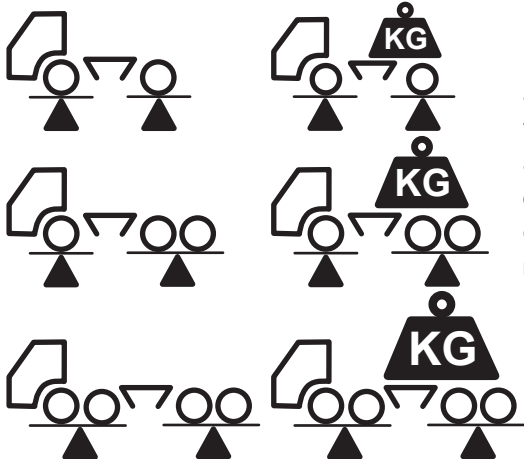


Calibrating trucks with axle and bogie combinations

Unloaded axle weights

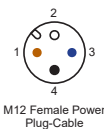
Loaded axle weights



For calibrations on a weighbridge, you must first record and enter the unloaded axle or bogie weights. Then, with the vehicle fully loaded, record the loaded axle or bogie weights and enter in the calibration menu. Note, if the vehicle has dual steer or drive combination you must record the combined bogie weight.

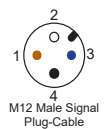
9 - 32V DC POWER & ALARM, plug is MALE. Cable socket is FEMALE

Pin 1	BROWN	Vehicle voltage supply	9V to 32V, typically 12V or 24V
Pin 2	WHITE	Amber Alarm 1 Output Voltage	12V to 24V, (supply voltage)
Pin 3	BLUE	Ground -Ve battery terminal	Ground 0 Volts (common)
Pin 4	BLACK	Red Alarm 2 Output Voltage	12V or 24V (supply voltage)



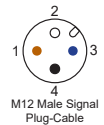
Sensor SIGNAL Channel 1 & 2, socket is FEMALE. Cable plug is MALE

Pin 1	BROWN	+ Excitation	+5 Volts DC
Pin 2	WHITE	+ Signal	0 - 4.5 Volts from load sensors
Pin 3	BLUE	0 Volts	Ground or -Ve battery
Pin 4	BLACK	Not used	



COM 2 RS485 socket is FEMALE. Cable plug is MALE

Pin 1	BROWN	+12V	Supply regulated +12 Volts
Pin 2	WHITE	Tx	Transmit from FT-30M (half-duplex)
Pin 3	BLUE	GND	0 Volts Ground
Pin 4	Black	Rx	Receive into FT-30M (half-duplex)



COM 1 RS232 9 pin male D socket

Pin 2	TxA_1	Output Serial port (transmit) for connection to the host device (printer or telemetry device)
Pin 3	RxA_1	Input Serial port (receive) for connection to the host device (printer or telemetry device)
Pin 4	CTS	Clear to Send input (Check for busy handshake for printers)
Pin 5	GND	Ground 0V
Pin 9	12V	Optional battery volt source (12-24V) for printers



Fitting Options



Swivel RAM mount



Radio DIN Mount



Waterproof enclosure

MSB 15/04/2021

Easy2Weigh...

Load Management System

Easy2Weigh is a two channel scale system which indicates front and rear axles for load distribution and vehicle NET and GROSS.



Dual Channel Weighbridge Calibration

The display is touchscreen, press and swipe finger gestures guide users through menus, features and settings.

