

eSERIES[®] Intelligent Traffic Management

Removing workers from the line of fire while
improving productivity.

SLOW
DOWN

60
ROAD
WORK

PREPARE
TO
STOP

AHEAD

The experts in roading safety

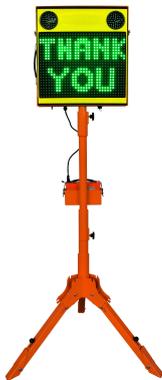
ARROWES[™]
ROADING SAFETY





The ARROWES eSERIES[®] is a smart, integrated traffic management system designed to keep workers out of the line of fire.

Each unit can operate independently or communicate together to create a fully coordinated traffic control site. Controlled remotely from a safe location, the eSERIES improves safety, efficiency and compliance on modern roadworks.



The eSAS[®]

An intelligent Speed Awareness Sign that alerts motorists to their travelling speed as they approach a worksite.



The eSTOP[®]

A portable traffic signal system that replaces the traditional stop/slow batten.



The eBOOM[®]

A lightweight portable boom gate that introduces a physical barrier to traffic control.



The Smartest Way to Reduce Speed at Roadworks

The most effective way to reduce vehicle speed and protect frontline workers.

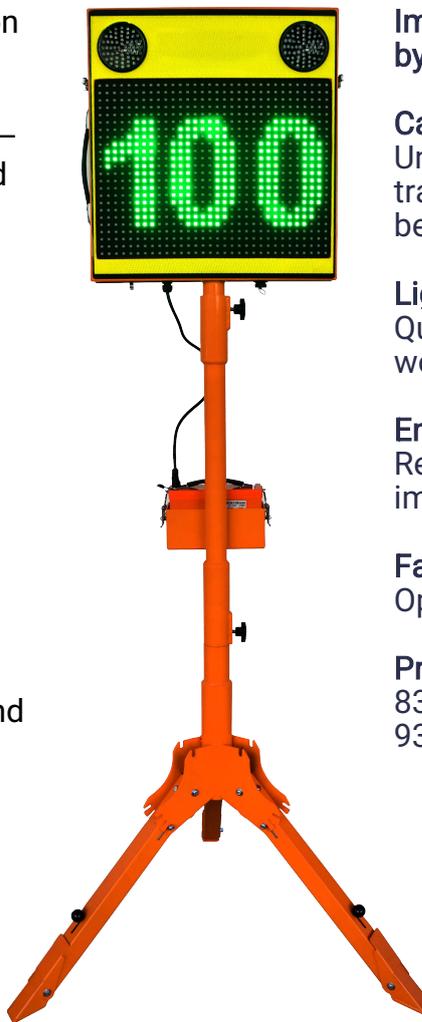
Patent ID: 2020100193 (AU)



Speed is the number one risk on any road worksite. The ARROWES eSAS® was designed for a single purpose – to slow approaching traffic and improve worker safety.

Using embedded radar technology, the eSAS detects vehicle speed and provides instant feedback to motorists. This real-time interaction encourages drivers to reduce speed well before reaching the work zone.

Proven in independent trials across Australia, the eSAS improves speed compliance and helps create safer, more predictable worksites.



Improves speed compliance by 24%*

Captures valuable traffic data
Understand vehicle speed, traffic volumes and driver behaviour.

Lightweight and portable
Quick to deploy on any worksite.

Engages distracted drivers
Real-time speed feedback improves awareness.

Fast setup
Operational in minutes.

Proven compliance results
83% under speed limit
93% within +5 km/h*



*As recorded in an independent trial conducted across Australia in 2019 by Downer. †As reported in recent CPB trial.





