

User Manual for the Akrapovič Sound Kit

BMW M5 (F90)





Akrapovič Sound Kit

CONGRATULATIONS -

Congratulations on purchasing the Akrapovič Sound Kit. The Akrapovič Sound Kit is a product of Akrapovič d.d., Malo Hudo 8a, 1295 Ivančna Gorica, Slovenia ("Akrapovič").

Please read this entire user manual carefully prior to installing and using the Akrapovič Sound Kit.

The Akrapovič Sound Kit should be used only with original Akrapovič exhaust systems. The Akrapovič Sound Kit may be operated using the enclosed Sound Kit Remote Controller or with the Akrapovič Car Sound Kit App.

This Akrapovič Sound Kit is intended for use only in BMW M5 (F90) cars. Use or adaption of the Sound Kit for other types of vehicles may result in non-working products.

Please entrust the installation of the Akrapovič Sound Kit to a trained professional skilled in car electronics and knowledge of exhaust system installation and performance. The instructions provided in this manual should be followed to ensure proper installation and safe use of the Akrapovič Sound Kit. Akrapovič and/or its partners shall not be held liable for any damage or personal injury (including direct, indirect, or consequential damage) sustained as a result of improper installation of the Akrapovič Sound Kit, use contrary to the instructions and warnings contained herein, or use with exhaust systems other than Akrapovič (original) exhaust systems or vehicles other than those specified on the particular Akrapovič Sound Kit box and/or the official Akrapovič website.

If you have any questions regarding the installation and/or proper use of the Akrapovič Sound Kit or this user manual, contact your local authorized Akrapovič partner.

For more information about the Akrapovič Sound Kit and/or Akrapovič exhaust systems, see the official Akrapovič website at:

http://www.akrapovic.com

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The photographs and other illustrations in this manual are symbolic and are intended to help represent individual steps for proper installation and use, as well as for a general overview. The actual component parts of the Akrapovič Sound Kit may not entirely correspond to the photographs and other illustrations.

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CONTENTS



- 1 key ring
- 1 Sound Kit Remote Controller holder
- 1 user manual with the PIN pairing code (printed on the back cover of this manual)

*Battery included.

Detailed list of parts can be found on the Akrapovič website (please use the QR code on the back page or look for "Schematic view" in the respective product page on www.akrapovic.com).

PRODUCT OVERVIEW

The Akrapovič Sound Kit enables owners of selected Akrapovič car exhausts to control the sound of the system from the cockpit of their vehicle. Using Akrapovič technology, the driver can easily switch between two distinctive sound modes.

As an alternative to the Sound Kit Remote Controller, Akrapovič has created a smartphone app (for iOS and Android) to provide an even better connection to the receiver.

The operation of the Akrapovič Sound Kit using the Akrapovič Car Sound Kit App requires the PIN pairing code, which is permanently written on the Sound Kit Receiver and is printed on the back cover of this manual. **KEEP THIS MANUAL FOR FURTHER REFERENCE because the PIN pairing code is unique to a particular Akrapovič Sound Kit and cannot be retrieved if it is lost or if its inscription on the Sound Kit Receiver becomes unreadable or inaccessible.**

In case of replacement of the Sound Kit Receiver, Sound Kit Remote Controller must also be replaced, since it is not transferable between Sound Kit Receivers after it has been paired. It is possible to use the Akrapovič Sound Kit with more than one Sound Kit Remote Controller (not at the same time). Additional Sound Kit Remote Controllers can be purchased separately; contact your local authorized Akrapovič partner for more information.

SAFETY WARNINGS

Road Safety

To avoid traffic accidents, use the Akrapovič Sound Kit system responsibly and safely, and always obey local traffic rules.

Use of the Sound Kit Remote Controller and the Akrapovič Car Sound Kit App while driving may cause distraction, so avoid operating the Akrapovič Sound Kit system in circumstances that prevent you from focusing on safe driving. Using a smartphone while driving may be prohibited in some countries - check local traffic rules.

Note that using the Akrapovič Sound Kit system influences the engine response and torque generated, causing certain changes in the vehicle response - therefore do not use the Akrapovič Sound Kit system in poor weather conditions. When using the Akrapovič Sound Kit, always consider the road and traffic conditions.

Use of the Sound Kit Remote Controller and/or Akrapovič Car Sound Kit App by persons other than the driver (especially children) and

consequently unexpected changes both sound modes in uncontrolled circumstances may take drivers by surprise, endangering the safety of the passengers in the vehicle and/or other road users or causing interference-related malfunctions. Refer to the Interference section below.

