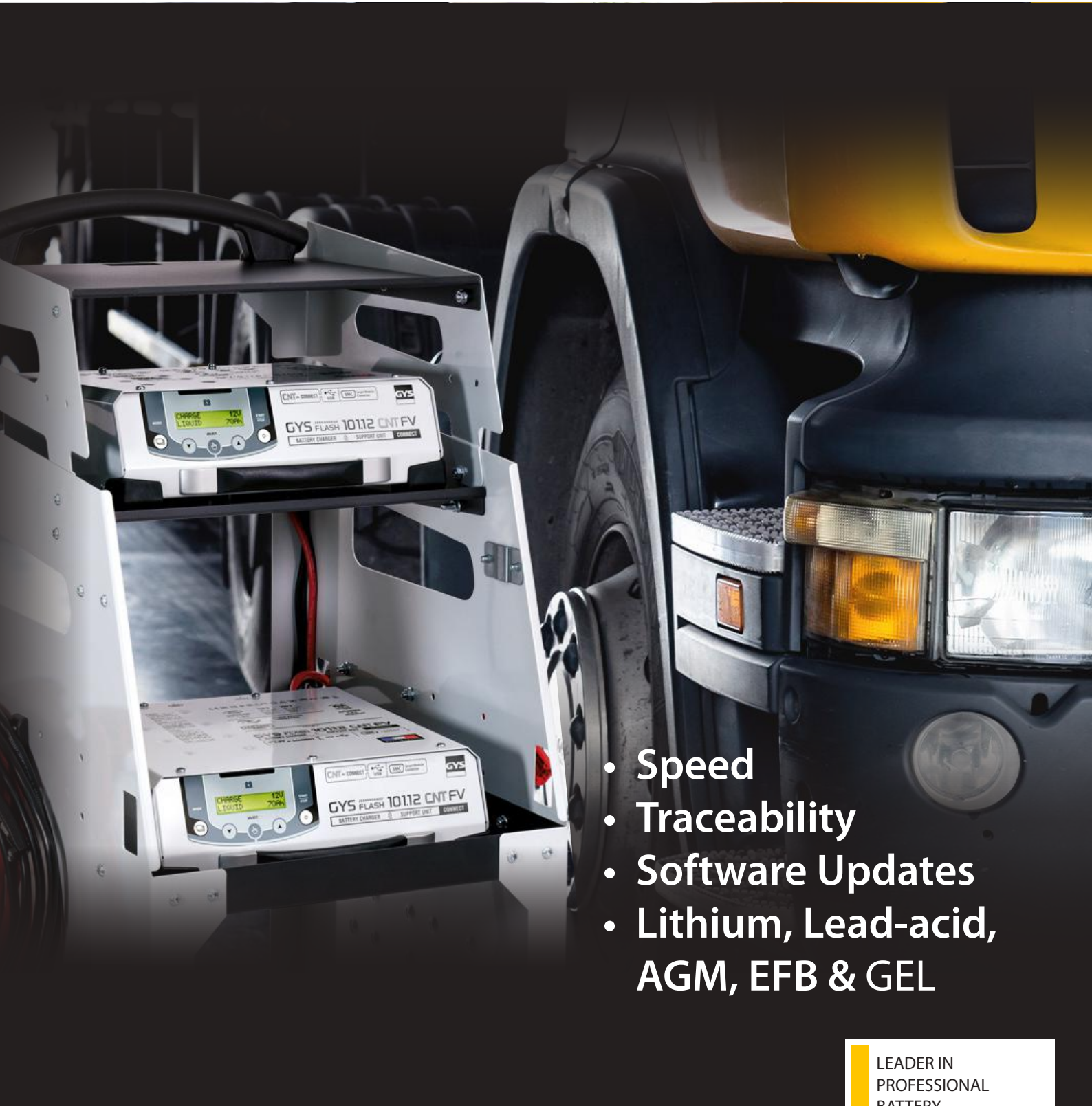




# 24V Battery Balancing System

