Product Overview

LOCKCAR IC3262 is a smart vehicle immobiliser controlled via mobile app over WiFi and Bluetooth Low Energy. It interrupts the starter relay coil circuit to prevent unauthorized engine start. When the authorised mobile device or BLE tag is present, the immobiliser allows normal starting; when absent, the starter circuit remains open.

Key features

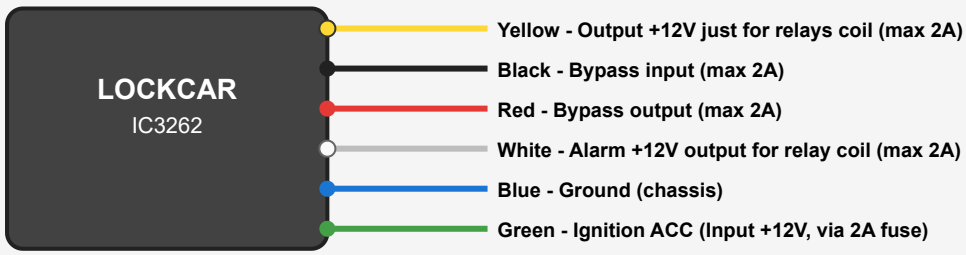
- Tag detection (proximity-based unlock)
- WiFi access point with web app interface
- Configurable arming modes (auto / manual)
- Built-in shock sensor with alarm output
- Emergency manual bypass switch
- Reverse polarity and load dump protection
- Compatible with iOS and Android (LockCAR IMMO app)

What's in the box

- LOCKCAR IC3262 immobiliser module
- Pre-wired harness with 6 colour-coded wires
- Valet Switch-Button
- Installation manual diagram
- Tag Trust Device
- CR2030 battery
- QR codes for mobile app download

Wiring Diagram

Module pinout (6-wire harness)



All outputs are low-current control signals. They drive relay coils, not high-current loads.

Wire Function Summary

Wire	Function	Max current	Connect to
Green	Power input (ignition ACC switched +12V)	via 2A fuse	Ignition ACC line through fuse
Blue	Ground reference	-	Chassis ground (clean metal point)

Wire	Function	Max current	Connect to
🟡 Yellow	Starter immobilisation output (+12V switched)	**2A MAX**	Starter relay **COIL** (low-current side)
⚪ White	Alarm output (+12V signal on intrusion)	**2A MAX**	Horn / siren relay **COIL**
⚫ Black	Emergency bypass switch input	**2A MAX**	One terminal of hidden valet switch
🔴 Red	Emergency bypass switch output	**2A MAX**	Other terminal of hidden valet switch

⚠ Critical: 2A current limit on all output wires

The **Yellow, White, Black, and Red** wires are all rated for a maximum of **2A continuous current**. They are designed exclusively to drive **relay coils** (typical 150–300mA). They must **NEVER** be connected directly to the starter motor, ECU power relay, fuel pump, horn, siren, or any device drawing more than 2A. Doing so will permanently damage the module and is not covered by warranty.

Installation Procedure

Step 1 - Power Connection (Green wire + Blue wire)

1. Locate the ignition **ACC** wire in your vehicle (12V present only when ignition is in accessory or ON position, OFF when key removed).
2. Use **2A blade fuse** in line with the Green wire.
3. Connect Green wire (after the fuse) to the ACC source.
4. Connect Blue wire to a clean chassis ground point.

