



## LUISCO SYSTEM USER MANUAL (v.1.1)

LUISCO SYSTEMS Mod. LSSK, LS270, LS360

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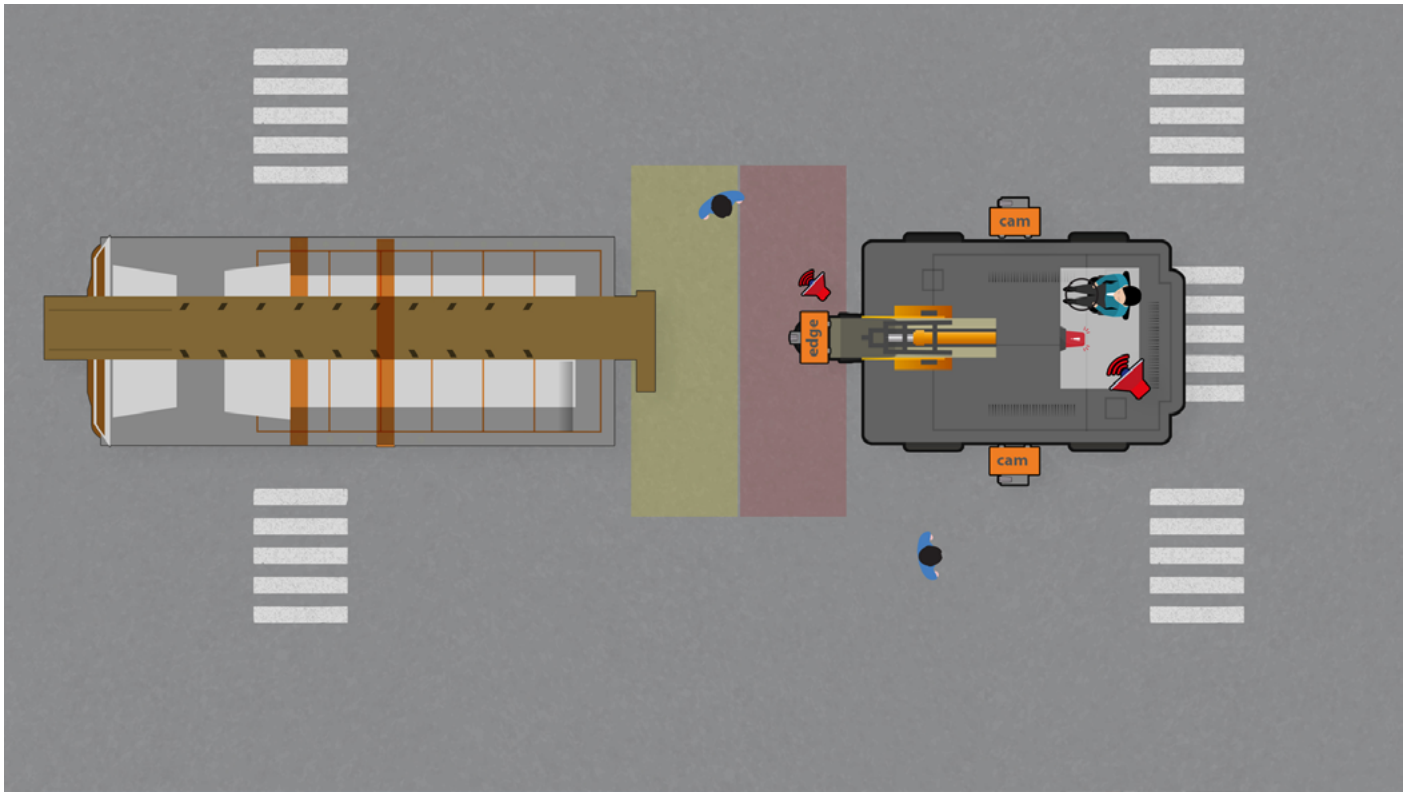
➤ INTRODUCTION

Workplace safety is a key concern for protecting operators, especially in complex environments where the use of heavy machinery is a daily occurrence.

Every day, professionals work in situations that require maximum attention and advanced tools to prevent accidents and enhance operator protection.

**LUISCO SYSTEM** was created with the goal of providing innovative technological solutions that support workplace monitoring, increasing safety levels, and ensuring greater awareness of the surrounding environment.

Thanks to an advanced monitoring system, both the driver and the operators working within the vehicle's operating range can perform their tasks more safely, reducing risks and improving operational efficiency.



