

# Installation Manual



## UTX SkidWeigh Plus

Lift Truck Automatic True Idling Data Collection

UTX V118



## General Installation Guide

This **UTX SkidWeigh Plus V118** Series guide describes how to install, test and use your fully automatic onboard operational true idling recording system used to determine base line for fleet idling times. **This UTX SkidWeigh Plus system does not require any calibration in the field or any input from the operator.** In the event that you require additional assistance, please contact customer support via e-mail at [support@skidweigh.com](mailto:support@skidweigh.com) , visit [www.skidweigh.com](http://www.skidweigh.com) or contact us at the address or contact number below:

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## Safety

Always disconnect the vehicle battery while installing SkidWeigh system or any other electronic product.

Make sure that unit, pressure transducer and any other associated cables are securely mounted and do not impede any of the vehicle's controls. Use care when routing the components cables. Route the cables where they will be protected. Use commonly accepted install practices for after market industrial vehicle electronic devices.

The installation of the SkidWeigh systems should only be performed by an acknowledged lift truck dealer technician or end user electro and hydraulic technical installer.

Here are two acceptable methods of making a wire connections:

- \* Soldering your connections (recommended)
- \* Crimp connectors ( with the use of the proper crimping tool)

Regardless of the method you choose, ensure that the connection is mechanically sound and properly insulated. Use high quality electrical tape and shrink tubing where necessary. This product is connected directly to the vehicle's ignition switch, 12 to 55 VDC. There is no on-off switch on the unit.

## Electro-Magnetic Compatibility

CE conformity to EC directive 89/336 (EMC) by application of harmonized standards: Interference stability EN 61000-6-2 and EN 61326-1 interference emit EN 61000-6-3, EN 61326-1 for the pressure transducer.

## UTX SkidWeigh Plus Series

Our policy is one of continuous improvement and the information in this document is subject to change without notice. The software version is displayed on the LCD display once the power is turned on to the system.

## Overview of components

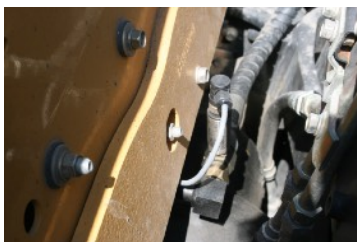
The standard UTX SkidWeigh Plus operational idling recording system consist of two main components:

- \* Digital indicator incorporating impact module, USB port, wiring harness, mounting bracket and anti-vibration mount
- \* Hydraulic pressure transducer with 3 wires cable
- \* Installation & calibration manual and operator usage instruction

## Operational principal

The **UTX SkidWeigh Plus** operational principal is based on monitoring the raw operational data in real time incorporating the proprietary utilization factor software providing true material handling operational idling monitoring, recording and reporting. Every time the vehicle ignition switch is turned on and vehicle is in operational mode the recording session is **automatically initiated without any input from the operator**.

**All true operational idling events are shown to the operator on LCD display in real time.**



### Pressure transducer installation

The pressure transducer must be installed in the lifting hydraulic line **between the lift control valve and lift cylinder(s)**.

Mount a T-piece in lifting hydraulic line.

### Pressure transducer installation precautions

Before installation of the pressure transducer the hydraulic lift circuit must be pressure free.

Pressure transducer has 1/4"-18 NPT male thread. Use thread seal to ensure tight fit.

### Selecting the mounting location for digital indicator



**Note:** Use the mounting bracket with the anti vibration mount and fasten digital indicator on the vehicle dashboard. There are many examples of mounting locations that will depend on the vehicle model. However, additional mounting items such as a flat brackets may be needed to help secure digital indicator.