Comparison Table

	eSAS Type B
Display screen dimension (cm)	43 x 43
eSERIES integration	•
Message based on motorist behaviour and eSTOP light status	•
Data logging	•
Display selection switches	•
Siren - when motorist exceeds xx speed to set speed	option
Flashing beacon - when motorist exceeds xx speed to set speed	option
Recording DVR - 360 degrees	option
Double batteries	option
Vehicle mounting	option
Speed sign rails	option

Features

- Embedded radar detects approaching vehicle speed
- Multiple pre-programmed display modes for different site conditions
- Simple operation using four control switches
- Built-in data logging (vehicle count, speed, GPS location and timestamp)
- Export traffic data easily via SD card (.CSV format)
- Up to 5000 days of data storage (16GB)
- Fully self-contained unit with battery and tripod base
- Lightweight modular design – 20kg total across three components
- Wind load tested up to 110km/h with sandbags
- Radar detection range up to 150m
- Up to 20 hours battery life

Available Options

Carry Case

Protective carry case and component bags for the display head, tripod legs and battery. Provides secure storage and easy transport of the complete eSAS system.

Camera

Front and/or rear recording cameras providing additional worker protection and incident evidence. Footage includes GPS location, timestamp and traffic light status.

Alert Beacon

Optional acoustic and/or visual alarm beacon that activates when excessive vehicle speeds are detected.

Plant Mounted

Display head can be mounted to utes or mobile plant, with optional direct vehicle power supply. Custom mounting solutions available.

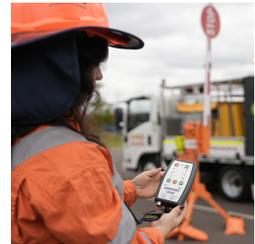


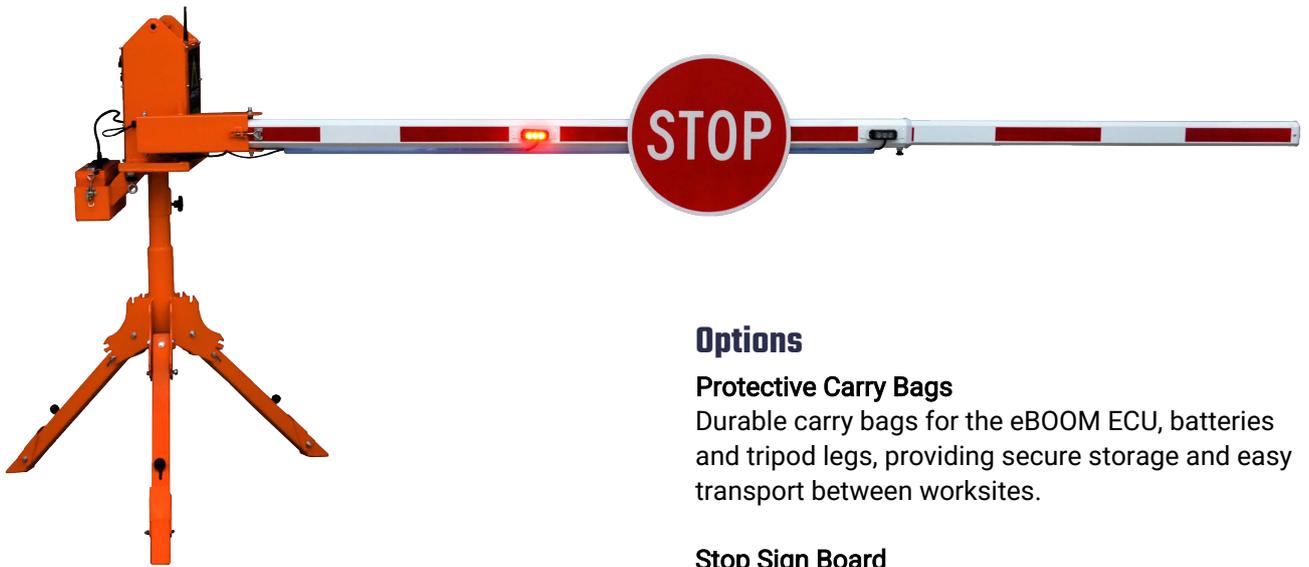
eBOOM®: Portability Redefined

A lightweight, portable boom barrier designed to introduce a physical stop control to temporary traffic management, operating standalone or fully synchronised with the eSERIES® system.