➤ CONFIGURATION CONTENTS

**LUISCO EDGE STANDARD KIT (LSSK) - Code 001280**

**001281 - 1x Edge AI Transmitter**  
(Integrated MDR with geolocation, audio/video recording, alarm transmission to the LUIS portal)

**001282 - 1x LUISCO Edge RX Receiver** (wireless or powered directly from the vehicle)  
+Internal cabin connection cable kit + 220V Power Adapter

**001202 - 1x AI TOOLING KIT**  
(Accessory for connecting the system to the safety zone configuration)

**15-24265 - 69-250012 - 2x 220V Power Adapters**

**ACCESSORI OPZIONALI:**  
001289 - Magnetic mounting plate for Side Cam  
001293 - Double-sided EPAL magnetic attachment plate



001281 - LUISCO EDGE AI TX



001282 - LUISCO RX



001202 AI TOOLING KIT



001289 - MOUNTING PLATE



001293 - PALLET PLATE

➤ CONFIGURATION CONTENTS

LUISCO SYSTEM 270 (LS270) - code 001290

**001281 - 1x Edge AI Transmitter**  
(MDR with integrated geolocation, audio/video recording, alarm transmission to the LUIS portal)

**001283 - 001284 - 2x Side Cam** (lateral installation)

**001282 - 1x LUISCO Edge RX Receiver** (wireless or powered directly from the vehicle)  
+Internal cabin connection cable kit + 220V Power Adapter

**001202 - 1x AI TOOLING KIT**  
(Accessory for connecting the system to the safety zone configuration APP)

**301124.V1 - 1x 10” Touch Monitor**

**002313 - 1x Dual-joint Support**  
**15-24265 - 69-250012 - 69-25025 - 3x 220V Power Adapters**

**OPTIONAL ACCESSORIES:**  
001287 - Video Joystick Controller  
001288 - Mounting Plate for EDGE  
001289 - Magnetic Mounting Plate for Side Cam  
001293 - Double-sided EPAL Magnetic Attachment Plate  
001292 - Ultra-resistant Shockproof LUISCO Trolley



001281 - LUISCO EDGE AI TX



001283 - LEFT SIDE CAM



001284 - RIGHT SIDE CAM



001282 - LUISCO RX



301124.V1- MONITOR TOUCH



001202 AI TOOLING KIT



002313 - SUPPORT



001287- JOYSTICK



001288 - EDGE PLATE  
001289 - SIDE CAM PLATE



001293 - PPALLET PLATE



001292 - TROLLEY

➤ CONFIGURATION CONTENTS

LUISCO SYSTEM 360 (LS360) - code 001291

**001281 - 1x Edge AI Transmitter**  
(MDR with integrated geolocation, audio/video recording, alarm transmission to the LUIS portal)

**001283 - 001284 - 2x Side Cam** (lateral installation)

**001285 - 1x Front Cam** (front installation)

**001286 - 1x Portable 360 RX Monitor** (with integrated receiver)

**001202 - 1x AI TOOLING KIT**  
(Accessory for connecting the system to the safety zone configuration)

**15-24265 - 69-25025 - 220V Power Adapters**

**OPTIONAL ACCESSORIES:**  
001288 - Fixing Plate for EDGE  
001289 - Magnetic Mounting Plate for Side Cam  
001293 - Double-sided EPAL Magnetic Attachment Plate  
001292 - Ultra-resistant Shockproof Luisco Trolley



001281 - LUISCO EDGE AI TX



001285 - FRONT CAM



001283 - LEFT SIDE CAM  
001284 - RIGHT SIDE CAM



001286  
PORTABLE MONITOR



001202 AI TOOLING KIT



001288 - EDGE PLATE  
001289 - SIDE CAM PLATE



001293 - PALLET PLATE



001292 - TROLLEY



LUISCO EDGE STANDARD KIT (LSSK)

A compact starter kit for simple and effective monitoring of maneuvering areas.  
The **LUISCO EDGE AI TRANSMITTER** integrates:

- Acoustic and visual alarms to signal obstacles
- MDR with video recording and alarm recording configuration
- Transmission of images and alarms to multiple receivers simultaneously
- Real-time geolocation\*

\*The dedicated portal (subscription service, free for the first year) allows real-time monitoring of operations. It enables easy configuration and offers flexibility in choosing the visual interface. It transmits images and alarms to one or more receivers simultaneously.

LUISCO SYSTEM 270 (LS270)

This innovative device is designed to provide 270-degree monitoring during maneuvers, ensuring advanced control of the surrounding environment and alerting the driver and operators approaching designated danger zones.

The system integrates the **LUISCO EDGE AI TRANSMITTER**, equipped with an acoustic alarm, MDR, and geo-location system\*, specifically designed for the mobile rear coupling.

The setup includes two Side Cams to be placed on the sides of the vehicle, providing a detailed, blind-spot-free view of the maneuvering area.  
The driver’s cabin is equipped with advanced video and acoustic monitoring tools, with an RX receiver and an integrated speaker in the monitor.

The system can be equipped with two MDR systems:

- MDR integrated into the **LUISCO EDGE AI TRANSMITTER**: records audio and video of maneuvers
- Additional MDR (Optional): installable in the cabin for recording from other cameras

\*The dedicated portal (subscription service, free for the first year) allows real-time monitoring of operations. The system also allows the configuration of one or more RX receivers on the same transmitter, even remotely from the vehicle, ensuring extended and flexible monitoring.

