

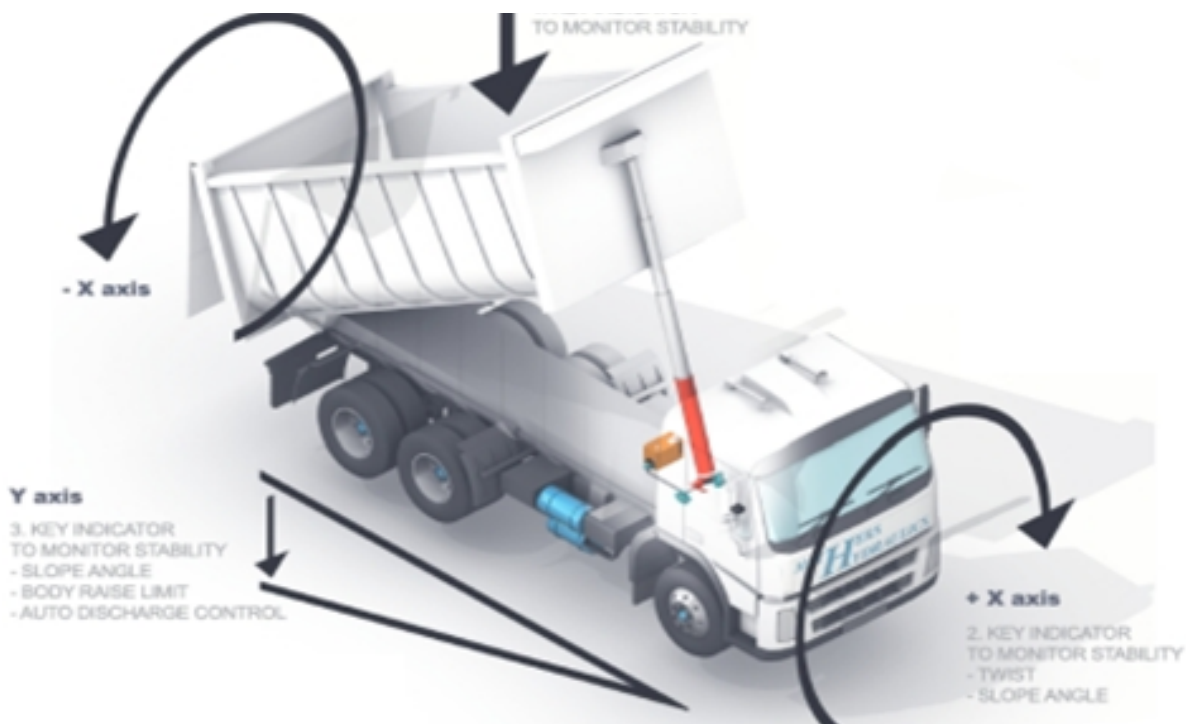
# ANTI\_TILT

Tilt Warning device










# Overview:

This Anti-Tilt Warning Device is designed for heavy-duty trucks and dumper vehicles operating in uneven terrain. It helps prevent accidents caused by excessive tilting during loading/unloading operations by actively monitoring the truck's tilt angle and warning the operator in real-time.



# FEATURES

-  Tilt Monitoring Range:  $\pm 90^\circ$
-  Warning Trigger Point:  $\pm 5^\circ$  from horizontal
-  Warning System:
  - (1) Red LED blinking Array
  - (2) Buzzer beep (continuous).
-  Display: “1.3inch” OLED screen
- Real-time tilt angle display
-  Power Source: Rechargeable battery (Internal)
- Input: 15V Charger (included)
-  Mounting: Strong neodymium magnets for quick attachment to iron surfaces
-  Enclosure: Rugged iron box for durability and protection

# **OPERATION INSTRUCTIONS**

## **Step 1: Mounting the Device**

- Attach the device to a flat iron surface (usually near the operator cabin or body frame) using the magnetic base.
- Ensure it is securely fixed and leveled properly.

## **Step 2: Power ON**

- Turn on the device using the power switch (if available).
- The OLED will display the current tilt angle (in degrees).

## **Step 3: Normal Operation**

- During normal operation (tilt within  $\pm 5^\circ$ ), the device will remain silent.
- OLED continues to show real-time tilt values.

## **Step 4: Tilt Warning**

- If tilt exceeds  $\pm 5^\circ$ :
  - RED LED starts blinking.
  - Buzzer turns ON continuously to alert the operator.

## **Step 5: Reset or Restore**

- As soon as tilt returns within safe limit ( $\pm 5^\circ$ ), the LED and buzzer automatically turn OFF.

# SPECIFICATIONS

Parameter	Specification
Tilt Range	$\pm 90$ degrees (Pitch/Roll)
Warning Trigger	$> \pm 5$ degrees
Battery Voltage	12V Rechargeable Battery
Charging Input	15V DC
Display Type	OLED 0.96"
Mounting	Magnetic base
Casing	Iron box (powder coated)
Alerts	LED Blinking + Buzzer Sound

## **CHARGING INSTRUCTIONS**

1. Plug in the 15V charger to the DC input port.
2. A charging LED (if available) will indicate charging status.
3. Full charge time: Approx. 2-3 hours.
4. Recommended to charge after each work shift or once daily.

## **SAFETY INSTRUCTIONS**

1. Do not submerge the device in water.
2. Do not expose it to direct flames or extreme heat.
3. Always turn off the device during charging.
4. Keep away from strong electromagnetic interference (welding, motor drives).

## **MAINTENANCE & CARE**

1. Wipe the device regularly with a clean, dry cloth.
2. Ensure magnetic base is free from dirt and metal chips.
3. Check battery status periodically.
4. If buzzer or display malfunctions, contact the manufacturer.

# WARRANTY

1. 1 Year Limited Warranty from date of purchase.
2. Covers manufacturing defects only.

# TROUBLESHOOTING

<b>Issue</b>	<b>Possible Solution</b>
OLED not displaying	Check power switch / battery charge
Buzzer not working	Check tilt angle or contact support
LED not blinking	Ensure tilt exceeds $\pm 5^\circ$
Device not charging	Inspect charger and DC jack



# UNIVERSAL

## ELECTRICALS & ELECTRONICS

An ISO 9001:2015 Certified



Address: NO#36 Seerappa Layout, 2nd Cross, Lakshmipura Main Road, Abbigere Industrial Area, Abbigere Village, Bengaluru-560090.

Company: Universal Electrical & Electronics

Website: [www.ueeindia.com](http://www.ueeindia.com)

Mobile: [+91 8494900615](tel:+918494900615).

Email: [eande.universal@gmail.com](mailto:eande.universal@gmail.com)