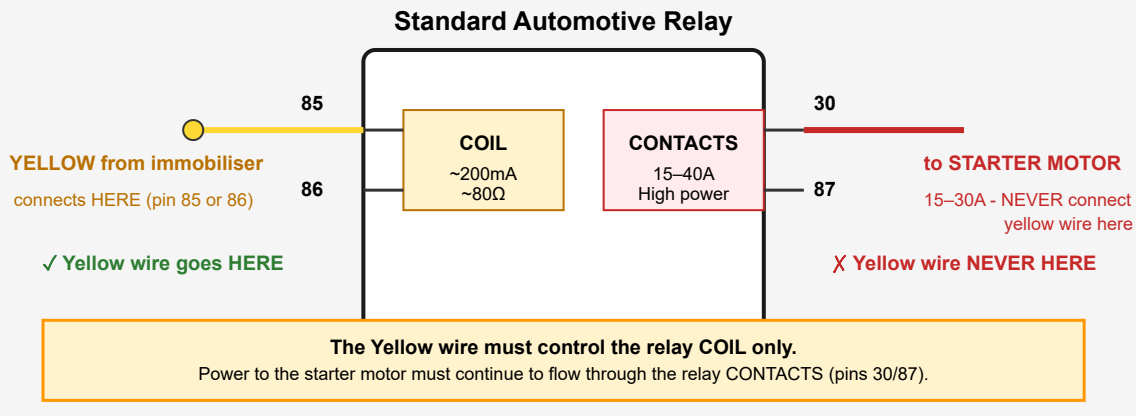
> **ⓘ Why use ACC and not permanent +12V?**
>
> Powering the immobiliser from ACC ensures it draws zero current when the vehicle is locked, preventing battery drain. The internal BLE module retains pairing data across power cycles.

Step 2 - Starter Immobilisation (Yellow wire)

This is the **most critical step**. The Yellow wire must connect to the **relay coil** that energizes the starter motor - never to the starter motor itself or to the high-current power line.

How to identify the correct wire

1. Locate the **starter relay** in your vehicle's fuse box or engine bay (consult vehicle wiring diagram if needed).
2. Standard automotive relays have 4 or 5 pins:
   - **Pins 85 and 86** - coil (low current, typically 150–300mA, this is where you connect)
   - **Pins 30 and 87** - switched contacts (high current, 15–40A, **DO NOT TOUCH**)
   - **Pin 87a** - normally-closed (some relays only)
3. Identify the wire that **energizes the coil** (pin 85 or 86). With a multimeter on continuity mode, it should show ~80Ω to ground or to the other coil pin.
4. Cut this coil wire and connect the Yellow wire from the immobiliser **in series**. The immobiliser now controls when this relay can energize.



Relay pinout - Yellow wire connects to coil pins (85/86), never to contacts (30/87).

Step 3 - Alarm Output (White wire)

Connect White wire to the **coil of an external horn or siren relay**. The immobiliser outputs +12V on this wire when it detects shock, vibration, or unauthorized intrusion.

- Maximum current: **2A**
- Connect to relay coil that switches the actual horn/siren
- Do not connect directly to a horn or siren - they typically draw 5–15A

Step 4 - Emergency Bypass (Black + Red wires)

The Black and Red wires form an internal switched path. When you connect them together externally (via a hidden ON/OFF toggle), the immobiliser is overridden and the vehicle can be started normally. This is for emergencies only (lost phone, dead battery on tag, etc.).

How the bypass works

Internally, the Black wire is the input (typically tied to +12V from the ignition side) and the Red wire is the output (continues to the immobiliser starter path). When the external switch closes Black to Red, current flows directly through the module bypassing the immobilisation logic.

- Maximum current through bypass: **2A continuous**
- Install a hidden toggle or valet switch between Black and Red wires
- Use a standard low-current toggle switch (rated 2A or higher)
- Install the switch in a discreet, owner-only-accessible location

> **Important: Bypass also limited to 2A**
>
> The bypass path (Black ↔ Red) shares the same 2A current limit as the other outputs. Like the Yellow wire, the bypass should only carry the current needed to drive a relay coil, not the starter motor directly. If your installation routes the bypass through high-current circuits, use an external relay to handle the load.

Trust Device (Tag)

The TAG included in the LOCKCAR IC3262 kit is designed to provide a seamless, hands-free experience: you no longer need to enter a PIN manually each time you start the vehicle. The immobiliser automatically detects the tag's presence and disarms when you're near the car, then re-arms when you walk away. The mobile app is only needed for initial setup, configuration changes, or emergency override.

> **ⓘ Use your own device as a trust device**
>
> In addition to the supplied tag, the LOCKCAR app allows you to register **any Bluetooth-capable device** as your trust device - including smartwatches (Apple Watch, Galaxy Watch, etc.), smart rings (Oura, Galaxy Ring), fitness bands, or even another smartphone. Just enter the device's MAC address in the app's configuration screen. This gives you full flexibility to choose what you already carry every day.