LUISCO SYSTEM 360 (LS360)

This system represents an evolution of the 270 model, offering complete 360-degree monitoring and full system autonomy thanks to the portable monitor.

- Front Cam: Enhances safety by reducing risks at the front of the vehicle
- Portable monitor with integrated alarm receiver, providing more flexible control

LUISCO EDGE STANDARD KIT (LSSK)

The installation of the **LUISCO EDGE STANDARD KIT** is simple and adaptable to the operator’s needs.

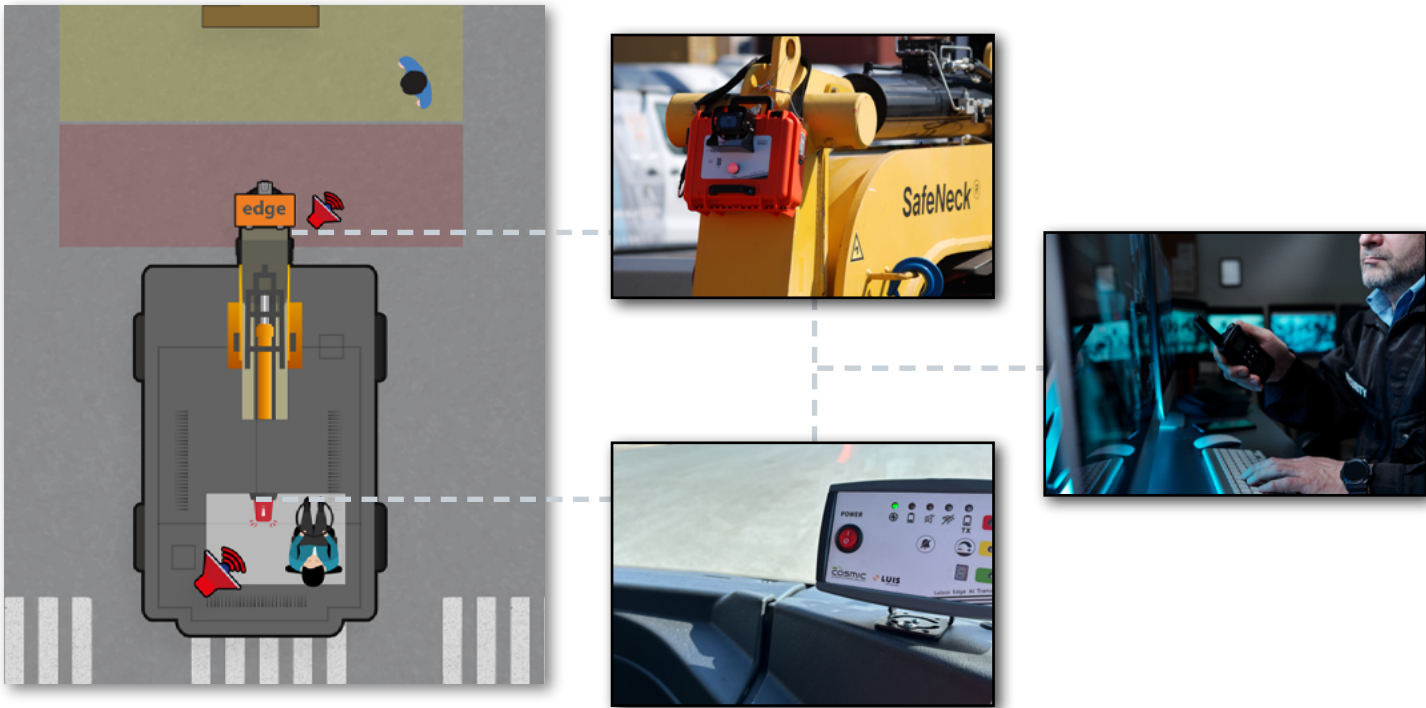
1. Positioning the EDGE AI TRANSMITTER

- a) - Position the **EDGE AI TRANSMITTER** case on the rear or front of the vehicle, depending on the area where the control system is to be applied
- b) - Ensure that the magnets adhere perfectly to the vehicle’s surface
- c) - If the surface is not suitable for fixing, a supplementary magnetic plate (optional) can be used to increase anchor stability
- d) - Secure the case using cables and carabiners, attaching them to the vehicle’s anchoring parts
- e) - Lift the camera’s metal protection and uncover it completely
- f) - Press the ON button located on the right side of the case

The system is now ready for use and operational for monitoring the selected area.

2. System Check

- a) - Verify on the monitor that the monitoring area is visible
- b) - The system is now ready for use; ensure the camera lenses are clean and use a cloth if necessary to remove any dust residue



**LUISCO SYSTEM 270 (LS270)**

The installation is extremely simple and can be carried out by a single operator or directly by the vehicle driver.