Interference

All wireless devices are susceptible to or may cause interference. Do not use the Sound Kit Remote Controller in environments where such interference might cause malfunction of machines or devices and/or endanger the lives of others (e.g., in airplanes, in hospitals, or near medical equipment or implanted medical devices) as well as in places where the use of wireless devices is prohibited or restricted.

Child Safety

The Sound Kit Remote Controller should be kept out of reach of children because it contains small parts. The Sound Kit Remote Controller and/or Akrapovič Car Sound Kit App should not be operated by children. Refer to the Road Safety section above.

OPERATING THE AKRAPOVIČ SOUND KIT WITH THE SOUND KIT REMOTE CONTROLLER

PAIRING PROCESS with a New Sound Kit Remote Controller

For the Sound Kit Remote Controller to work, it must be paired with the Sound Kit Receiver. The (original) Akrapovič exhaust system with the valves and Sound Kit Receiver must first be installed. Refer to the Akrapovič exhaust system and the Akrapovič Sound Kit Installation Manual.

To pair the Sound Kit Remote Controller with the Sound Kit Receiver, press and hold the button on the Sound Kit Remote Controller until the red LED starts flashing. Switch the car **ON** to supply the Sound Kit Receiver.

The pairing process will occur automatically within ten seconds. If the pairing process is completed successfully, the LED (white or red) on the Sound Kit Remote Controller will turn **ON** for fifteen seconds.

If the pairing is unsuccessful, the LED light on the Sound Kit Remote Controller will flash white three times and switch to sleep mode. If this happens, you should repeat the complete pairing process.

After the pairing process is completed, the Sound Kit Remote Controller can only be used with the corresponding installed and paired Sound Kit Receiver.

The pairing process must be completed before the first use of the Akrapovič Sound Kit.

HOW TO USE the Sound Kit Remote Controller

For the Sound Kit Remote Controller to work, it must be used in the vehicle or within a twenty meter range.

Press the Sound Kit Remote Controller button to switch between two distinctive sound modes.



OPERATING OF THE VALVES IN DIFFERENT CAR MODES

Sound mode 1 can also be called Adaptive mode. In this mode, valve operation depends on the selected car mode (Efficient, Sport and Sport+), pedal position and engine speed. This mode is optimized for every day use with its balance of engine performance and sound experience.

Sound mode 2 can also be called Race mode. Valves can be completlly controlled with optional Akrapovič Sound Kit Remote or mobile app and can be opened/closed at any time - if closing of the valves does not effect the engine performance. This mode is intended to be used for racing purposes only.

The LED colors change when the valve position (the modes of the Akrapovič Sound Kit) is changed:



White Sound mode 1

Blinking White

no communication with the Sound Kit Receiver; refer to the troubleshooting section

Rea

Sound mode 2

Blinking Red

communication with the Sound Kit Receiver is working but there is an issue with the valve system; see the troubleshooting section No color: sleep mode

Orange: battery level too low to operate

or detected default on the battery

If the button is not pressed for a full fifteen seconds, the Sound Kit RemoteController enters sleep mode until the next time it is pressed.

Note that the valves are by default always in Sound mode 1 position when the engine is started. If the Sound Kit Remote Controller stops operating during driving (e.g., the battery runs out, or the Sound Kit Remote Controller is damaged or is not functioning due to some other technical reason), switching between the modes will be automatically managed by switching between different car modes (Efficient, Sport and Sport+).

At the next engine start, the default mode is applied.

The Sound Kit Remote Controller will not function when the Akrapovič Car Sound Kit App is connected.

KEY RING AND SOUND KIT REMOTE CONTROLLER HANGER MOUNTING INSTRUCTIONS

1. Adding the Key Ring to the Sound Kit Remote Controller Simultaneously press the Sound Kit Remote Controller side buttons and insert the key ring support, as shown in **Figures 1 and 2**.







Figure 2

2. Mounting and Using the Sound Kit Remote Controller Hanger

Peel off the protective strip (Figure 3), and correctly orient and stick the Sound Kit Remote Controller together on the hanger in the desired position (Figure 4).



Figure 3

Figure 4

The Sound Kit Remote Controller can be removed from its hanger by pressing the side buttons simultaneously (Figure 5).



Figure 5

- 3. Battery Replacement for the Sound Kit Remote Controller
- 3.1 Unscrew the housing screws and open the Sound Kit Remote Controller housing. Carefully remove the battery by offsetting the marked battery holder pin (Figures 6 and 7). Tool: Use a small PH000 screwdriver.