TRUCK-TECH UK LTD

Unit 6 B Wharf Road
Ealand DN17 4JW
North Lincolnshire

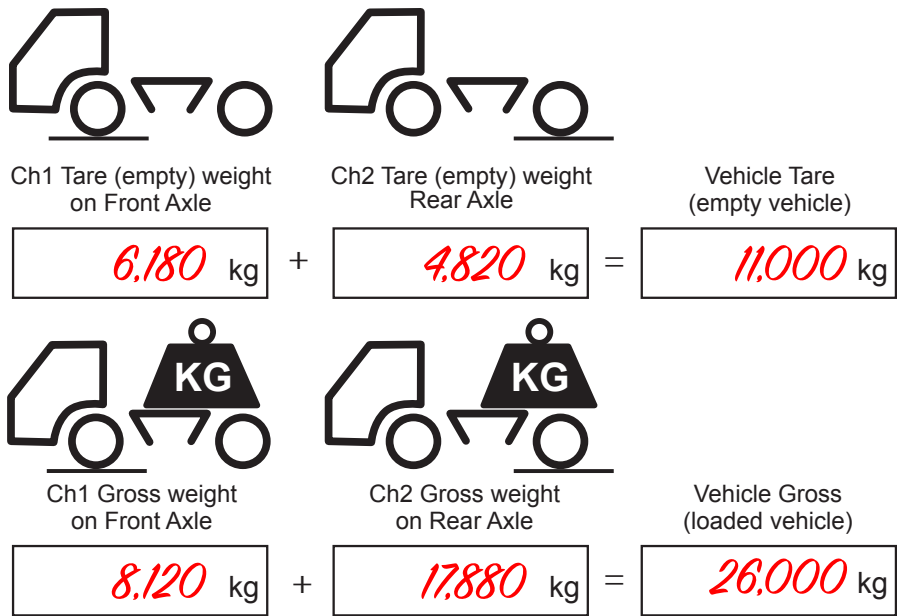
01427 875800
info@truck-techuk.co.uk
www.truck-techuk.co.uk

For best accuracy, calibrate using a certified weighbridge.
Take weight readings on flat and firm ground.

In **Dual** mode, calibration is done in two stages:
Firstly you will need to weigh the front and rear axles on a weighbridge and set the **Tare** (empty) truck weight for each axle or bogey.
Secondly, you will need to load the truck to its maximum and set the **Gross** loaded weight for each axle.

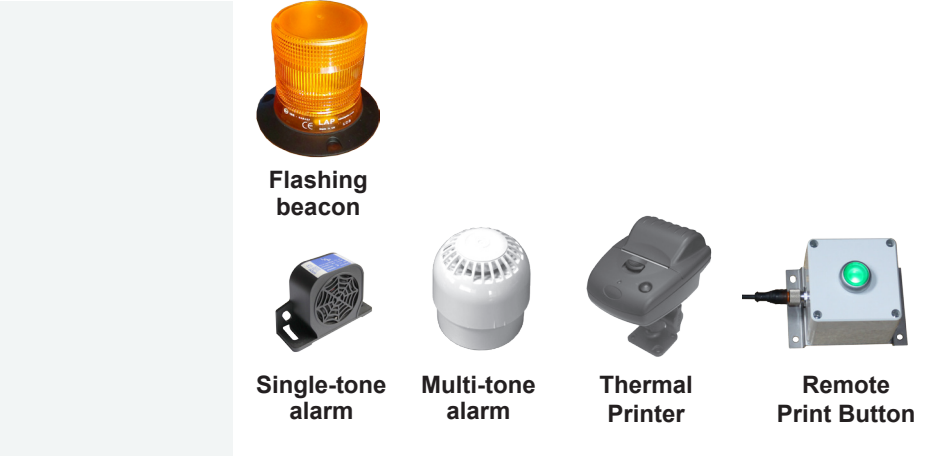
- Ch1 (Channel 1) = The front steer axle
- Ch2 (Channel 2) = The rear drive (load) axles
- Tare = Empty vehicle weight
- Net = Payload, the material loaded on vehicle
- Gross = Tare+Net (total fully loaded vehicle)

Calibration example with 15,000 kg net payload
See back cover for 6x4 and 8x4 trucks



Use the template on page 6 to record your calibration weight and volt values for later use.

Accessories



Calibration record

Reg: Date:

The template shows two rows of diagrams for tare and gross weight measurements. Each row has two channels: Ch1 (Front Axle) and Ch2 (Rear Axle). The tare stage shows a truck with no load, and the gross stage shows a truck with a load of 15,000 kg. The tare stage results are: Ch1 Tare (empty) weight on Front Axle, Ch2 Tare (empty) weight on Rear Axle, and Vehicle Tare (empty vehicle). The gross stage results are: Ch1 Gross weight on Front Axle, Ch2 Gross weight on Rear Axle, and Vehicle Gross (loaded vehicle). The template includes boxes for recording weight in kg and voltage in Volts.