Tag Operation

The supplied tag has a single button that controls all functions through press duration and audible beep feedback.

Action	How to perform	Feedback
Power ON	Press and hold the button for at least **3 seconds**	Two short beeps (*beep beep*) - the tag is now powered on and broadcasting
Power OFF	Press and hold the button for at least **3 seconds** while the tag is on	One long beep (*beeeeep*) - the tag is now off and no longer broadcasting
Check status	Press the button briefly (single short press)	**Beep heard** → tag is ON. **No beep** → tag is OFF.
Boost START	Press the button once	**Beep heard** → tag is on BOOST mode. **40 seconds** → START Engine Starting away.

> **Always verify tag status before leaving the vehicle**
>
> A quick press of the button confirms whether the tag is active. If you don't hear a beep, the tag is OFF (or the battery is depleted) and the immobiliser will keep the vehicle locked. Get into the habit of checking before walking away.

Battery

The tag is powered by a single **CR2032** coin cell battery — a standard size, easy to find in supermarkets, electronics stores, or online. Typical battery life is 6–12 months depending on usage.

How to replace the battery

1. Open the cover on the **back of the tag**. Most tags have a small notch or slot — gently pry the cover off with a coin, a small flat screwdriver, or a fingernail.
2. Remove the depleted battery.
3. Insert the new CR2032 with the **+ (positive) side facing up**, visible from above when you look into the battery compartment.
4. Close the cover. You should hear or feel a soft click when it snaps into place.
5. Press and hold the button for 3 seconds - two beeps confirm the tag is powered on with the new battery.

ⓘ Use a quality battery for best results
We strongly recommend using a **genuine, branded CR2032 battery** (Duracell, Energizer, Panasonic, Sony, Varta, etc.). Low-quality or counterfeit batteries often have significantly reduced capacity, may leak, and can shorten the tag's useful life. The small price difference is well worth it.

Tag Behaviour Summary

When tag is ON and nearby

- Immobiliser detects the BLE signal
- System disarms automatically
- Yellow wire becomes active (+12V)
- Vehicle can be started normally
- No PIN or app interaction required

When tag is OFF or out of range

- Immobiliser remains armed
- Yellow wire stays inactive (0V)
- Starter relay coil is interrupted
- Vehicle cannot be started
- Use the app or emergency bypass switch to override

Mobile App Setup

Download the app

The LockCAR IMMO app is available for iOS and Android. Scan the QR codes on the package or search for **"LockCAR IMMO"** in your app store.

First-time pairing

1. Turn the vehicle ignition to ACC. The module powers up (LED indicator lights up).
2. On your phone, open WiFi settings. Connect to network named `LOCKCAR-XXXXXX` (the suffix is unique to your module).
3. Default password: `12345678`
4. Open the LockCAR IMMO app. It auto-detects the connected module.
5. Follow the in-app setup wizard:
   - Change default WiFi password (recommended)
   - Pair your BLE tag (target MAC address)
   - Set BLE range/sensitivity (1–5 scale)
   - Configure shock sensor sensitivity
   - Set alarm and unlock behaviour
6. Test the system: walk away from the vehicle with the tag, verify the engine cannot start. Return with the tag, verify normal operation.

Operating modes

Mode	Behaviour
AUTO	Immobiliser arms/disarms automatically based on BLE tag presence (default).
MANUAL	App controls arming. BLE tag ignored.
MANUAL ONLY	BLE scan disabled to save battery. Only app control works.
BYPASS	Black/Red switch closed - immobiliser fully overridden.

Factory reset

To reset all settings to factory defaults:

- Send `DEFAULT RESET` via BUTTON from the app's advanced menu

The module restarts with default WiFi name and password.

Troubleshooting

Issue	Possible cause & solution
Module does not power up (no Wi-Fi found)	Check 2A fuse on Green wire. Verify Green has +12V with ignition on, Blue has good ground. Verify polarity (module has reverse-polarity protection but won't operate if connected backwards).
Vehicle won't start even with tag nearby	Verify Yellow wire is connected to relay coil pin (85 or 86), not to a fuse or power line. Test by manually bypassing the immobiliser (Black/Red switch). Check TAG scanning in app.
Vehicle starts even when tag is far away	Check TAG range setting in app - set lower (more restrictive). Verify yellow wire actually interrupts the starter coil (not bypassed). Check vehicle wiring hasn't been modified.