NOTE: Make sure to insert the new battery correctly! Check the battery polarity (type: Lithium CR2032 3V). Use ONLY disposable brand-named CR2032 3V lithium coin cell batteries in the Sound Kit Remote Controller.

NEVER use rechargeable coin cell batteries or other battery types – Risk of explosion if battery is replaced by an incorrect type.



Figure 6 Figure 7

3.2 After inserting the new battery, carefully snap the housing back together, aligning the side buttons as indicated, and close the housing. Tighten the screws as indicated (Figure 8).



Figure 8

OPERATING THE AKRAPOVIČ SOUND KIT WITH THE AKRAPOVIČ CAR SOUND KIT APP

Important notes

This Akrapovič Sound Kit only works with the Akrapovič Car Sound Kit App. Check the name of the app carefully because the Akrapovič Sound Kit system will not function if the incorrect app is installed.

The Akrapovič Car Sound Kit App is adapted for use on smartphones only and it is not functional on other mobile devices.

The Sound Kit Remote Controller will not function when the Akrapovič Car Sound Kit App is connected. Turn **OFF** the app if you wish to use the Sound Kit Remote Controller instead.

The Akrapovič Car Sound Kit App can be paired with different Akrapovič Sound Kits for cars.

Installing the Akrapovič Car Sound Kit App

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The Akrapovič Car Sound Kit App can be installed on devices listed in the app installer.



> Use the QR code scanner to open and install the **Akrapovič Car Sound Kit App**. The app can be installed from the App Store.

Android

The Akrapovič Car Sound Kit App can be installed on devices listed in the app installer (smartphones with embedded Bluetooth 4.0 Low Energy and Android 4.4.2 and 5.1; 5.0 excluded).



> Use the QR code scanner to open and install the **Akrapovič Car Sound Kit App**. The app can be installed from the Play Store.

2. Opening the Akrapovič Sound Kit Smartphone App for the First Time

After the Akrapovič Car Sound Kit App is installed on your smartphone, switch **ON** the vehicle and open the Akrapovič Car Sound Kit App on your device.

The first time the app is opened, a message will appear and ask if an Akrapovič Sound Kit is installed in the car (Figure 9).







Figure 10

3. Pairing the Akrapovič Sound Kitwith the Smartphone App

Before using the Akrapovič Car Sound Kit App, it must be paired with the Akrapovič Sound Kit Receiver. To pair the Akrapovič Car Sound Kit App with the Sound Kit Receiver, touch **PAIR NEW** (Figure 10).

- The Akrapovič Car Sound Kit App will search for Bluetooth devices.
- The Sound Kit Receiver discovery name is "SoundKit"
- Pressing on it will launch the pairing request
- Enter the PIN paring code as found on the back cover of this manual
- The pairing process is concluded by entering and saving your car name for further use.

4. How to Use the Akrapovič Sound Kit Smartphone App

Touch your car name in the app. A screen with the Sound Kit Remote Controller will appear. Touch the Akrapovič logo in the middle of

the screen **(Figure 11)** to switch between the two different positions of the valves.



Figure 11

Note that the valves are by default always in Sound mode 1 position when the engine is started. If the Bluetooth connection is lost/disconnected or the Akrapovič Car Sound Kit App is closed, the valves remain in the last mode activated until the vehicle's engine is switched **OFF**. At the next engine start, the default mode is applied.

By touching the back button, the app disconnects from the Sound Kit Receiver. The Sound Kit Remote Controller can now be used.

TROUBLESHOOTING

If you're having trouble using the Sound Kit Remote Controller and/ or Akrapovič Car Sound Kit App, first check the following to see if the Sound Kit Remote Controller and/or Akrapovič Car Sound Kit App is paired with the Sound Kit Receiver. If yes, refer to the list of possible solutions in the table below.

If you're unable to resolve the problem based on the suggestions below, contact your local authorized Akrapovič partner.

Sound Kit Remote Controller

PROBLEM	POSSIBLE CAUSE	SOLUTION
No LED on the Sound Kit Remote Controller	Battery level too low to function	Replace the battery.
	Sound Kit Remote Controller not working properly	Remove the battery, press the Sound Kit Remote Controller button for one second, and put the battery back in.