Patent Application ID: 2021250468 (AU) 793026 (NZ)

- Lightweight design – eBOOM® body weighs just 21kg, allowing easy deployment by a single operator
- Impact-safe boom arm dislodges on impact to reduce the risk of creating a projectile
- Safety sensor prevents the boom arm lowering onto vehicles or people
- 4-second audible warning before lowering; arm lowers on RED and lifts on GREEN
- High visibility red warning light activates when lowering and when the boom is down
- Plug-in boom arm up to 3.8metres in length
- Fully encrypted wireless control via the Arrowes HRC X remote controller
- Deploy freestanding on tripod or mount directly to a ute tray.
- Seamlessly pairs with the eSERIES® system for synchronised traffic control





Comparison Table

	eBOOM
Manual Control	•
eSERIES integration	•
Auto Timer	•
Vehicle Actuation	option
HRC distance - clear line of sight	2km (HRCx)

Options

Protective Carry Bags

Durable carry bags for the eBOOM ECU, batteries and tripod legs, providing secure storage and easy transport between worksites.

Stop Sign Board

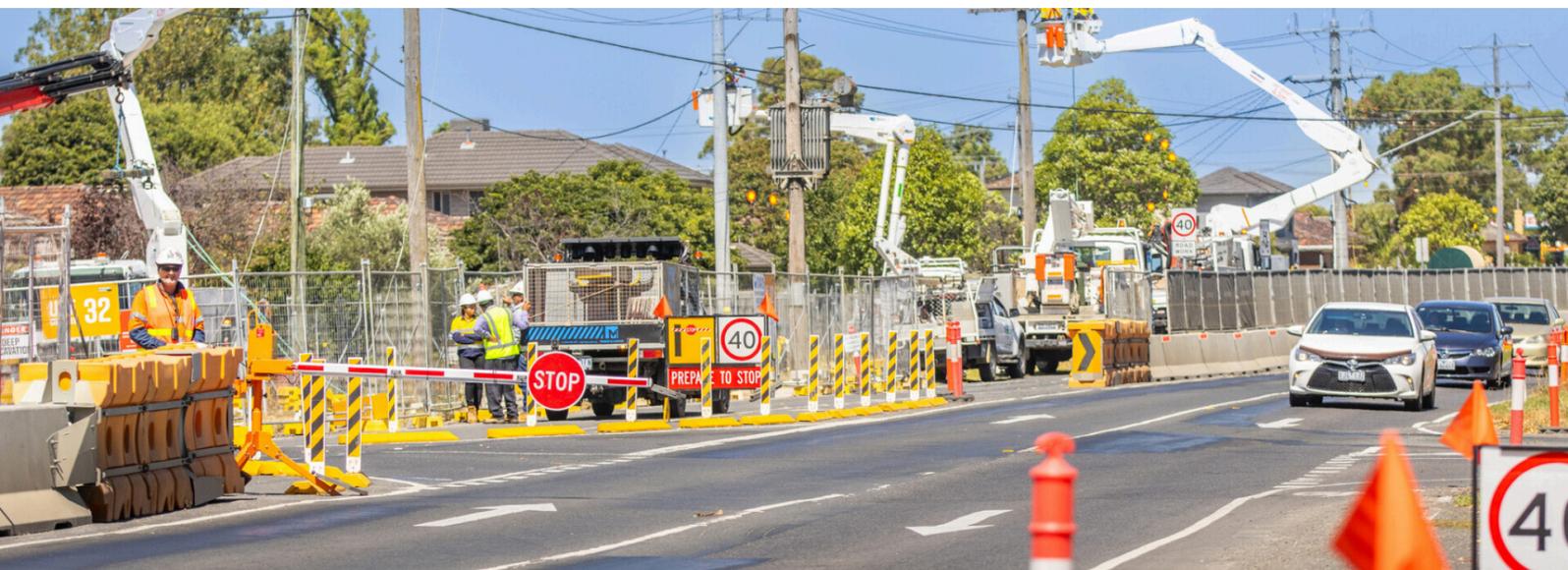
Mandatory when the eBOOM is deployed as a standalone traffic control unit, providing clear visual stop instruction to approaching motorists.

