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IMPORTANT

Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions.

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Safety Information

For your own safety and the safety of others, and to prevent damage to the device and vehicles upon which it is used, it is important that the safety instructions presented throughout this manual be read and understood by all persons operating or coming into contact with the device.

There are numerous procedures, techniques, tools, and parts required for servicing vehicles, as well as the skills of the person doing the work. Because of the vast number of test applications and variations in the products that can be tested with this equipment, we cannot possibly anticipate or provide advice or safety messages to cover every circumstance. It is the automotive technician's responsibility to be knowledgeable of the system being tested. It is crucial to use proper service methods and test procedures. It is essential to perform tests in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, the device being used, or the vehicle being tested.

Before using the device, always refer to and follow the safety messages and applicable test procedures provided by the manufacturer of the vehicle or equipment being tested. Use the device only as described in this manual. Be sure to read, understand, and follow all safety messages and instructions in this manual.

Safety Messages

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.

DANGER

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

Safety Instructions

The safety messages herein cover situations Autel is aware of at the time of publication. Autel cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.

 **DANGER**

When an engine is operating, keep the service area **WELL VENTILATED** or attach a building exhaust removal system to the engine exhaust system. Engines produce carbon monoxide, an odorless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.

 **It is not advised to use headphones at a high volume**

Listening at high volumes for long periods of time may result in loss of hearing.

 **Safety Warnings**

- Always perform automotive testing in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated work area, for exhaust gases are poisonous.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Be extra cautious when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Keep a fire extinguisher suitable for gasoline, chemical, and electrical fires nearby.
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the test equipment dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Refer to the service manual for the vehicle being serviced and adhere to all diagnostic procedures and precautions. Failure to do so may result in personal injury or damage to the test equipment.
- To avoid damaging the test equipment or generating false data, make sure the vehicle battery is fully charged and the connection to the vehicle DLC is clean and secure.
- Do not place the test equipment on the distributor of the vehicle. Strong electro-magnetic interference can damage the equipment.

1 MaxiFlash LVCI — Vehicle Communication Interface

1.1 Function Description

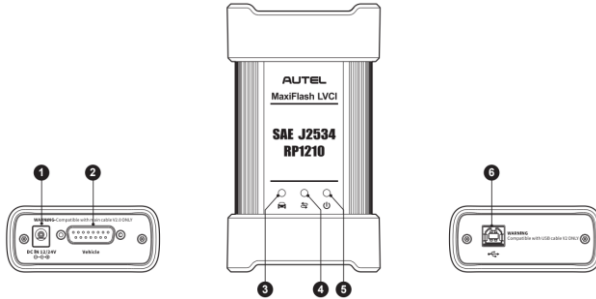


Figure 2-4 MaxiFlash LVCI Views

1. DC Power Supply Input Port
2. Vehicle Data Connector (DB15-Pin)
3. Vehicle LED — flashes green when communicating with vehicle system.

4. Connection LED — lights solid green when connected to the tablet via USB cable; lights solid blue when connected to the tablet via Bluetooth connection.
5. Power LED — refer to [Table 2-3 Power LED Description](#) for details.
6. USB Port

Table 2-3 Power LED Description

LED	Color	Description
Power	Yellow	Lights yellow automatically at power-up when VCI is self-testing.
	Green	Lights solid green when powered on.
	Red	<ul style="list-style-type: none"> • Lights solid red when a system failure occurs. • Flashes red when VCI is upgrading.

! IMPORTANT

Do not disconnect the programming device while the vehicle LED is on. If the flash programming procedure is interrupted while the vehicle's ECU is blank or only partially programmed, the module may be unrecoverable.

1.1.1 Programming Capability

The MaxiFlash LVCI (namely VCI device) is an SAE J2534 & RP1210 compliant PassThru programming interface device. Using the updated OEM software, it is capable of replacing the existing software/firmware in the Electronic Control Units (ECU), programming new ECUs and fixing software-controlled drivability issues and emission issues.

1.1.2 Communication Capability

The MaxiFlash LVCI supports Bluetooth (BT) and USB cable communications. It can transmit vehicle data to the tablet with or without a cable connection. In open areas, the working range of the transmitter through Bluetooth communication is up to 328 feet (about 100 m). If the signal is lost due to being taken out of range, communication will be restored once the tablet is within range.

1.2 Power Sources

The VCI device can receive power from the following sources:

- Vehicle Power
- AC/DC Power Supply

2.2.2.1 Vehicle Power

The VCI device operates on 12/24 V vehicle power, which receives power via the vehicle data connection port. The device powers on whenever it is connected to an OBD II/EOBD compliant Data Link Connector (DLC). For non-OBDII/EOBD compliant vehicles, the device can be powered from an auxiliary power outlet adapter or other suitable power port on the test vehicle using the auxiliary power cable.

2.2.2.2 AC/DC Power Supply

The VCI device can be powered from a wall socket using the AC/DC power adapter.

1.3 Technical Specifications

Table 2-4 MaxiFlash LVCI Specifications

Item	Description
Communications	<ul style="list-style-type: none">• BT 4.2 + EDR• USB 2.0
Wireless Frequency	2.4 GHz
Input Voltage Range	9 V DC to 28 V DC
Supply Current	<ul style="list-style-type: none">• 110 mA @12 V DC• 90 mA @ 24 V DC
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F)
Storage Temp.	-10 °C to 60 °C (14 °F to 140 °F)
Dimensions (L x W x H)	148.2 mm (5.83") x 85.5 mm (3.37") x 36.5 mm (1.44")
Weight	286 g (0.63 lbs.)

FCC STATEMENT :

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.

Warning: 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/TV technician for help.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

- English: "

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."

- French:"

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 n' 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."