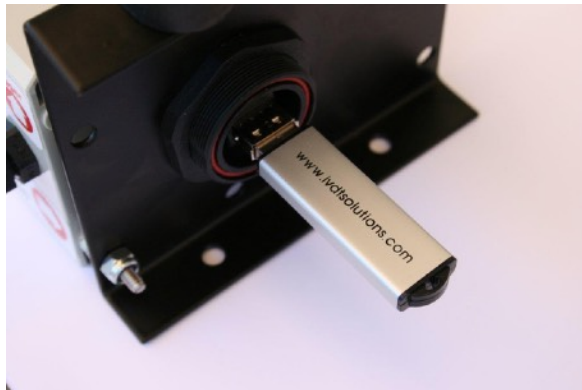
## Electrical connections

All UTX SkidWeigh systems operate from 12 to 55 VDC.

- **Orange Wire (+) Ignition switch**
- **Brown Wire (-) Battery negative**
- **Red Wire, connect to RED wire of the pressure transducer cable**
- **Black Wire, connect to BLACK wire of the pressure transducer cable**
- **White Wire, connect to WHITE wire of the pressure transducer cable**

## Power short circuit protection

All SkidWeigh systems are internally short circuit protected with resettable fuse. There is no need to install external inline fuse in orange wire connected to the ignition switch.



**Note:** System does not require any input from the operator. All data are recorded and shown to the operator in real time.

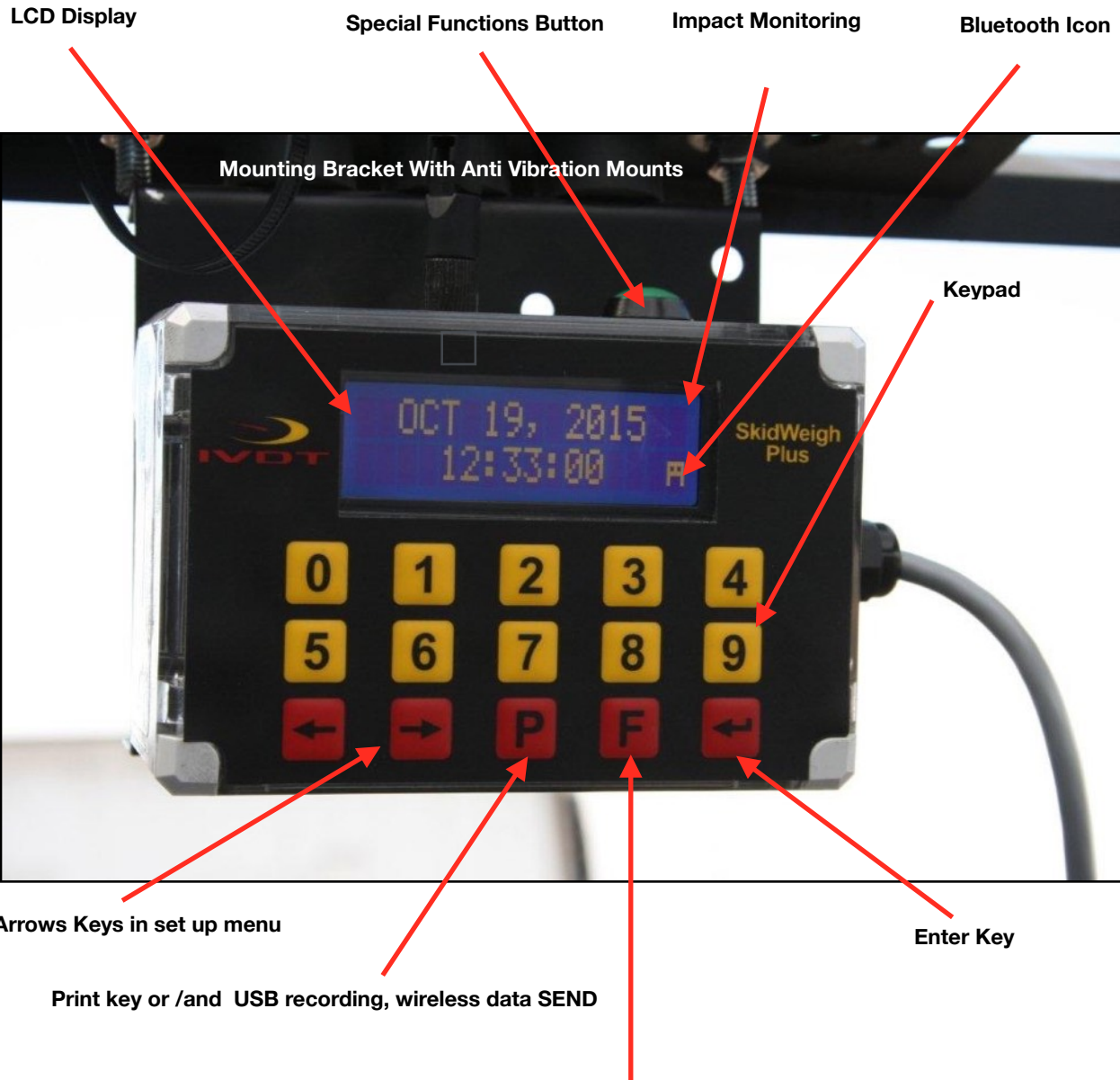
## Verification of the electrical connections done properly

