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Flashloader Hand-held User Guide

The GIAC Flashloader Hand-held Switcher allows a user to switch between GIAC-tuned software programs with the touch of a button. Options include stock, pump gas performance (91/93-octane) or race gas performance (100+ octane), several boost settings as well as “valet” and “anti-theft” modes. The product is a pocket-sized, hand-held device that works like a stand-alone PC plugging directly into the ECU port. The Flashloader Hand-held uses serial flashing technology and requires no additional hardware within the ECU. This guide provides general usage instructions.

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I. About Version 4.0

Firmware Version 1 (2004) supported most IMMO3 VAG cars and Porsche.

Firmware Version 2 (2005) added support for B5 S4 protocol as well as some European spec. cars.

Firmware Version 3 (2005) was never released and remained an internal test version.

Firmware Version 4 (2006) added support for more European spec. cars, improved user notification during first-time connections, and introduced these exciting features:

- **Privacy Firewall:** The Flashloader Hand-held Privacy Firewall feature offers a higher level of security for your new programming and your car. It requires a password, a 4-digit PIN. If the Privacy Firewall feature has been purchased, the Flashloader Hand-held will not function properly if this PIN has not been programmed into the device. Programming this PIN is typically done at point-of-sale by an authorized GIAC dealer.
- **Boost Controller:** Users now have the option to purchase a boost control product with three boost settings to choose from within an acceptable range. The buttons offer mild, MT01 (150), moderate, MT02 (210), and wild, MT03 (255). These settings will only affect PUMP or RACE programming.
- **U-Select Compatibility:** Version 4.0 Software is fully compatible with GIAC files created in the new U-Select platform as well as with older GIAC bundled switching software flashes (2x, 3x, 5x). See inset for full description of U-Select Software.

U-Select Software:

With this file platform, a user can select Flashloader Hand-held Switcher files a la carte! With the minimum purchase of a GIAC pump program, the user can purchase any number (up to 7) and any combination (60 possible) of other programs. For example a two program FHH switcher with U-Select files might include pump/stock, pump/race, pump/valet, or pump/kill combinations.

Under the old file platform GIAC programs were bundled in pre-selected combinations of 2- 3- and 5- program products. A two program switcher had one option: pump/stock.

If you are unsure about which Flashloader Hand-held Software version you have, look at the back of the device and compare it to the models depicted in the picture below.



Regardless of the firmware version you have now, you may upgrade your firmware at any time through an authorized GIAC distributor.

II. Connecting to the Car's Computer

To operate the GIAC Flashloader Hand-held, plug the device into the port of the car's computer, or engine control unit (ECU) (typically under the dash).

Press the READ button. Each time the READ button is pressed, the red "Busy" LED will flash a few times and then the LED's of the available modes will blink. The green LED's will light up to indicate which modes have been purchased. The MTO1 LED will turn on if the Privacy Firewall feature has been purchased. The MTO2 LED will turn on if the boost feature has been purchased. The LED's will turn off after a second and the "current mode" will be indicated by the corresponding LED.

The first time that the Flashloader is connected to the ECU, there should be no "current mode" indicated. Pressing the READ button will cause the red Busy-LED to blink indicating that there is no information that can be read. Pressing another available button will set the mode to the corresponding programming.

If the READ button or PUMP button is pressed and the corresponding LEDs continue to blink, then the connection to the ECU has failed. If the Privacy Firewall option was purchased, it may be that an incorrect PIN was programmed into the hand-held or the ECU. Contact your authorized GIAC dealer to remedy this situation.



III. Operating the Hand-held

After a connection has been made with the ECU, the Flashloader Hand-held enables switching among different GIAC programs by pressing the corresponding button:

- READ will read the current mode and indicate position by illuminating one of the five buttons listed below.
- STOCK activates stock settings.
- PUMP activates GIAC performance programming for regular pump gas.
- RACE activates GIAC performance programming for race gas.
- KILL prevents the car from running. The programming is written to prevent KILL button activation above 0 RPMs.
- VALET activates programming with substantially lower power.
- Pressing any of the MTO buttons, while in PUMP or RACE mode, sends a boost command to the ECU with different values.
 1. MTO1 changes the boost to 150
 2. MTO2 changes the boost to 210
 3. MTO3 changes the boost to 255

For most ECUs, GIAC's downloadable Windows™-based Switching Software allows direct entry of boost values instead of the three toggle settings above.

If a button is pressed for a program and it fails to enter the mode properly, or if the corresponding feature has not been purchased then the button LED will continue to blink until another button is pressed.

IV. Important Notes

- Although some switching modes can be selected while the car is moving, do not use the Flashloader Hand-held while driving. For your safety and the safety of others, make sure the car is parked and out of traffic while operating the device. It is against the law in many states to use a computer, cell phone or other device of distraction while driving.
- Use the highest octane available. You must use at least 91-octane for regular GIAC performance software. For race gas programming, use at least 100-octane fuel.
- Exposure to water, extreme temperatures, or excessive trauma will damage your Flashloader Hand-held device. All GIAC software is for racing or off-road use only. GIAC does not endorse its software for street use.

V. Setting Your PIN

If you have purchased the Privacy Firewall feature, an original password/PIN was created by your GIAC authorized dealer at the point of sale. At the time of installation a PIN should have been programmed both in the ECU and Hand-held device (if purchased at the same time). In rare instances you may need to reset the PIN. It may be that the Hand-held was purchased at a different time than the software; it may be that you need to borrow a friend's Hand-held for use with your car; or, you may have two cars and want to use one hand-held. For these reasons, it is also important to get the PIN from your dealer and retain it somehow. To reset your PIN, follow these steps:

1. Disconnect the Flashloader Hand-held device from the ECU.
2. Plug the device back to the ECU while simultaneously pressing the MTO1 button, found on the bottom left corner of the Flashloader.
3. The red "Busy" LED will turn on and stay lit indicating that a password must be entered. Take your finger off the button when the red "Busy" LED turns on.
4. Enter your password. The password must be of length 4. There are no exceptions. Press any of the buttons for your password entry except for the MTO buttons at the bottom of the device.
5. After pressing the fourth button the red "Busy" LED will turn off indicating that the user is operating in Normal mode. To reset the password repeat from Step 1.

IMPORTANT: If you want to change your PIN, it must match the PIN in the ECU that you want to use the Hand-held with.