Vehicle Mount Kit

Mount the eBOOM directly to a traffic control ute or service vehicle for rapid deployment without the need for tripod setup.

Additional Battery Pack

Extended runtime option for longer shifts or remote deployments.





Remove Workers from the Line of Fire with eSTOP®

Keep traffic controllers out of live traffic with Arrowes' intelligent portable traffic signal system.

- **Replaces stop/slow batten**
Remote-controlled traffic signal system.
- **Keeps controllers out of live traffic**
Operate the system safely from a distance.
- **Reduces worker exposure**
Removes risks from traffic, driver abuse and harsh conditions.
- **Proven safety performance**
Reduces near misses by up to 93%.
- **Trusted across Australia & New Zealand**
The most widely deployed PTSS solution.
- **Award-winning safety innovation**



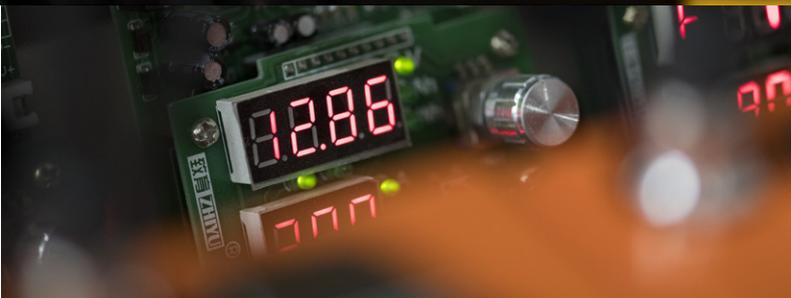
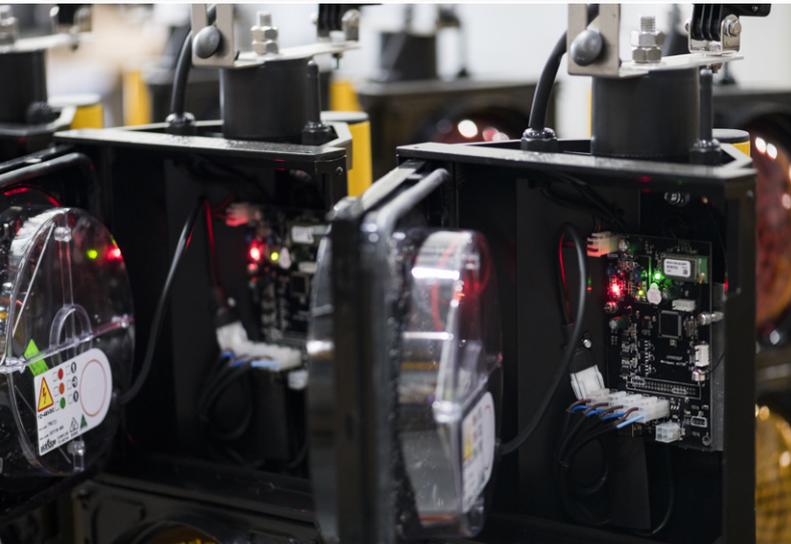
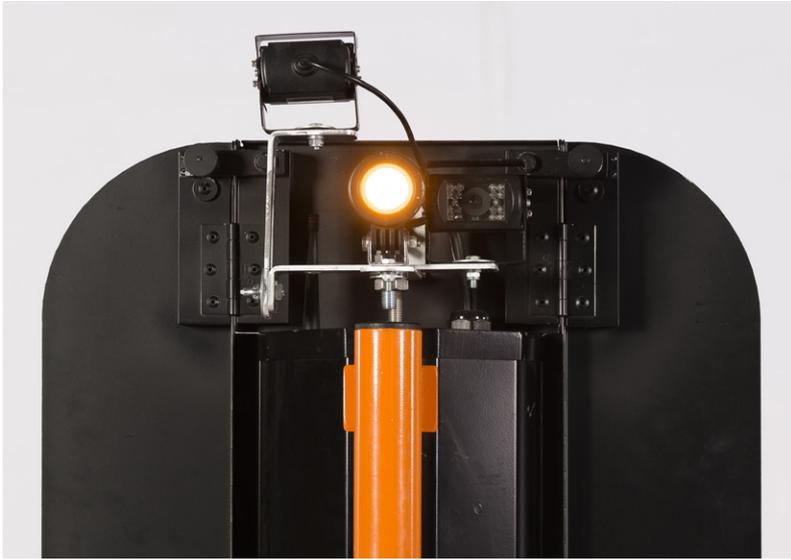
The eSTOP® is Australia's first Type 1 approved **Portable Traffic Signal System (PTSS)** and has become the benchmark for safer temporary traffic control.

