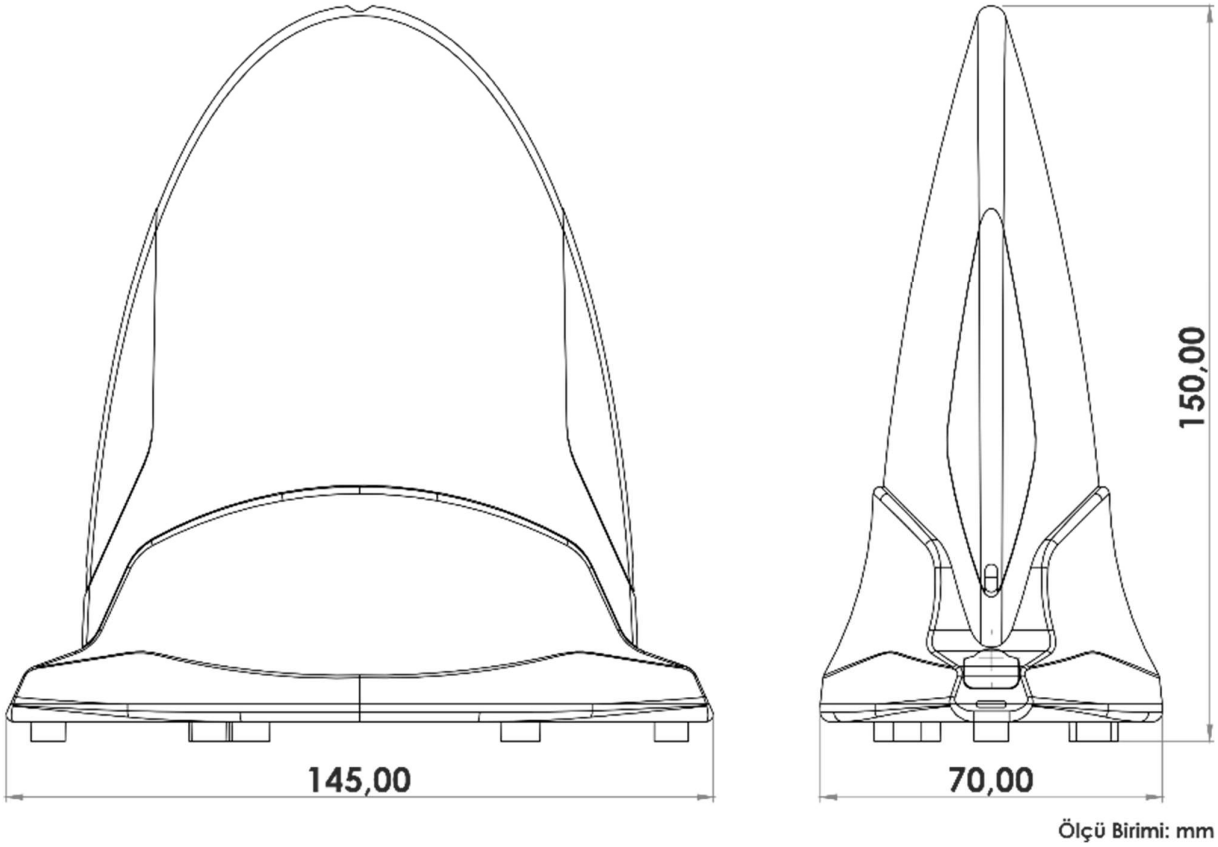


***Figure 6.10 –*** *SFL Dimensions (Unit: mm)*

****Pipe mounting brackets for the SFL are available upon request. Therefore, they must be specifically indicated at the time of order; otherwise, a separate order will be required for the mounting brackets.*

# 7. CONNECTION DIAGRAM

The connection diagram for the **FL – Flashing Lamp** is shown below.