- Turn on vehicle power switch
- Digital LCD display will be activated, showing software version and serial number
- Digital LCD display will show current date and time



If the above test is valid than the system electrical connections are done right.





**FUNCTION MODE KEY**

## **F 9 ADMINISTRATIVE MENU** (Password protected)

## Administrative Menu Instructions

The administration menu allows the end user to manage data, set vehicle ID#, input proper time and date, modify utilization factor and set the impacts and saving data to memory stick.



Other \*optional software configurations are for RFID card reader management, weighing scale calibration, safety checklist and overload alerts .

\* Contact Integrated Visual Data Technology Inc.

To enter into the **Administration Menu**, press **F** key and than press **9** key. Input password

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Use **left and right arrow keys to scroll for functions** that might apply for your system configuration.

Follow the LCD instructions, use **Enter key** to confirm set up input and use **F key** to exit.

LCD Display
MENU
Password = ____

LCD Display
<> KEY to SCROLL
F KEY TO EXIT

### Date / Time Set Up

LCD Display
SET CLOCK
ENTER TO SELECT

LCD Display
SET CLOCK
AUTO _

Use left ◀ and right ▶ arrow key (*bottom left side of the keypad*) to change from AUTO to MANUAL date/time set up.

**Note:** AUTO set up refers to system utilizing a wireless RF platform with automatic date /time update from IVDT Base station communication and programming hub.

For the applications without Base Station, use **SET CLOCK MANUAL \_** instructions.

LCD Display
SET CLOCK
MANUAL _

to set clock / date. Follow the LCD instructions and press **Enter key** to confirm.



LCD Display
Aug 28, 2010
12:20:23

Press **“Enter key”** ↵ to confirm the setting. The cursor will automatically move to the next item to be changed ( Month, Day, Year, Hours, Minutes, Seconds). On the last correction, seconds item press **“Enter key”** ↵ to confirm new date / time set up.

## Set vehicle ID#

- Maximum input number for vehicle ID# is 3 digits.

**Note:** For system used with RFID card reader maximum input number for vehicle ID# is 5 digits.

LCD Display
<> KEY to SCROLL
F KEY TO EXIT

LCD Display
SET VEHICLE ID
ENTER TO SELECT

LCD Display
ENTER VEHICLE ID
1_

LCD Display
VEHICLE ID
CONFIGURATED



## Saving recorded data to USB memory stick

The UTX SkidWeigh Plus system will allow you to download all recorded data onto a USB drive.

**Follow instructions shown on the LCD display**

This function is located in **Administrative Menu**.

LCD Display
<> KEY TO SCROLL
F KEY TO EXIT
LCD Display
SAVE TO USB
ENTER TO SELECT
LCD Display
SAVING TO USB
-----
LCD Display
ERASE SDRAM ? N

When the system has finished uploading the data to the USB memory stick the LCD display will prompt you to erase the SDRAM , all files contained on the UTX SkidWeigh Plus.

Once you have made your selection **Y** or **N** the system will automatically bring you back to the main screen in the administrative menu.

LCD Display
<> KEY TO SCROLL
F KEY TO EXIT