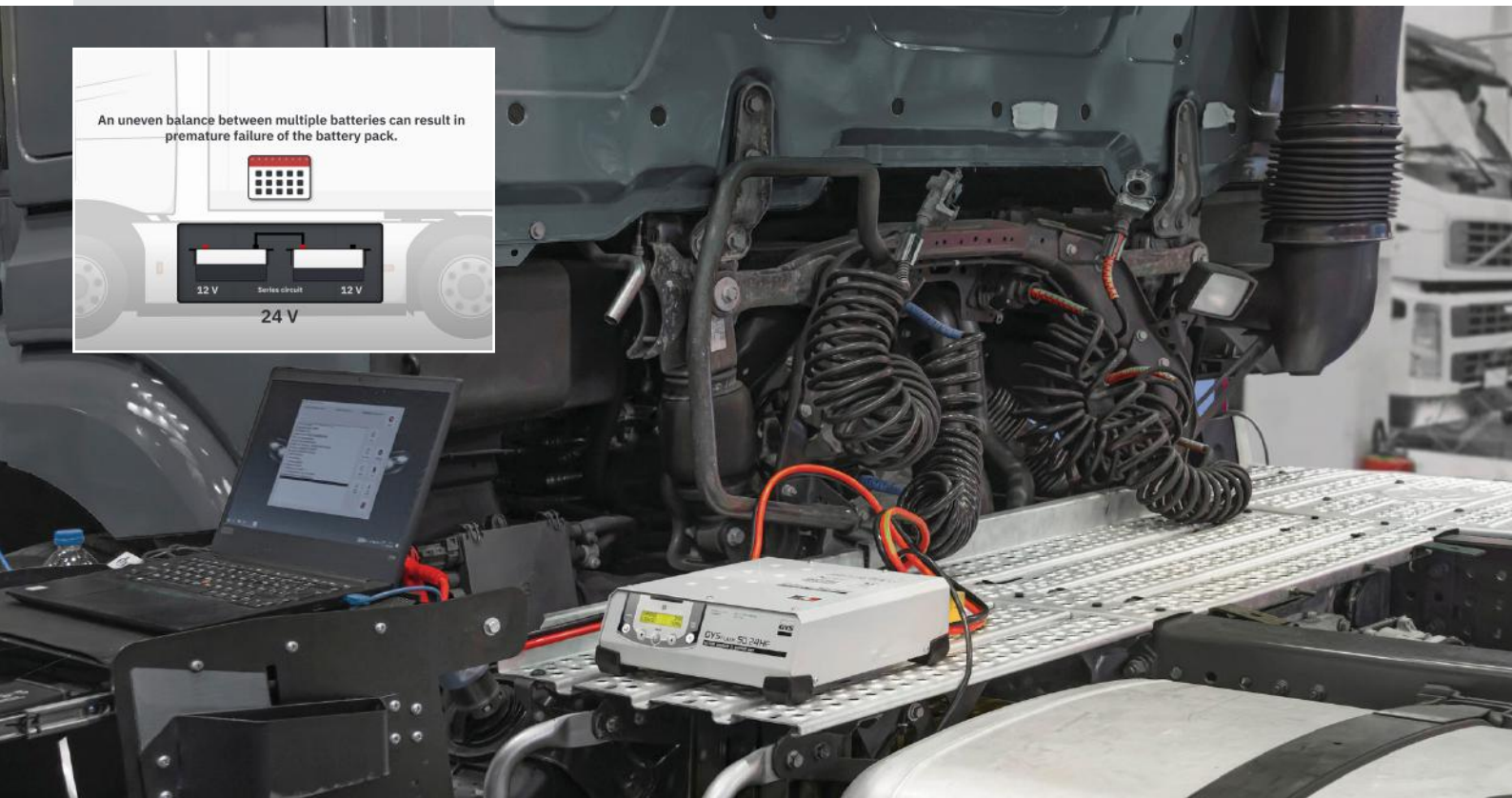
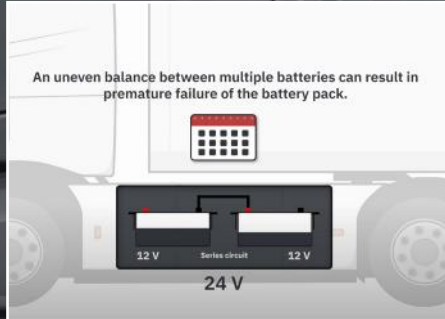