**1. Positioning the LUISCO EDGE AI TRANSMITTER**

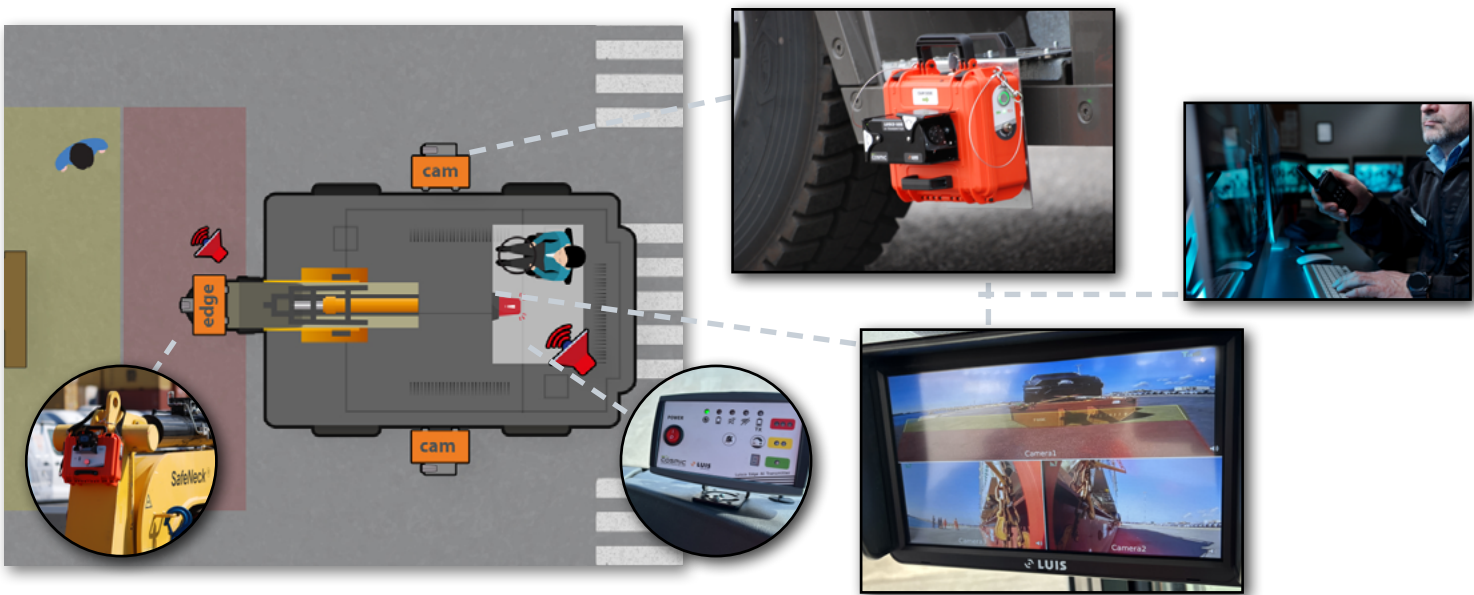
- a) - Extract the **EDGE AI TRANSMITTER** case from the trolley and place it at the rear of the vehicle
- b) - Gently place it on the vehicle's metal base, ensuring that the magnets adhere
- c) - If the vehicle's surface is not suitable for fixing, you can request a supplementary magnetic plate to increase anchor stability
- d) - Once the case is secured, fasten it by hooking the two safety cables to the vehicle using the included carabiners. This step is essential to ensure greater safety and avoid the risk of detachment due to jolts or vibrations
- e) - Lift the metal protection on the camera and press the ON button located on the right side of the case. The device is now active

**2. Positioning the SIDE CAMS**

- a) - Extract the Side Cams from the trolley and place them on the sides of the vehicle
- b) - Pay attention to the arrow on the case, which indicates the side to which the camera should be directed
- c) - The cases should be placed with the cameras facing the rear of the vehicle
- d) - If necessary, supplementary magnetic plates can be used to improve adhesion to the surface
- e) - After positioning them, ensure you hook the two safety cables to the vehicle using the included carabiners
- f) - Lift the metal protection on the camera and press ON on the right side of the case

NOTE: The **LUISCO RX** signal receiver should be placed in the cabin and connected to the vehicle's electrical power supply. It can also operate autonomously.

This instruction applies to the **LUISCO LSSK** model as well, but not to the **LUISCO SYSTEM 360**, which already has an integrated receiver. **The system is now active.**



**LUISCO SYSTEM 360 (LS360)**

The installation of the **LUISCO SYSTEM LS360** is equally simple and follows the same steps as the **LS270** with the addition of the Front Cam, providing total 360-degree coverage.

