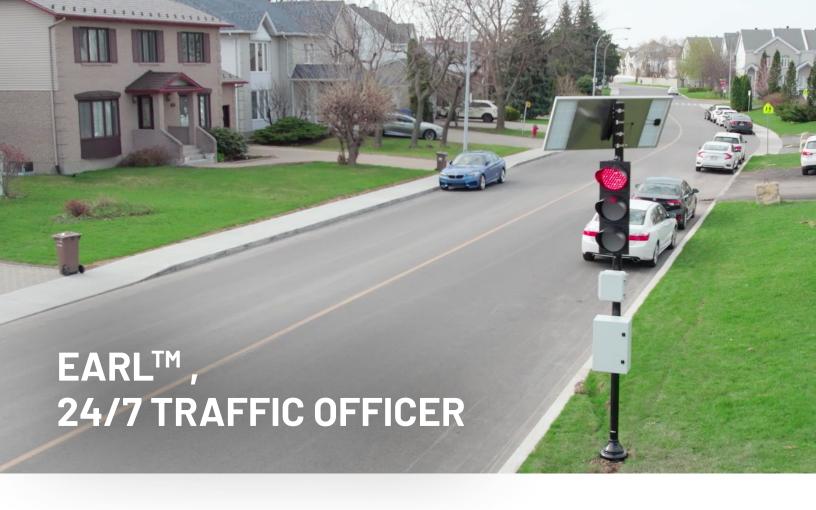
Signalisation Kalitec inc. 1.888.788.4747 info@kalitec.com www.kalitec.com

## kalitec

# **EARL**<sup>™</sup> Educational Awareness Reward Light





EARL™ closely monitors compliance with the limit.

That's why it rewards those who drive at the right speed with a green light.

EARL™ is an educational awareness reward light.



### An immediate and lasting effect on speed

In urban and suburban areas, excessive speeding is a source of insecurity. EARL  $^{\text{\tiny M}}$  is a new educational concept that reverses the trend: it stays on red when the driver is driving too fast, encouraging him to slow down, or even forcing him to stop for a moment. A preventive tool that shows excellent results where it is implemented.

### Secure and inform without repressing

Drivers, pedestrians, cyclists: EARL  $^{\text{\tiny M}}$  has a consensus on preventive safety. In addition to acting, without punishing, on the behavior of drivers and motorcyclists, it records traffic data and generates statistics that will allow you to prove its effectiveness to your citizens.

### Cost-effective, quick and secure set-up

Easy to set up and install independently by your staff, EARL  $^{\text{\tiny M}}$  adapts to its environment with its power supply /public lighting. Its solar version guarantees complete autonomy all year round.

# THE SOLUTION TO LIMIT SPEEDING

EARL ™ has a very dissuasive effect by raising awareness in an effective and non-repressive manner. Here are some explanations...

### **Instant speed mesurement**

The speed of the vehicles is detected by a Doppler antenna generally integrated on the light. This antenna emits waves that are reflected on the moving vehicle. The return frequency of the wave then determines its speed with a very high precision.

### Direct interaction through color

EARL ™ displays red by default and turns green if the driver is respecting the speed limit. If the driver is speeding, it stays red.

#### All recorded traffic statistics

In addition to its preventive role,  $EARL^{m}$  records valuable statistics on the nature of traffic in your municipality. You will be able to measure its impact on the drivers' behavior.





## Which location for maximum efficiency?

For maximum efficiency, position EARL™ according to the following criterias:

- on a two-lane road, in urban areas where the speed limit is 50 km/h (30 mph) or less
- on a stretch of road i.e. at least 30 m (100 ft) from a pedestrian crossing or an intersection.

# YOUR NEW EDUCATIONAL TOOL THAT MULTIPLIES THE ADVANTAGES

Accurate detection, connected system, easy installation: EARL™ has a wealth of technological and proven innovations that have earned it the praise of many municipalities.





- Optimal visibility of the light that meets the brightness requirements and transportation regulations
- Detection quality up to 200 m (600 ft) by a long range Doppler antenna
- Proven technology on more than 30,000 radar speed signs already installed

### 2 A smart light that guides you step by step

- Smartphone app to easily install, control and interact with EARL™ via Bluetooth®
- Records speeds and generates statistics
- Mobile application to analyze and understand traffic data

### **3** EARL™ adapts to all types of locations sustainably

- 2 power supply modes adapted to all locations: solar power or permanent current power supply or directly on public lighting
- Low energy consumption and totally self-sufficient with its solar panel and its integrated batteries

### EARL ™, AS EFFICIENT AS A TRADITIONAL LIGHT

EARL™ 's DNA: it's accurate, but also unmistakable. With its high-visibility lights, accurate vehicle speed detection and an educational sign ahead, EARL™ is as impactful as a traditional light.