- Speed
- Traceability
- Software Updates
- Lithium, Lead-acid, AGM, EFB & GEL

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LEADER IN  
PROFESSIONAL  
BATTERY  
CHARGING  
EQUIPMENT

# 24V Battery Balancing System GYSFLASH PRO



## The Battery Balancing Challenge

### Why Battery balancing matters in Commercial Vehicles

A well-known problem in commercial fleets is that 24-volt battery systems often experience imbalance, as the two 12-volt batteries in series don't always charge evenly. This imbalance can lead to higher repair costs, shorter battery life, and unexpected vehicle downtime.

### What Causes Imbalance?

Imbalance arises due to:

- Uneven charging rates
- Aging differences between the batteries
- Environmental conditions like temperature and placement

These factors result in one battery underperforming, which ultimately weakens the entire system, leading to efficiency loss and increased replacement costs.

Additionally, large commercial vehicle batteries typically have a capacity of around 200Ah, making them time-intensive to charge. Balancing these systems is an essential maintenance step to ensure battery longevity and performance.



**CHECK OUT  
GYSFLASH PRO  
BALANCING**

on our **You Tube** channel

[www.gys-welding.com](http://www.gys-welding.com)

# The GYSFLASH Pro Balancing System

## Balanced charging with the GYSFLASH Pro in 2 hours

The GYSFLASH Pro 24V Balancing System delivers 100 amps of balanced charging power across both batteries, achieving a balanced charge in as little as two hours - enabling battery balancing to be completed alongside routine servicing. Traditional chargers, which output only 10-15 amps, may take up to 10 hours, but the GYSFLASH Pro's advanced 100-amp performance reduces this time by 10x while ensuring a balanced, coordinated charge.

## Why GYSFLASH Pro Balancing?

1. Speed - High 100-amp output reduces charge times significantly, supporting rapid turnaround in commercial service.
2. Traceability - Advanced software provides full traceability, enabling operators to track each vehicle's charging and balancing history.
3. Updatable Software - Regular software updates keep the system current with the latest charging technology.
4. Multiple Charging Curves - Supports a variety of battery chemistries, including lithium, lead-acid, AGM, EFB, and gel, ensuring compatibility with diverse commercial vehicle batteries.



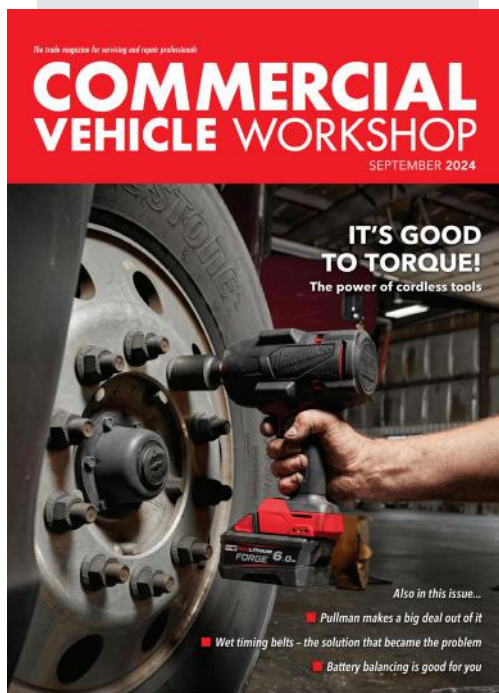
## GYSFLASH CONNECTED TECHNOLOGY

Connected (CNT) technology allows for software updates. External interfaces, USB and a DB9 socket, enables both input and output of data to and from the charger. New or bespoke charging curves can be uploaded and it can be connected to a printer, keyboard and barcode scanner.