Designed to replace traditional stop/slow batten operations, the eSTOP allows traffic controllers to manage traffic remotely while remaining safely out of live traffic.

Used by leading contractors across Australia and New Zealand, trials conducted by a tier-one contractor demonstrated a **93% reduction in near misses** when using the system.

Portable, highly visible and built for demanding worksites, the eSTOP provides a safer and more efficient alternative to traditional traffic control.





eSTOP[®] AUTO

The eSTOP[®] AUTO replaces the traditional stop/slow batten with a portable traffic signal system that can operate manually or automatically.

Designed to remove traffic controllers from live traffic, the system allows operators to manage vehicle movements remotely while maintaining full control of the worksite.

In AUTO mode, pre-programmed signal logic manages traffic flow while an embedded vehicle radar dynamically adjusts timings to reduce unnecessary waiting and improve traffic efficiency.

Features

- Type 1 approved Portable Traffic Signal System (Australia & New Zealand)
- Manual or automated operation depending on site requirements
- Fail-safe logic prevents two green signals operating simultaneously
- Vehicle detection radar optimises traffic flow
- Up to 2km wireless control range via HRC X controller
- Quick setup portable system with lightweight modular components
- Integrated target board compliant for NSW and NZ worksites
- Tilt and rotation alarms for safety monitoring
- Up to 15 hours battery life
- Fully encrypted wireless communication





Comparison Table

	eSTOP-Auto
Manual Control	•
eSERIES integration	•
Auto Timer	•
Vehicle Actuation	option
HRC distance - clear line of sight	2km (HRCx)
Recording DVR - 360 degrees	option



Options

Bags: Protective, secure and easy to carry hard case for lanterns, target boards, batteries and tripod legs.

Camera: Front and rear camera recording providing further protection for front line workers and evidence in insurance cases. Camera footage includes GPS location, time-stamp as well as indicating traffic light status. Recording on embedded SD card.

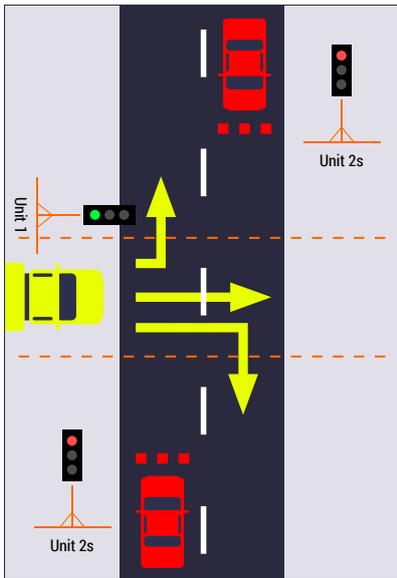
Target Board: Patent ID 2020100318
Mandatory for NSW & NZ.