Sound Kit Remote Controller

PROBLEM	POSSIBLE CAUSE	SOLUTION
Orange LED on the Sound Kit Remote Controller	Low battery level or issue with the battery	Replace the battery.
White LED blinking on the Sound Kit Remote Controller	No communication with the Sound Kit Receiver	Check if the vehicle is switched ON.
		Make sure you are within a range of twenty meters from your vehicle.
		Check the receiver: the green LED on the receiver must be ON when pressing the Sound Kit Remote Controller, meaning communication is enabled.
Red LED blinking on the Sound Kit Remote Controller	There is communication with the Sound Kit Receiver but there is some issue with the valve system	Switch OFF the car. Wait one minute and switch ON the car.

Smartphone App

PROBLEM	POSSIBLE CAUSE	SOLUTION
Issues related to connecting or pairing with the Sound Kit Receiver	Not able to discover or connect to the Sound Kit Receiver	Check if the app is adapted for use with your device: refer to the list of devices in the app installer.
		Check if the vehicle is switched ON.
	Not able to pair with the Sound Kit Receiver	Check the PIN pairing code entered.
Smartphone app not working properly	Not able to connect with the Sound KitReceiver	Check if the vehicle is switched ON.
		Restart the app. If the problem persists, restart your smartphone.
		Go to the smartphone's Blue- tooth settings: press on "forget device." Repeat the procedure described under "Opening the Akrapovič Car Sound Kit App for the First Time."

DECLARATION OF CONFORMITY FOR SOUND KIT

COMPANY: Akrapovič d.d.

ADDRESS: Malo Hudo 8a, 1295 Ivančna Gorica, Slovenia

declares that the following products:

PRODUCT NAME: Sound Kit TRADE NAME: Akrapovič TYPE OR MODEL: P-HF 1065

is in conformity with the requirements of the following

Directives of the European Union: Regulation UN/ECE-R10 rev5



FCC NOTICE FOR SOUND KIT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must

accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment **OFF** and **ON**, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio technician for help.

Sound Kit Remote Controller: FCC-ID: 2AECJASK01
Sound Kit Receiver: FCC-ID: 2AECJASR01

Industry Canada compliance statement

This Class B digital apparatus complies with Canadian ICES-003.This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de

l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Sound Kit Remote Controller: IC: 20099-ASK01

Sound Kit Receiver: IC: 20099-ASR01

European Union Directives conformance Statement

Akrapovič d.d. hereby declares that this Akrapovič Sound Kit P-HF841 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC You can view your product's Declaration of Conformity (DoC) to Directive 1999/5/EC (to R&TTE Directive) at www.akrapovic.com/docs/SoundKitCertification.pdf.



Caring for the Environment by Recycling

Please dispose of any materials in accordance with local recycling regulations. When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated, but disposed of in accordance with local regulations concerning battery disposal.



GENERAL WARNING

Because of the world-wide distribution of Akrapovič d.d. products, neither Akrapovič d.d. nor any of its subsidiaries make any representation that the products comply with the air and/or noise emissions laws, or labeling laws, of any jurisdiction. The purchasers are entirely responsible for informing themselves of the applicable laws where the products are to be used and to comply with those law.

Although legal compliance of Akrapovič products in a specific country should be determined by the user, you can find some basic guidance on compliance of your Akrapovič exhaust system with various legal requirements on the product-related part of our website (please use the QR code on the front page or look for the respective product page on www.akrapovic.com). For EC and ECE type approvals, please refer to the certificate enclosed to your product.

WARNING / USA

Various U.S. states and the U.S. federal government have individual laws regulating the use of aftermarket exhaust parts and systems, especially as those parts and systems modify, remove, or replace original equipment

catalysts. Please consult the appropriate laws in your area before installing any aftermarket part or system on your vehicle to ensure compliance with all applicable laws. Neither Akrapovič d.d. nor any of their subsidiaries or the sellers of the parts or systems make any representation that any of their parts or systems comply with any such laws.

WARNING / CALIFORNIA

California laws prohibit the use of any aftermarket exhaust part or system that modifies, removes or replaces original equipment catalysts unless the California Air Resources Board has issued an Executive Order regarding such part or system or unless the part or system is exempted by being used only on racing vehicles on closed courses. Neither Akrapovič d.d. nor any of their subsidiaries make any representation that any of their parts or systems has received such an Executive Order or that any of their parts or systems conform with the racing vehicles exemption. The purchasers are entirely responsible for informing themselves of applicable California laws and to comply with those laws.





Pin pairing code:

Keep this code for future reference.

Refer to the product overview section for important information regarding the pin pairing code.



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