**1. Positioning the LUISCO EDGE AI TRANSMITTER**

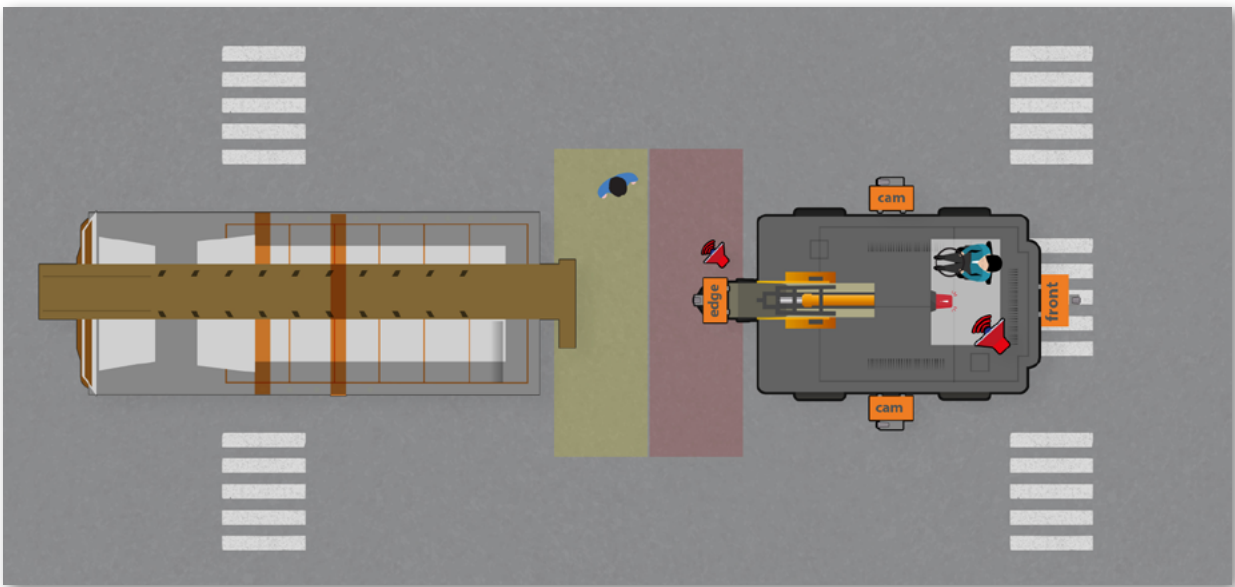
- a) - Extract the **EDGE AI TRANSMITTER** case from the trolley and place it at the rear of the vehicle
- b) - Gently place it on the vehicle's metal base, ensuring that the magnets adhere perfectly to the surface
- c) - If the vehicle's surface is unsuitable for fixing, a supplementary magnetic plate can be requested to increase anchor stability
- d) - Once the case is secured, fasten it by hooking the two safety cables to the vehicle using the included carabiners
- e) - Lift the metal protection on the camera and press the ON button located on the right side of the case

**2. Positioning the SIDE CAMS**

- a) - Extract the Side Cams from the trolley and position them on the sides of the vehicle
- b) - Pay attention to the arrow on the case, which indicates the side of the camera
- c) - Position the cameras facing the rear of the vehicle
- d) - If necessary, use supplementary magnetic plates for more stable fixation
- e) - Hook the safety cables and press the ON button on the case to activate the device

**3. Positioning the FRONT CAM**

- a) - Extract the Front Cam case from the trolley and place it at the front of the vehicle
- b) - Ensure that the magnets adhere perfectly to the vehicle's metal surface
- c) - If the surface is not suitable for magnetic fixation, a supplementary magnetic plate can be used
- d) - Hook the two safety cables to the vehicle using the carabiners to avoid accidental detachment
- e) - Lift the camera protection and press the ON button located on the right side of the case





LUISCO SYSTEM 360 (LS360)