### **EARL™ ELECTRIC EARL™ SOLAR** • 1 main LED traffic light with 30 cm (12 in) diameter • 1 main LED traffic light with 30 cm (12 in) diameter lights lights • 1 control box containing: the motherboard, the • 1 control box containing: the motherboard, the data data memory, the Doppler antenna, the electrical memory, the Doppler antenna and the solar charger charger and battery • 1 pre-drilled mast • 1 pre-drilled mast • 1 solar panel · 1 anchoring kit for the mast 1 battery box · 1 anchoring kit for the mast



#### **KALITEC TIP: AN EDUCATIONAL SIGN**

In order to reinforce the understanding of EARL  $^{\rm m}$ , it is recommended to complete it with an educational sign ahead.

### **EDUCATIONAL SIGN KIT** (highly recommended)

- 1 educational panel for installation upstream
- 2 black painted Kalifix posts
- 2 anchors and accessories for planting in the ground (Concrete anchors available upon request)

# A SMART LIGHT THAT GUIDES YOU STEP BY STEP

EARL™ doesn't just slow drivers down: delivered with its smartphone application, it also allows you to be configured in total autonomy, to record the traffic data and to analyze them in order to obtain a clear vision of the users's behavior in your municipality.

## Mobile application: to control and interact with your light

Easy to set up and adjust with its built-in app, EARL  $^{\text{m}}$  is easily set up from your Android/iOS tablet or smartphone.

The Bluetooth ® module discreetly integrated into the control box allows for secure communication.

The application guides you step by step through the operation of the light and allows you to configure the reference speed. With this mobile application,  $EARL^{m}$  's installation can be easily performed by your teams and on location.





## Mobile application: to analyze and understand traffic data

EARL  $^{\text{\tiny M}}$  records each vehicle passage with the time stamp to the second and the speed data. Statistics are then created and produced in the application: number of vehicles, average and overtaking speeds, timing of the light and its operating cycle, etc.

Once connected to the application, you will be able to consult these statistics directly. The accurate and valuable information on driver behavior will be a vital aid to safety in your community.

# ADAPTS TO ALL TYPES OF INSTALLATIONS SUSTAINABLY

Simple power supply, autonomy, warranty, long term assistance: EARL ™ does not fear the weather or the passing years.



### A power supply method adapted to all location constraints

**EARL™** 's electric version has a power supply that makes it easy to install on the site of your choice: either on permanent power or on your municipality's public lighting system. Equipped with a battery, it can be recharged which guarantees its complete autonomy.

In its solar version, EARL™ houses a 200 watt monocrystalline solar panel and 12V lead-acid batteries adapted to the northern climate. The batteries are located in a dedicated, secure compartment at the bottom of the of the mast. This makes battery maintenance much easier. With this solar version, EARL™ guarantees optimal operation and complete autonomy all year round. An easy and inexpensive installation!

## EARL ™ guaranteed for 2 years parts and labor

EARL™, guaranteed for 2 years parts and labor, is designed with simplified maintenance in mind. All components can be disassembled facilitating potential interventions by your services.

If however a dysfunction (except vandalism) was to appear, we would proceed with you to the troubleshooting by telephone. Collection of the equipment will take place as soon as possible at your convenience for a factory return if necessary, including repair and reshipment.

### A SERVICE CONTRACT FOR YOUR COMFORT

At the end of the 2-year warranty period, we offer you a service contract including:

- The repair of the equipment parts, labor and transport in case of malfunction
- Software update
- Telephone assistance to answer your questions the device's use