eSTOP[®] AUTO use case scenarios

eSTOP[®] Plant Crossing States

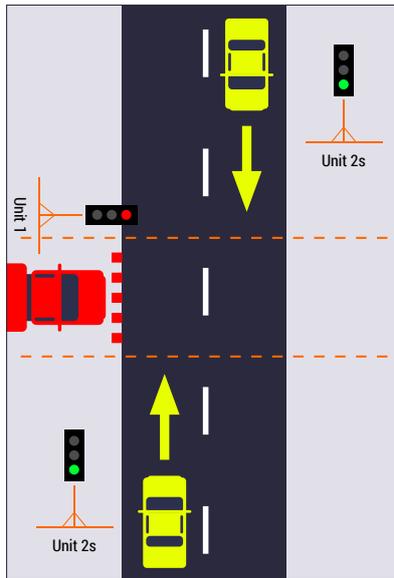
State 1

Unit 1 green = work vehicles to cross.
Unit 2s both red = all traffic stops.



State 2

Unit 1 red = work vehicles stopped.
Unit 2s both green = all traffic flowing.



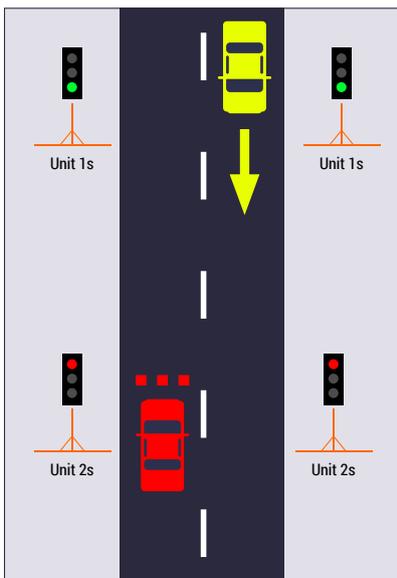
NB Unit 2s lantern colour must always match



eSTOP[®] AUTO Duplicate Light States

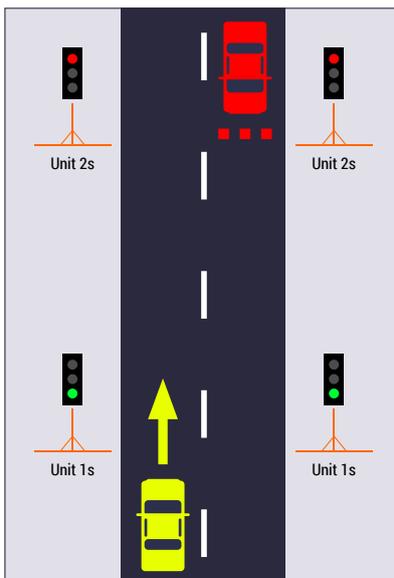
State 1

Unit 1s both green = south traffic flows.
Unit 2s both red = north traffic stops



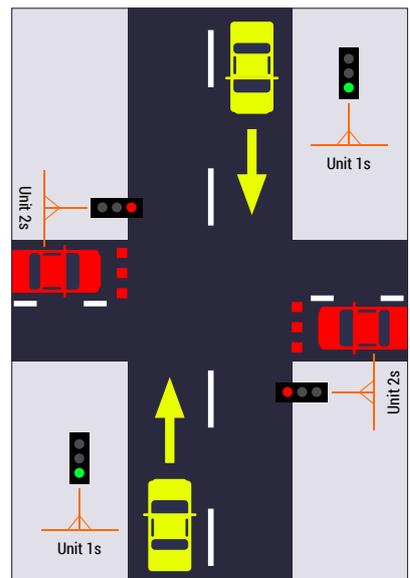
State 2

Unit 1s both red = south traffic stops.
Unit 2s both green = north traffic flows.