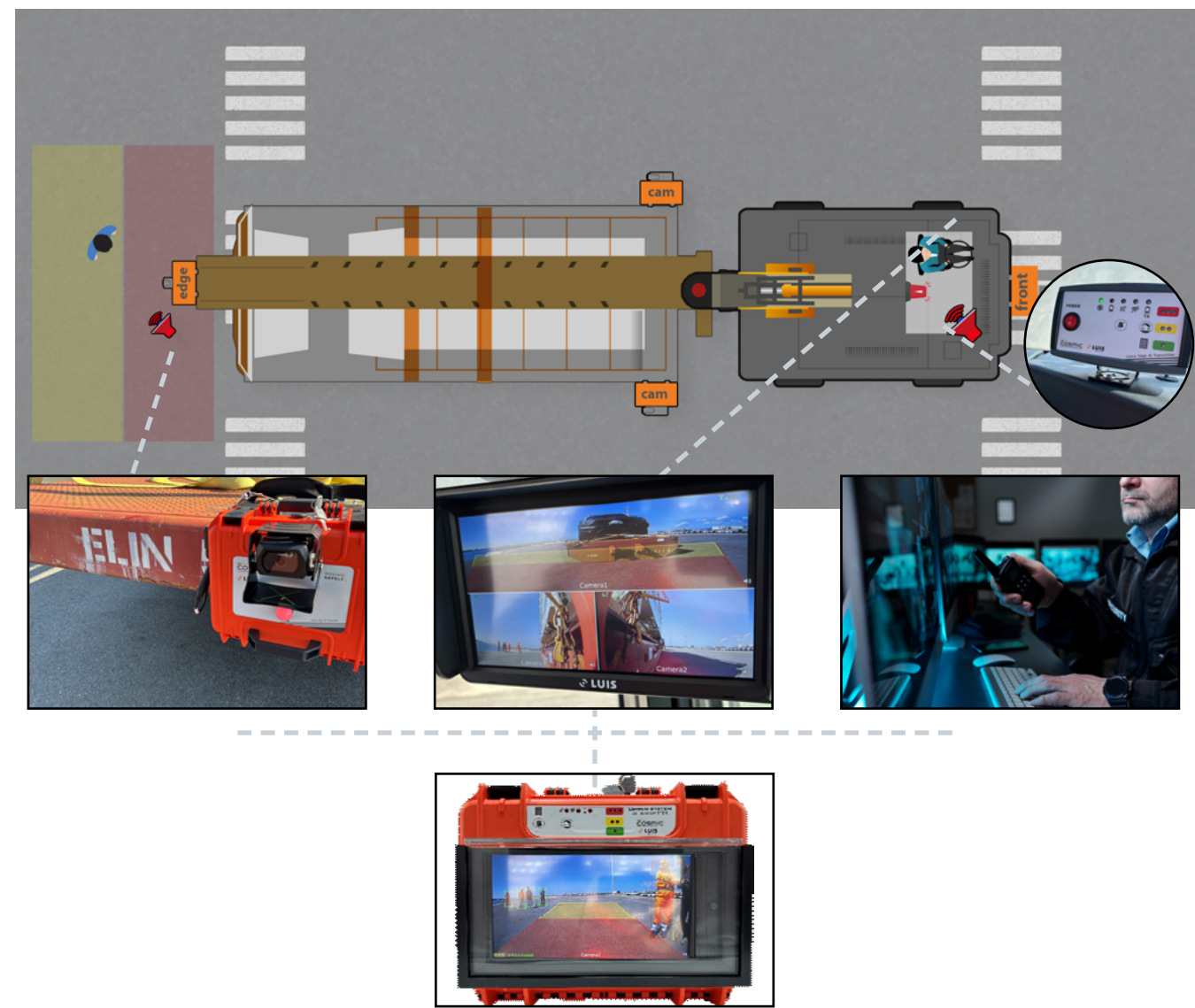
4. System Check

- a) - Ensure that the four monitoring areas are visible on the portable monitor  
One rear (**EDGE AI TRANSMITTER**)  
Two side (**SIDE CAM**)  
One front (**FRONT CAM**)
- b) - If all images are visible and clear, the system is ready for use. Ensure the camera lenses are clean and use a soft cloth to remove any dust residue if necessary

5. Trailer Installation

- a) - If the vehicle is towing a trailer, after coupling, reposition all cases
- b) - Remove the cases from the main vehicle and place them on the trailer
- c) - Ensure that the display on the portable monitor is active and covers the entire maneuvering area

With this configuration, the **LUISCO SYSTEM LS360** provides complete coverage of the surrounding environment, enhancing operational safety and ensuring constant monitoring in all directions.



➤ OPERATION

All the listed devices are easy to install and immediately operational. After installing the cameras on the vehicle, the driver has all the necessary tools available in the cabin for safe driving.

1. Operation in the Cabin

- The **RX** receiver emits an audible and visual signal to indicate the presence of people in the detection areas of the **EDGE AI TRANSMITTER**
- The transmitter also sends sounds detected in the immediate vicinity of the case to the cabin, including any danger calls such as “**Help**” “**Stop**” and “**Attention**”
- The initial configuration sets the alert area sizes, divided into: **Yellow Zone**: more distant area, preventive warning, **Red Zone**: closer area, immediate danger
- The areas can be modified using the AI Tooling Kit, which is provided with all systems
- If a control monitor is present in the cabin, it is possible to view the camera images in real-time
- The monitor highlights the presence of one or more pedestrians with colored rectangles on the camera images
- These signals allow the driver to stop the vehicle promptly if necessary

2. Operation Outside the Vehicle

- Near the **EDGE AI TRANSMITTER**, a pedestrian entering one of the alert areas immediately perceives a loud audible signal from the external system. The signal varies based on proximity, as does the visual signal, which changes from yellow to red depending on the danger's proximity
- These signals enable the pedestrian to realize the danger and quickly move away from the vehicle's trajectory, avoiding risky situations

