

# **TECHNICAL SPECIFICATIONS**

# Kali-Flash™

Rectangular Rapid Flashing Beacon (RRFB)

REF: FT-DYN-KF DATE: January 4th 2024



## **LED lamps**

- Encapsulated in a vandal-resistant aluminum cabinet painted black (or color of choice)
- Two 76 mm x 178 mm amber LED lamps, MUTCD compliant
- One side indicator light (28 mm x 66 mm) to inform pedestrians of light operation
- Light intensity compliant with SAE J595 Class 1 standard
- Automatic intensity adjustment according to ambient light conditions
- WW+S flashing sequence
- Single- or double-sided option (see Pedestrian crossing configuration section)

#### **Control cabinet**

- Made of high-resistance polycarbonate
- Nema 4 waterproof certification
- Anti-theft and easily accessible for maintenance (e.g. configuration, battery change after 5 years, etc.)
- IC and FCC certified

## **Power supply**

#### Solar

- Standard solar power packages (other packages available on request):
  - 100W 40Ah
  - 50W 40Ah
  - 50W 20 Ah
- Monocrystalline solar panels: for better charging even on cloudy days
- 360° adjustment of solar panels for optimized installation
- Sealed AGM batteries for high performance in cold weather:
  - Recharge down to -20°C
  - Discharge down to -40°C

## **Electrical**

- 120-230 VAC 12 VDC converter
- 20Ah battery for operation even during power cuts

### **Activation**

## Push-button activation

- Piezo technology for trouble-free operation even in cold weather
- Audible signal on activation (complies with MUTCD 2009-4E)



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Certified resistant NEMA TS 2 and waterproof NEMA 250 - 6P

## Smart-DetektTM passive detection (optional)

A McGill University study (2020) on Kali-Flash<sup>TM</sup> revealed that only 10% of pedestrians activate push-button crossings. Smart-Detekt<sup>TM</sup> passive detection is therefore ideally suited to drastically increase pedestrian safety at crossings.

- Detection only of pedestrians intending to cross
- Detection of pedestrian direction
- Programming to prevent lights from restarting when pedestrians exit the crossing

#### Activation time

- Programmable from 1 to 60 seconds (default 20 seconds)
- Restart of flashing cycle on system reactivation

#### Communication

#### Between structures

- Synchronization of lights on both sides of the roadway via short-range radio signal (80 m)
- 20 communication channels available, limiting interference between nearby crossings
- Possibility of adding advanced signals (structures without push-buttons / passive detection) activated in tandem with the crossing

#### Dynamik<sup>™</sup> remote connection (included with Premium model)

In Montreal, 32.2% of pedestrian collisions occur when crossing the roadway (Source: Vision Zero fatalities and serious injuries 2019 2021). It is therefore essential to ensure that RRBF lights are working properly to maximize pedestrian safety. Dynamik<sup>TM</sup> makes it possible to configure and monitor traffic light operation in real time.

- Programmable light flashing time
- Real-time e-mail alarms for low battery or system malfunctions
- System performance statistics:
  - Number of light activations, including pedestrian traffic direction
  - Solar panel charging history
  - Battery voltage history
  - Control cabinet temperature history
  - Ambient brightness history
- Automatic activation of lights according to a calendar (e.g.: during events)
- Automatic system updates
  - Functionality additions
  - · System and security enhancements

#### Support

- Pole-mounted installation in hot-dip galvanized steel, painted black, with a choice of:
  - Planted anchor for installation in ground (no concrete base required)
  - Galvanized steel anchor for existing concrete slab
- Installation on existing support (supplied by customer)

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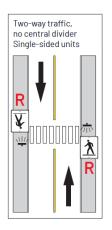
Rectangular Rapid Flashing Beacon (RRFB)

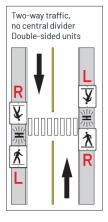
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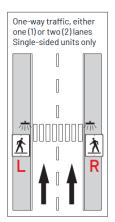
### **CONFIGURATION OF PEDESTRIAN CROSSINGS**

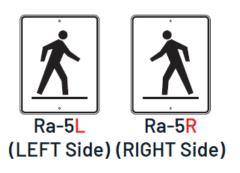
Kali-Flash installation diagrams according to lane type and traffic direction (number of lanes may vary)

#### Simultaneous activation for all structures

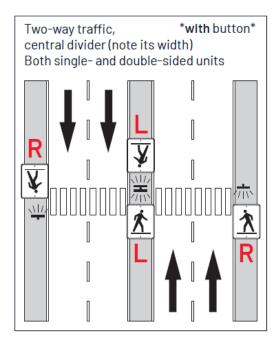








# Simultaneous activation for all structures with ground clearance of 2.4 m (7.8 ft) or less



**Always** includes a central push-button to reactivate the lights when needed.

# Pair activation for all structures with 2.4 m (7.8 ft.) or more of earthwork