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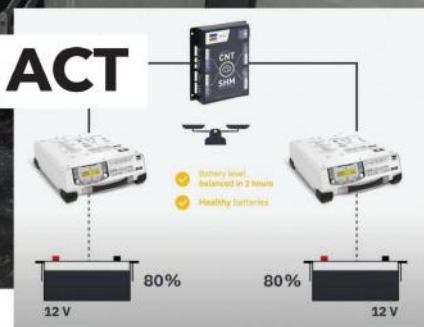


# Press coverage



## BALANCING ACT

GYS believes it has the perfect solution to the problem of battery imbalance, improving battery life in the process.



In the world of commercial vehicle maintenance, ensuring optimal 24v battery performance is paramount. As is widely known, 24v systems consist of two 12v batteries connected in series. Over time, charging these separate batteries inevitably leads to an imbalance in their state of charge.

Battery imbalance occurs when the two 12v batteries connected in series do not maintain equal states of charge. This discrepancy can arise from multiple factors. Differences in internal resistance, resulting from manufacturing variations or uneven aging, can cause one battery to charge or discharge faster than the other. Additionally, temperature fluctuations due to ventilation or placement issues, as well

as inconsistent

maintenance practices, can exacerbate the imbalance.

This imbalance can lead to the premature failure of the battery pack. The system's overall capacity is limited by the weaker battery, reducing efficiency and performance. Consequently, this results in unnecessary costs and inconveniences, such as vehicles not starting and the need for more frequent battery pack replacements.

### Better balanced

GYS has introduced a solution to address the battery imbalance problem. This solution enables two batteries to be charged to a perfectly balanced state in as little as two hours.

The system consists of a pair of GYSFLASH units with a smart connection module. This is made possible due to advanced technology, developed in recent years within the GYSFLASH range, that allows for connectivity, software updates, and custom charge configurations.

This is a great addition to routine commercial vehicle maintenance and can be completed in as little as two hours, while a vehicle service is being performed.

FOR MORE INFORMATION, GO TO [WWW.RDR.LINK/VBM015](http://WWW.RDR.LINK/VBM015)

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## GYS addresses 24-volt battery imbalance issues

By admin Categories: Commercial News Published On: Friday 25 October 2024

Charging systems provider GYS has launched a solution to help tackle the challenge of 24-volt battery imbalance.

"In the world of commercial vehicle maintenance, ensuring optimal 24-volt battery performance is paramount," said GYS.

"24-volt systems consist of two 12-volt batteries connected in series. Over time, charging these separate batteries inevitably leads to an imbalance in their state of charge."

The discrepancy can arise from multiple factors, says the company.



"Differences in internal resistance, resulting from manufacturing variations or uneven aging, can cause one battery to charge or discharge faster than the other. Additionally, temperature fluctuations due to ventilation or placement issues, as well as inconsistent maintenance practices, can exacerbate the imbalance.

"This imbalance can lead to the premature failure of the battery pack. The system's overall capacity is limited by the weaker battery, reducing efficiency and performance. Consequently, this results in unnecessary costs and inconveniences, such as vehicles not starting and the need for more frequent battery pack replacements."

GYS's solution to the battery imbalance problem enables two batteries to be charged to a perfectly balanced state in as little as two hours, the company says.

"The GYS system consists of a pair of GYSFlash units with a smart connection module. This is made possible due to advanced technology, developed in recent years within the GYSFlash range, that allows for connectivity, software updates, and custom charge configurations.

"This is an excellent addition to routine commercial vehicle maintenance and can be completed in as little as two hours, while a vehicle service is being performed."

[www.gys-welding.com](http://www.gys-welding.com)

<https://transportoperator.co.uk/2024/10/25/gys-addresses-24-volt-battery-imbalance-issues/>

November 2024

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