Issue	Possible cause & solution
App can't find module's WiFi network	If the TAG is not ON wait 30 seconds after power-up for WiFi to broadcast. Check phone WiFi is on. Try forgetting any previous LOCKCAR network on the phone.
Alarm triggers randomly	Reduce shock sensor sensitivity in app. Verify module is mounted on a stable, vibration-free surface (not directly on engine block or near speakers).
Module overheats or smells burnt	**STOP USING IMMEDIATELY.** Disconnect power. The Yellow or White output was likely connected to a high-current load.

Smoke or burnt smell? Read this

If the module ever smokes, smells burnt, or stops working after installation: **1)** immediately disconnect the Green wire from power, **2)** verify the Yellow, White, Black and Red wires are connected only to relay coils, not to a high-current load, **3)** contact technical support. Damage caused by connecting any output to a load exceeding 2A is not covered by warranty.

Technical Specifications

Electrical

Operating voltage	9–24V DC (12V automotive nominal)
Standby current	<30 mA typical, <10 mA in deep sleep
Operating current	<100 mA (WiFi+BLE active)
Yellow output	**2A max continuous** (relay coil driver)
White output	**2A max continuous** (alarm relay coil driver)
Bypass (Black↔Red)	**2A max continuous** (relay coil bypass path)
Input fuse	2A blade fuse

Protection

Reverse polarity	Protected (MOSFET + diode)
Load dump (ISO 7637)	Protected (24V TVS,)
Output flyback	Protected (flyback + Schottky)
Input filtering	100µF bulk + HF decoupling

Wireless

WiFi	2.4 GHz, 802.11 b/g/n (access point mode)
Bluetooth	Bluetooth 5.0, scan mode for Tag detection
BLE range	1–10m configurable (5 levels)
Antenna	Internal Antenna

Environmental

Operating temp	-20°C to +70°C
Storage temp	-30°C to +85°C
Humidity	10–90% non-condensing
IP rating	IP30 (install in dry location)

Physical

Dimensions	approx. 55 × 35 × 15 mm
Weight	approx. 40 g (with harness)
Harness length	30 cm (6 wires, AWG 20)
Enclosure	ABS plastic or heat-shrink wrapped

Safety & Compliance

⚠ Critical safety warnings

- **Maximum 2A on Yellow, White, Black, and Red wires.** Connecting any of these to higher loads (ECU power relay, fuel pump, starter motor, horn, siren) will destroy the module and void warranty.
- **Always install the 2A fuse on the Green wire.** Do not bypass.
- **Do not install on safety-critical wiring** such as airbags, ABS, or stability control.
- **Disconnect vehicle battery before installation** to prevent shorts.
- **Professional installation recommended.** Improper installation may void vehicle warranty or affect other systems.

Compliance

CE	RoHS	UKCA
Compliant with EU directives 2014/30/EU (EMC) and 2014/53/EU (RED)	Restriction of Hazardous Substances Directive 2011/65/EU compliant	Conformity Assessed for the United Kingdom market

Warranty

LOCKCAR IC3262 is covered by a **12-month limited warranty** from date of purchase against manufacturing defects. The warranty covers component failures under normal use.

Warranty exclusions

The warranty does NOT cover:

- Damage caused by connecting Yellow, White, Black, or Red wires to loads exceeding 2A continuous
- Damage from incorrect wiring, reverse polarity for extended periods, or short circuits
- Damage from water, humidity, or installation in wet environments
- Damage from improper or unprofessional installation
- Cosmetic damage, normal wear, or accidental damage
- Modules tampered with or modified

Limitation of liability

LOCKCAR® is not responsible for damages to the vehicle, vehicle electrical systems, or third-party components resulting from installation, use, or malfunction of this product. Installation is performed at the installer's risk. Always test the system thoroughly before relying on it for security.

Support & contact

For technical support, warranty claims, or product questions, contact LOCKCAR® through the app or visit the support page indicated on the product packaging.