3. Dual Safety Guarantee

- The system provides dual-level safety, both for the driver inside the vehicle and for pedestrians outside.
- In the cabin, the driver has full control of the situation with sound and light alerts, audio transmission from the rear of the vehicle, and real-time images on the monitor
  - Outside, pedestrians receive immediate auditory and visual signals, allowing them to quickly move away from danger zones
  - Thanks to the combination of visual and audible alerts, the **LUISCO SYSTEM** ensures a high level of safety reducing the risk of accidents and improving maneuver management in complex work environments

4. Remote Control via Dedicated Portal

The **LUIS SMART PREVENT** System allows remote monitoring of the vehicle via the dedicated portal: <https://mdr.luisapp.de> (extra subscription service). **The first year is free.**

By activating the subscription, it is possible to:

- Watch the vehicle in real-time while maneuvering
- Access saved images
- Monitor the vehicle's tracking from system startup, even when the system is off (updated every hour for about 3-4 days)
- Access maneuver recordings
- Listen to ambient audio near the cameras

This function enables maneuver control from anywhere, increasing safety and allowing constant monitoring, even from a distance.

SETTINGS AND CONFIGURATIONS

During the installation of the system, authorized installers configure a series of fundamental parameters for the correct operation of the device.

1. Cabin Configuration

- The installer agrees with the vehicle manager on a series of customized settings, including:
- Choice of RX receiver: it can be set in wireless mode or installed via cable, fixed in the cabin
  - Camera display mode: configuration of the images on the control monitor or, in some cases, on multiple monitors according to the operator's preferences
  - Joystick configuration: if present (not supplied), it is set up to allow quick selection of display preferences
  - Monitor display settings: choice between single view mode, multiple view mode, or highlighting of danger zones
  - Audio settings: adjustment of the reception volume for audible alerts coming from the outside

2. Emergency Area Configuration

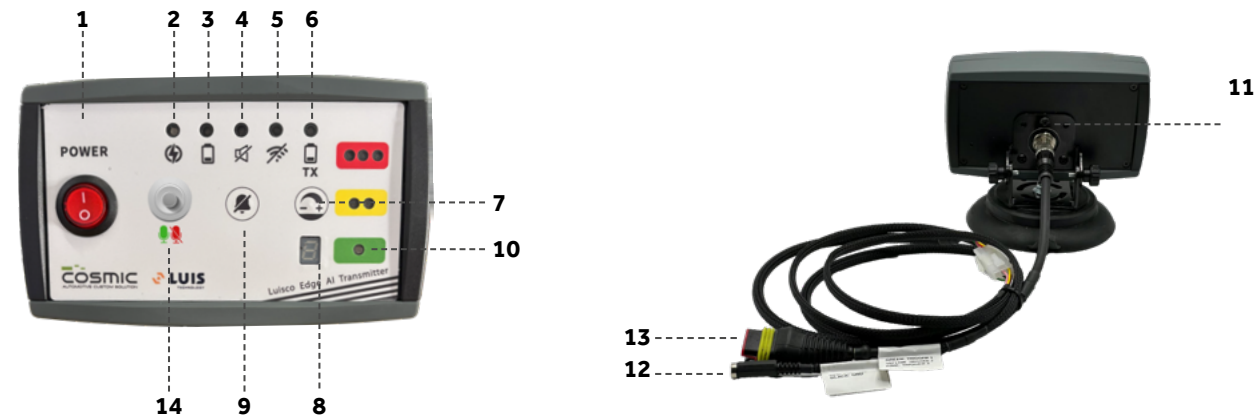
The **LUISCO EDGE AI TRANSMITTER** allows the configuration of emergency areas through the dedicated configurator.

This function allows:

- Expanding or narrowing the safety field in control zones
- Determining the yellow zone (preventive warning) and the red zone (immediate danger)
- Customizing audible and visual alerts to adapt them to the working conditions

Thanks to these settings, the **LUISCO SYSTEM** offers maximum flexibility to adapt to any type of vehicle and operational environment.

TECHNICAL SPECIFICATIONS



1. Receiver on/off button
2. Green LED indicator: indicates that the receiver is charging
3. Battery status indicator: shows the battery status of the receiver when it is not connected to the vehicle's power supply
4. Flashing red LED indicator: indicates that the audio alarm is disabled
5. Flashing red LED indicator + intermittent audio alarm\*\*: indicates that there is no connection between the receiver (RX) and transmitter (TX). In this case, check that the TX is on and set to the same channel as the RX.
6. Steady red LED indicator: signals that the transmitter's (TX) battery is running low
7. Channel display and change: pressing the button displays the receiver's channel (1-9). Holding the button for 5 seconds causes the channel number to flash, allowing it to change incrementally. Each subsequent press increases the channel number
8. Flashing red LED (bottom right): indicates that the transmission between RX and TX is active and functioning correctly
9. Audio alarm deactivation
  - Pressing the button deactivates the receiver's audio alarm for 60 seconds
  - Holding it down for 5 seconds completely disables the alarm, and the letter "P" flashes on the display.
  - Pressing it again restores the device to factory settings
10. Alarm LED indicators: signal the monitoring areas of the EDGE camera
11. Direct power connector: for connecting to the vehicle's wiring
12. Device power: for direct connection to the vehicle's power supply
13. Trigger output connector for alarms: allows activation of external alarms
14. \*PTT (Push-to-Talk) button: for activating audio transmission between RX and TX



