

GBU-12/16/10

Laser guided amunition (Paveway 2)

- [Paveway II - GBU-12/16/10 Overview](#)
- [Using Paveway II Bombs \(GBU-10/12/16\) with the ATFLIR](#)

Paveway II – GBU-12/16/10

Overview

The **Paveway II** family of **Laser-Guided Bombs (LGBs)** are precision strike weapons that guide onto a **coded infrared laser spot**, typically designated by the launching aircraft, a wingman (buddy lasing), or a JTAC.

They’re ideal for **stationary** or **slow-moving** targets in clear weather, especially when collateral damage must be minimized.

☐☐ Bomb Breakdown

Variant	Warhead	Weight	Based On
GBU-10	Mk-84	2000 lb	High-drag general-purpose bomb
GBU-16	Mk-83	1000 lb	Balanced between punch and weight
GBU-12	Mk-82	500 lb	Lightest, best for CAS or precision strikes

■
Each LGB consists of:

- A **Mk 8x series bomb body**
- A **laser seeker head**
- A **guidance computer**
- A **maneuvering tail kit**

☐☐ Guidance Principles

- Seeks **reflected laser energy** from a specific 4-digit laser code (e.g., 1688)
- **Can only guide when laser is active and visible to seeker**
- **No GPS** – loses guidance if the laser is blocked or turned off

- Best for **direct line-of-sight attacks in clear weather**
 - Cannot guide behind mountains, through clouds, or if laser is obstructed
-

☐ Range & Employment Envelope

Altitude	Release Range (approx.)
20,000 ft	7-8 nm
10,000 ft	3-4 nm
5,000 ft	1.5-2.5 nm

■

Higher altitude = greater standoff, but increased exposure to SAMs.

☐ Best Use Cases

- **Static SAM sites**
 - **Buildings, bunkers**
 - **Vehicles and convoys (stationary or slow)**
 - **Bridges, radars**
 - Situations requiring **surgical precision** or **minimum collateral damage**
-

⚠ Limitations

- Must maintain **line of sight to target** during guidance
- Weather and terrain can **break the laser**
- Laser code **must match** between seeker and designator
- Not fire-and-forget — pilot or buddy must **continuously lase**

Using Paveway II Bombs (GBU-10/12/16) with the ATFLIR

With the **ATFLIR pod**, the F/A-18C can independently find, designate, and guide laser-guided bombs with precision. Here's how to use the Paveway II series step-by-step in DCS.

□ Loadout Prep

- Equip the desired LGB(s) and the **AN/ASQ-228 ATFLIR pod**
- Ensure your **laser code** (default: 1688) matches what's set on the bomb(s)

“ You can set laser codes in the **rearming menu** or use the **Ground Crew > Rearm&Refuel > Laser Code** option in the comms menu.

□□ Cockpit Setup

1. **Master Arm: ON**
 2. **A/G Master Mode**
 3. **FLIR: ON**
 - Select FLIR page on the DDI
 - Ensure ATFLIR is warmed up and functioning
 4. **Laser: ARM**
 - On the FLIR page, box **LTD/R** (arms the laser designator)
 - Box **TRIG** to enable **manual lasing** (if wanted)
-

☐☐ FLIR Targeting

1. Use the **Sensor Control Switch (SCS)** to give the FLIR page TDC priority.
 2. Slew the targeting pod onto the target using the TDC.
 3. Press **TDC depress** to designate the target.
 4. Pod should enter **AUTO (point track)** if on a valid target.
-

☐☐ Manual vs. Auto Lasing

Method	Description
Manual Lasing	TRIG boxed → pilot must hold trigger (second detent) to fire laser
Auto Lasing	TRIG unboxed → aircraft fires laser automatically ~10 sec before impact

■
For most cases, **auto lasing** is safer and reduces pilot workload. Use **manual lasing** when timing is critical or when buddy lasing.

☐☐ Bomb Release

1. Switch to **AUTO release mode by unboxing TRIG** (recommended).
 2. Fly the steering line until the **release cue** appears.
 3. Weapon releases when you hold the pickle button over the drop line.
 4. Maintain **line of sight** to the target until impact.
-

☐ Successful Hit Checklist

- ☐
- ☐ LTD/R boxed
- ☐
- ☐ TRIG boxed (if using manual lasing)
- ☐

- ☐ Laser code matches bomb
 - ☐
 - ☐ TGT designated in FLIR
 - ☐
 - ☐ Laser is fired on time
 - ☐
 - ☐ Line of sight is maintained until impact
-

Tips & Notes

- Stay above **6,000 ft AGL** for safe lasing distance.
- Lase **8-10 seconds before impact** in manual mode.
- Use **NARROW FOV** and **Zoom Level 2** for precision.
- Switch to **IR mode** at night or in poor lighting.