Channel	Tare (kg)	Tare (Volts)	Gross (kg)	Gross (Volts)
Ch1 (Front Axle)				
Ch2 (Rear Axle)				
Vehicle Total				

Select Amber Alarm 1




   **Test button.** This button will power the alarm device for the duration of the finger press.


 kg

 Swipe up or down to set the desired Gross weight alarm setpoint. (E.g. 26,400kg)^o  



0 secs


 Swipe up or down to set the desired delay setpoint. (E.g. 3s)
 


If the gross truck weight exceeds 26,400kg for more than 3 seconds, the alarm will trip



  Alarm 2 can be set by following the same steps above

Packer Plate Cut-Off (PPCO) can be toggled On/Off by pressing **PPCO**

A close-up of a digital scale's display. It shows a large '0' followed by 'kg'. To the left is a shopping bag icon, and to the right is a circular button with '>0<'. Below the display is a horizontal bar and three small dots. At the bottom, 'Ch1: 0' and 'Ch2:' are visible.



Ch1	Tare (unladen)	Gross (loaded)
		
	0kg kg/Volts	0kg

Ch1

		4,		4	
		5,	0	5	
kg =		0	6,	1	8
	1	1	7,	2	7
	2	2	8,	3	8
					1
					2

kg

✓

Ch1 Chan1 Volts
Tare 1.157

Ch2 Tare (unladen) Gross (loaded)

 0kg kg/Volts 0kg

Ch2

kg =

		2,	6	0	
		3,	7	1	
	0	4,	8	2	0
1	1	5,	9	3	1
2	2	6,	4	2	

kg

default password
000000



To go back to the home weighing screen:

Select Mode




 slide to

Dual Channel (Ch1 + (Ch2)

On weighbridge weigh and record Tare (unladen) weight

  (see page 1)

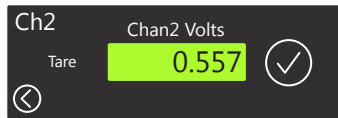
☞ Swipe up or down to set the Tare weight ☞ ✓



Weighbridge Cal

  (see page 1)

 Swipe up or down to set the Tare weight  



Confirm Channel 2 Tare Signal Volts



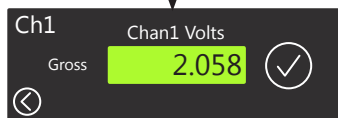
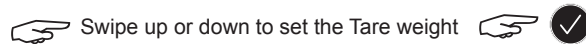
Load the vehicle to its maximum. Weigh and records the front (Ch1) and rear axle (Ch2)



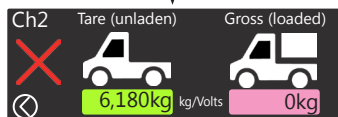
Set Channel 1 Gross



Set Channel 1 Gross Weight (fully loaded)



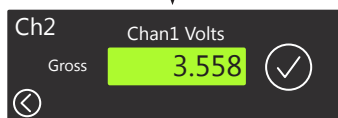
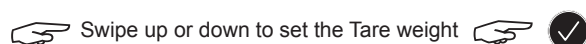
Confirm Channel 1 Gross Signal Volts



Set Channel 2 Gross



Set Channel 2 Gross Weight



Confirm Channel 2 Gross Signal Volts



Done. To toggle between Gross and Net:



FT-30M Alarms & Settings

Alarms prevent overloads and instability by warning the driver and crew to an approaching and full load condition.

Amber Alarm 1 is a WARNING of an approaching maximum load. When the alarm setpoint is tripped, the on-screen weight turns amber and a mute button will flash and beep. An externally powered sounder or flashing beacon where fitted will activate. Pressing the mute button deactivates the alarm and loading can continue until the maximum weight is reached. With each alarm trip: time, date and weight is recorded and can be downloaded via the USB port as a text file (Alarm_Data_2021_01.txt) for audit purposes.

The **amber alarm progress bar** shows the loading status from 80% of the maximum weight.

Red Alarm 2 informs the driver and crew the truck is loaded to its LEGAL MAXIMUM gross weight limit and should be directed to a facility to unload. Pressing the mute button will deactivate the on-screen alarm. Alarms will reset after the truck is unloaded to below 25% of the maximum gross weight.

PPCO: on waste collection vehicles, where Red alarm 2 output voltage is used to deactivate a waste truck compactor, pressing the mute button will stop the on-screen flashing and bleeping. The compactor will REMAIN DEACTIVATED (stopped) until the truck has unloaded to below 25% of the gross weight. **Note**, Red Alarm 2 voltage is typically wired to a PLC or a solenoid switch on the compactor controls wiring harness.