State 3 - Intersectional

Unit 1s both green = north & south traffic flows.
Unit 2s both red = east west traffic stopped.



Mirrored lights on each side ensures visibility of eSTOP[™] in multi-lane / highway situations or to prevent visibility being blocked by large vehicles.

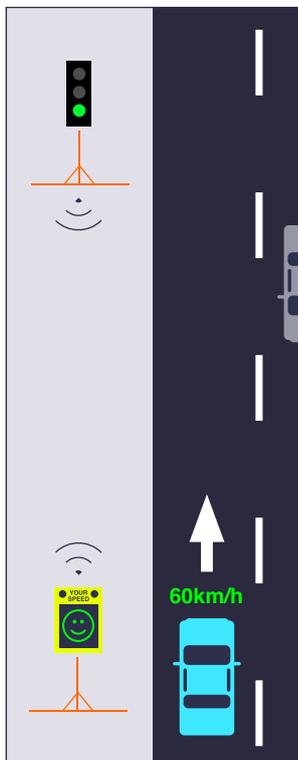


eSTOP® with eSAS integration

Integrated alert lights flash when eSTOP® is red

Warning message on display when eSTOP® is red or motorist is speeding

Connected via HRCx



Green light + NOT speeding

eSTOP signal is green + vehicle travelling below speed limit = **Smiley face** and **THANK YOU** message. Wigwag LED is off.



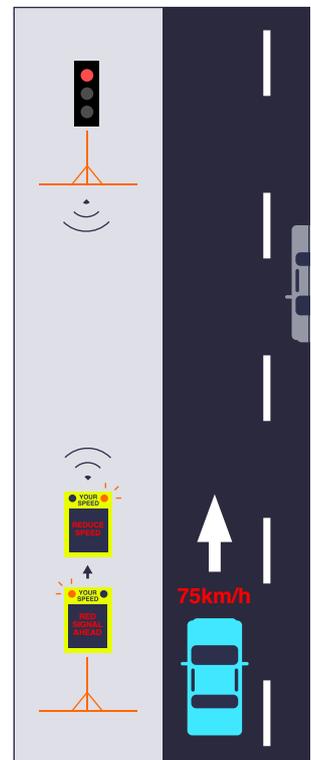
Green light + speeding

eSTOP signal is green + vehicle travelling over speed limit = **Frown face** and **SLOW DOWN** message. Wigwag LED is off.



Red light + NOT speeding

eSTOP signal is red + vehicle travelling below speed limit = **RED SIGNAL AHEAD** and **PREPARE TO STOP** message. Wigwag LED is flashing.



Red light + speeding

eSTOP signal is red + vehicle travelling over speed limit = flashing **REDUCE SPEED** and **PREPARE TO STOP** message. Wigwag LED is flashing.

Patent Application ID: 2019904761



eSTOP[®] with eBOOM[®] integration

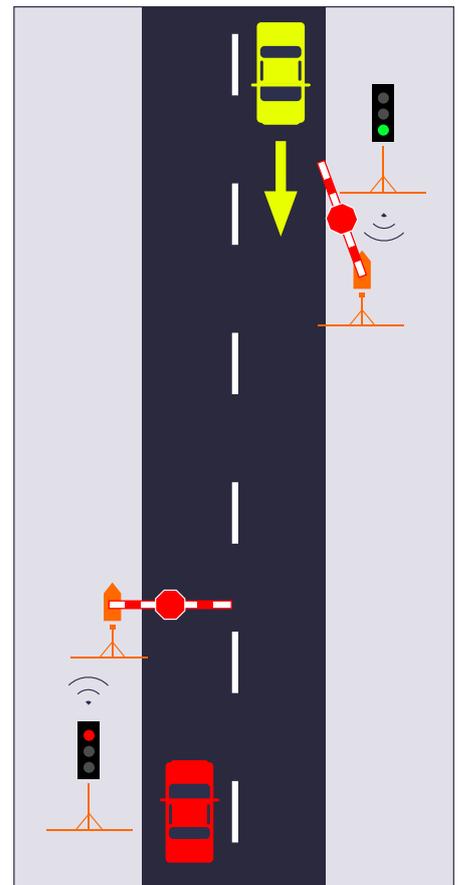
When paired with the eSTOP[®], the eBOOM[®] introduces a physical barrier to complement the traffic signal, creating a safer and more controlled worksite environment while remaining highly portable.