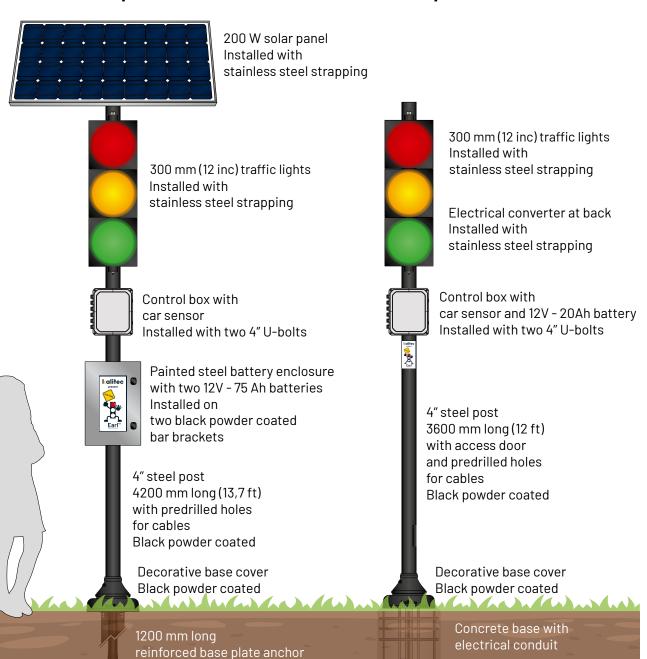
With this service contract, you can ensure continuity in the monitoring of EARL  $^{\text{TM}}$ 

### **TECHNICAL CHARACTERISTICS**

POWER SUPPLY ELECTRICAL	Main source	100 - 240 Vac
	Battery (Type, Voltage, Capacity)	Lead, 12 V 20Ah
POWER SUPPLY SOLAR	Main source	Main source 200W monocrystalline solar panel
	Battery (Type, Voltage, Capacity)	AGM 12V 150 or 225 Ah batteries
MAIN LIGHT	Material (shell)	UV stabilized PC
	Dimensions	350 x 1050 x 480 mm (W x H x D)
	Material (optics)	UV stabilized polycarbonate
	Diameter (optical)	300 mm
	Light source	91 leds of power > 455 cd (red, yellow, green)
CONTROL BOX	Material	Polycarbonate UV stabilized
	Dimensions	336 x 285 x 165 mm
	Color	Light grey
MAST	Material	Galvanized steel
	Diameter	100 mm (4 in)
	Height	4,2 m (13,7 ft)
	Color	Black
CONNECTIVITY	Bluetooth®	Bluetooth® 5 Low Energy
	Smartphone	Mobile Application
	Operating System	iOS/Android
DETECTION	Antenna	IPS-937-F Doppler
	Modulation Type	CW Doppler
	Frequency	24.125 GHz
	Range	200 m (600 ft)
COMPLIANCE	Road device France legislation	IISR compliance part 6, article 7 RoHS 2002/95/CE
	Industry Canada IC	20796-DSPREV13 (9885)
	Doppler Antenna	Compliant 2014/53/EU (RED)
	Kalitec recommends to consult an engineer during the process of deploying EARL ™.	
APPLICATION	Configuration	Initialization of the light Selection of the speed zone (20 - 30 - 40 - 50 km/h or 10-15-20-30 mph)
	Statistics	Counting (number of vehicles) Timing of the lights (green - yellow - red) Speeds (maximum, average and overtaking)
	Supervision	State of the hardware defects Memory filling

### **Solar option**

### **Electrical option**



## kalitec

Kalitec offers a range of high performance solutions for road safety and traffic management and traffic management solutions.

### Dynamik ™ Wireless Connection



- Remote control
- Operating statistics
- Alarms and troubleshooting

### > SPEED REDUCTION -



Radar Speed Sign



Cut-out

### > PEDESTRIAN SAFETY -



Kali-Flash - RRFB



Flexible Delineator

### > TRAFFIC MANAGEMENT



Kali-Park



Kali-Flow



Flashing LED Signs

Kalitec offers a complete service for manufacturing urban signage furniture. We support you from the design to the installation of your project.

### Superior quality products



- Highly durable materials
- Extended warranties
- Compliance with standards and security certifications

#### URBAN REVITALIZATION



City/Town Welcome Sign



Street Names



Signage



Interpretative Signs

### **>** BOLLARDS



Civic Address Signs 911



Bollards



Chicanes

# WHY CHOOSE KALITEC AND EARL™?

- 1 More than 17 years of experience in vehicle detection with Doppler systems.
- 2 EARL ™ Educational Awareness Reward Light, a new generation educational concept: efficiency in terms of lowering speed and increasing road safety.
- Integrated mobile application makes it easy for your teams to install and manage the light.
- 2 models of EARL ™ (electric and solar) to fit any location.
- Data reporting to legitimize and prove the effectiveness of EARL ™ to your citizens.
- 6 Start-up, after-sales service, maintenance, training, assistance : responsive services!