15. Microphone: for audio transmission between RX and TX
16. \*SET button
  - Pressed once, it disables the audio (the letter "P" flashes on the display)
  - Pressed again, the buzzer is reactivated
  - Holding it down for 5 seconds activates the channel change mode (1-9)
17. Microphone: for audio transmission between TX and the monitor
18. Multicolor LED indicator: signals the three alarm zones (green, yellow, and red)
19. \*Speaker: for audio transmission between RX and TX

\*Q2/25

➤ MAINTENANCE AND PRECAUTIONS DURING USE

1. In the Cabin

- Avoid impacts on the control systems installed in the cabin
- Periodically clean the devices and monitors to ensure a perfect display
- Regularly check the proper functioning of the RX receiver and the control monitor

2. Cases

- Pay close attention during and after the use of the cases
- The protruding cameras can be damaged in case of impacts or accidental falls, compromising the system's proper functioning
- Handle the cases with care and always store them in the appropriate trolley after use
- Regularly clean the camera lenses, power buttons, and sensitive parts to ensure optimal performance
- Regularly clean the magnets, which may attract iron residues, compromising the system's hold
- During installation, always secure the cases using the anchoring cables to the vehicle to prevent accidental disconnections
- Avoid jerking or abrupt movements when removing the cases from the metal surfaces
- To remove the cases, perform gentle movements to avoid damaging the magnetic and mechanical components

3. Resistance and Environmental Precautions

- The case is hermetically sealed and resistant to minor impacts and adverse weather conditions. However, it is recommended to avoid prolonged exposure to heavy rain or extreme weather conditions to preserve the system's functionality
- It is advisable to leave the system on between one handling operation and the next. Only turn off the system for long breaks or after completing the work
- At the end of use, store the system in the appropriate trolley (optional) or in a safe place to ensure protection and safe transport

**By following these maintenance and precaution guidelines, the longevity of the LUISCO SYSTEM is ensured and it will continue to operate efficiently in any operational condition**

➤ BATTERY CHARGING AND TIMING

- The charging of the systems (cases) is done using a charging power supply (included)
- It takes about 5 hours (under optimal weather conditions) to reach 100% charge
  - The system's battery life with a full charge is approximately 8 to 10 hours under continuous operation
  - Low temperatures can affect both charging times and battery duration, with an average efficiency fluctuation of 5-10%
  - The number of charge cycles is estimated at around 800 cycles (about 2 years), after which the battery's performance will start to decrease

**At the end of this period, it is recommended to perform a technical check-up to assess the need for battery replacement to maintain optimal performance.**

➤ CONTACTS AND ASSISTANCE

The **LUISCO SYSTEM** is covered by a 12-month warranty from the date of purchase, which includes coverage for manufacturing defects and malfunctions arising from anomalies in the original components.

1. Warranty Terms and Conditions

- Any malfunction must be reported immediately to the assistance service
- The warranty does not cover damage caused by impacts, drops, tampering, misuse, prolonged exposure to extreme weather conditions, or failure to follow the manual instructions
- Maintenance must be carried out exclusively at authorized service centers
- Any unauthorized repair will void the warranty

2. Access keys custody

The cases are supplied with opening keys needed for potential maintenance interventions.

- The responsibility for keeping the keys is entirely with the user. LUISCO SYSTEM is not responsible for any inconvenience arising from the loss of the keys
- Removing the security seals without authorization will result in the immediate forfeiture of the warranty

3. Request for Technical Assistance

If anomalies or malfunctions are detected, follow the assistance procedure below:

- a) - **Report the problem:** Send an email to **service@luis.de**, describing the issue in detail and, if possible, attaching photos or explanatory videos
- b) - **Technical evaluation:** A specialized technician will analyze the information provided and guide the user through a preliminary check to identify the cause of the problem
- c) - **Technical intervention:** If necessary, the repair or replacement procedure will be initiated according to the terms of the warranty and assistance provided

4. Post-Warranty Assistance Conditions

After the 12-month warranty expires, assistance can still be provided through paid interventions. In such cases, a detailed estimate will be provided before any repair or replacement operations are carried out.



*MOVING*  
**SAFELY** ▲