

## ABUS Granit X-Plus 540

# ABUS Granit X-Plus 540 U-Lock Instruction Manual

Model: Granit X-Plus 540

Brand: ABUS

## 1. INTRODUCTION AND OVERVIEW

The ABUS Granit X-Plus 540 is a high-security U-lock designed to provide robust theft protection for bicycles, particularly in urban environments. This lock incorporates advanced security features to resist various attack methods, ensuring the safety of your valuable bicycle.

### Key Features:

- **High Security Rating:** Achieves a security rating of 15 out of 15, indicating superior protection.
- **Hardened Steel Shackle:** Features a patented 13mm temper hardened steel square parabolic shackle.
- **Double Bolting Mechanism:** The shackle is double-bolted into the lock body, enhancing resistance against pulling and hitting attacks.
- **X-Plus Key Cylinder:** Equipped with a patented ABUS X-Plus Key cylinder, offering extremely high protection against picking attempts.
- **USH Bracket:** Includes a rattle-free USH bracket for convenient transport on your bicycle.





Figure 1: The ABUS Granit X-Plus 540 U-Lock, showcasing its robust shackle and lock body.

## 2. SETUP AND INSTALLATION

The USH bracket provides a secure and convenient way to transport your Granit X-Plus 540 U-lock on your bicycle frame.

### Attaching the USH Bracket:

1. Identify a suitable location on your bicycle frame (e.g., seat tube, down tube) that allows for secure

attachment and does not interfere with pedaling or other components.

2. Use the provided straps or screws to firmly attach the USH bracket to the chosen frame tube. Ensure the bracket is oriented correctly to hold the U-lock securely.
3. Tighten all fasteners to prevent movement during riding. The bracket is designed to be rattle-free.

#### **Inserting the U-Lock into the Bracket:**

- Align the U-lock body with the bracket.
- Slide the U-lock into the bracket until it clicks securely into place. Ensure it is firmly seated and does not wobble.



Figure 2: The USH540 mounting bracket components, designed for easy attachment of the U-lock to a bicycle frame.

### **3. OPERATING INSTRUCTIONS**

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#### **Locking Your Bicycle:**

1. Position your bicycle next to a secure, immovable object (e.g., a bike rack, lamppost).
2. Remove the U-lock from its USH bracket.
3. Insert the shackle through the bicycle frame, at least one wheel, and around the immovable object. Aim to fill as much of the shackle's internal space as possible to minimize leverage for potential

thieves.

4. Align the ends of the shackle with the openings on the lock body.
5. Push the shackle firmly into the lock body until it clicks and locks automatically. Ensure both ends of the shackle are fully engaged.

### **Unlocking Your Bicycle:**

1. Insert the X-Plus key into the key cylinder.
2. Turn the key to disengage the locking mechanism. The shackle will release from the lock body.
3. Remove the shackle from your bicycle and the immovable object.
4. Re-attach the U-lock to its USH bracket for transport.

### **Using the Lighted Key:**

- One of the supplied keys features an integrated LED light.
- Press the small button on the key to activate the light, illuminating the keyhole for easier unlocking in dark conditions.



Figure 3: The ABUS Granit X-Plus 540 U-Lock with its shackle separated from the lock body, illustrating the locking mechanism.



Figure 4: One of the two X-Plus keys provided, featuring an integrated LED light for convenient use in low-light conditions.

## 4. MAINTENANCE

Regular maintenance will ensure the smooth operation and longevity of your ABUS Granit X-Plus 540 U-lock.

### Key Cylinder Care:

- Periodically apply a small amount of lock lubricant (e.g., graphite-based or silicone-free spray) into the key cylinder. This helps prevent dust and moisture buildup and ensures smooth key insertion and turning.
- Avoid using oil-based lubricants as they can attract dirt and grime.

### General Cleaning:

- Wipe down the lock body and shackle with a damp cloth to remove dirt and debris.
- Ensure the lock is dry before storing, especially after exposure to rain or moisture.

## 5. TROUBLESHOOTING

### Stiff Locking Mechanism:

- If the shackle is difficult to insert or remove, apply lock lubricant to the key cylinder and the shackle ends.
- Ensure the shackle is clean and free of dirt or rust.

### Lost Keys:

- In case of lost keys, use the provided X-Plus Code Card to order replacement keys from an authorized ABUS dealer. Keep this card in a safe place, separate from your keys.



Figure 5: The X-Plus Code Card, essential for ordering replacement keys for your ABUS Granit X-Plus 540 U-Lock.

## 6. SPECIFICATIONS

<b>Mechanism Type</b>	Key
<b>Security Rating</b>	15 of 15
<b>Shackle Diameter</b>	13 mm / 0.5 inch
<b>Shackle Shape</b>	Square Parabolic
<b>Shackle Height</b>	300 mm / 11.8 inches
<b>Shackle Inner Width</b>	10.8 cm / 4.25 inches
<b>Material</b>	Alloy Steel

<b>Weight</b>	1870 g / 4.12 pounds
<b>Keys Supplied</b>	2 (1 with LED light)
<b>Included Accessories</b>	USH bracket, Key Code Card

## 7. WARRANTY AND SUPPORT

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Your ABUS Granit X-Plus 540 U-Lock is covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty details, please refer to the documentation included with your product or visit the official ABUS website.

For technical support, replacement parts, or warranty claims, please contact ABUS customer service through their official website or an authorized dealer. When contacting support, please have your product model and Key Code Card information readily available.