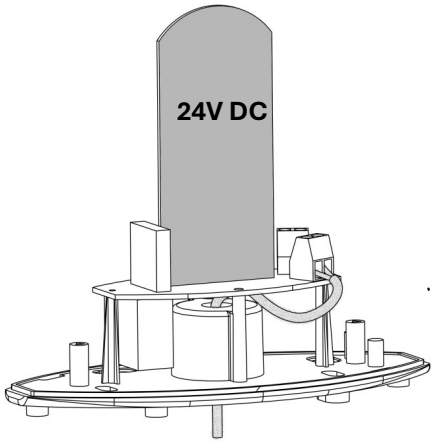


***Figure 7.1 –*** *Connecting the FL to 24V DC*

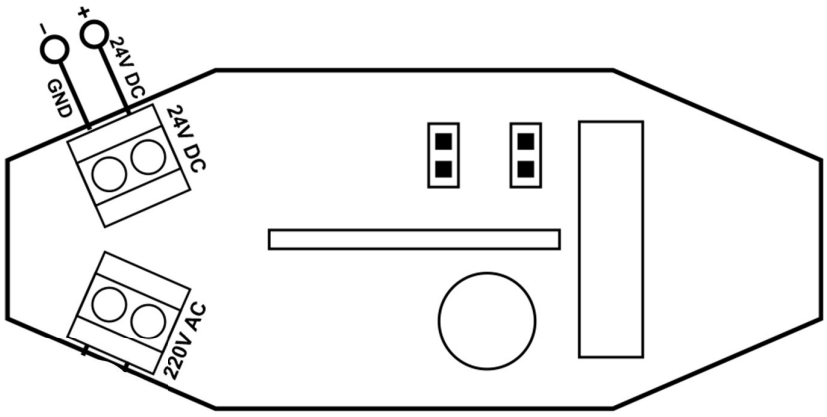


***Figure 7.2 –*** *Connecting the FL to 24V DC*

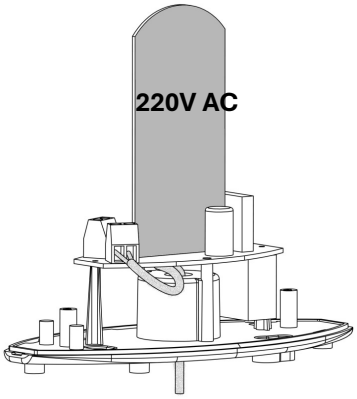


***Figure 7.3*** *– Connecting the FL to 220V AC.*

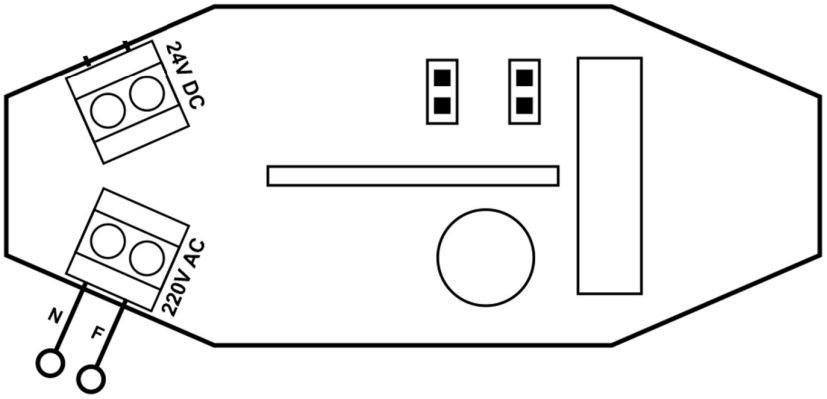


***Figure 7.4*** *– Connecting the FL to 220V AC.*

**For powering the flasher board, a power cable with a minimum cross-section of 2x0.75 mm$^2$ should be used. If the device is to be integrated into a system without fuse protection, a fast-acting 1A fuse must be installed on the live (L) line before energizing the neutral (N) and live (L) terminals.**

**For stable operation of the device, it is recommended to use a power supply with a minimum output power of 2.4W on the 24V DC supply line.**

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