Both units synchronise seamlessly and are operated using the same HRC X remote controller, allowing a single operator to manage traffic signals and boom operation from a safe location.

Weighing just 21kg, the eBOOM is lightweight and quick to deploy. It can be mounted on the back of a traffic control ute or used as a freestanding unit on a tripod base.

Using the same pairing process as the eSTOP[®], the eBOOM automatically responds to traffic signal changes, lowering and lifting in sync with the lantern status.

Together, the eSTOP[®] and eBOOM[®] enable traffic workers to control vehicle movements from outside live traffic while introducing an additional physical barrier to reinforce compliance and improve site safety.



The Full eSERIES[®] System

eSTOP[®], eBOOM[®] & eSAS[®] Integration

When deployed together, the eSTOP[®], eBOOM[®] and eSAS[®] create a fully synchronised traffic management system designed to improve safety and reduce reliance on manual control.

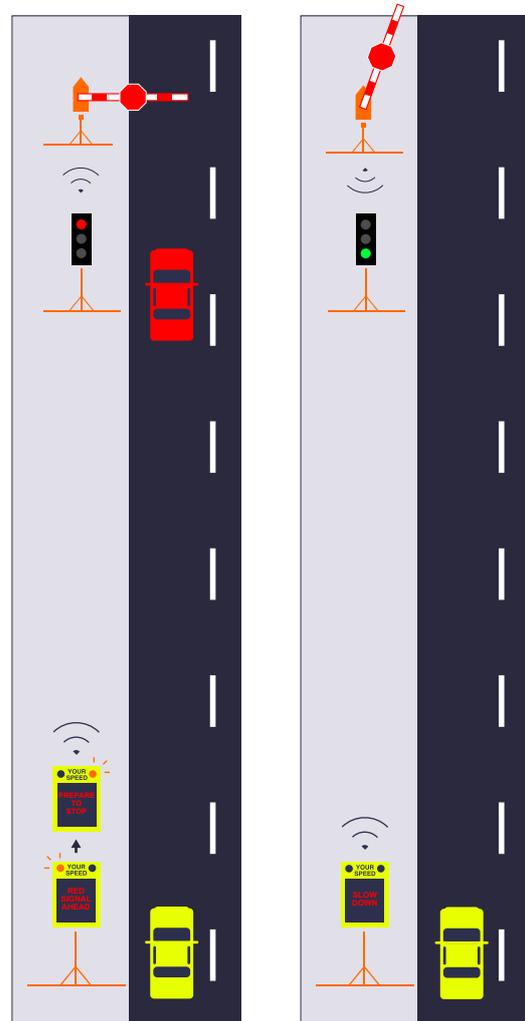
The system can operate as a semi-autonomous worksite, allowing a single operator to manage traffic movements remotely while maintaining full control of the site.

As motorists approach the work zone, the eSAS[®] is the first point of interaction. Using embedded radar, it detects vehicle speed and delivers real-time messaging that encourages drivers to slow down and prepare to stop.

At the worksite itself, the eSTOP[®] traffic signal controls vehicle flow while the eBOOM[®] provides a visible physical barrier that automatically synchronises with the lantern status.

Together, the eSERIES[®] influences driver behaviour, reinforces compliance with worksite speed limits and significantly reduces the risk of motorists running red signals.

Patent ID: 2021266917 (AU) 793502 (NZ)



Quality Australian manufacturing.

Arrowes products are proudly designed and manufactured in Australia.

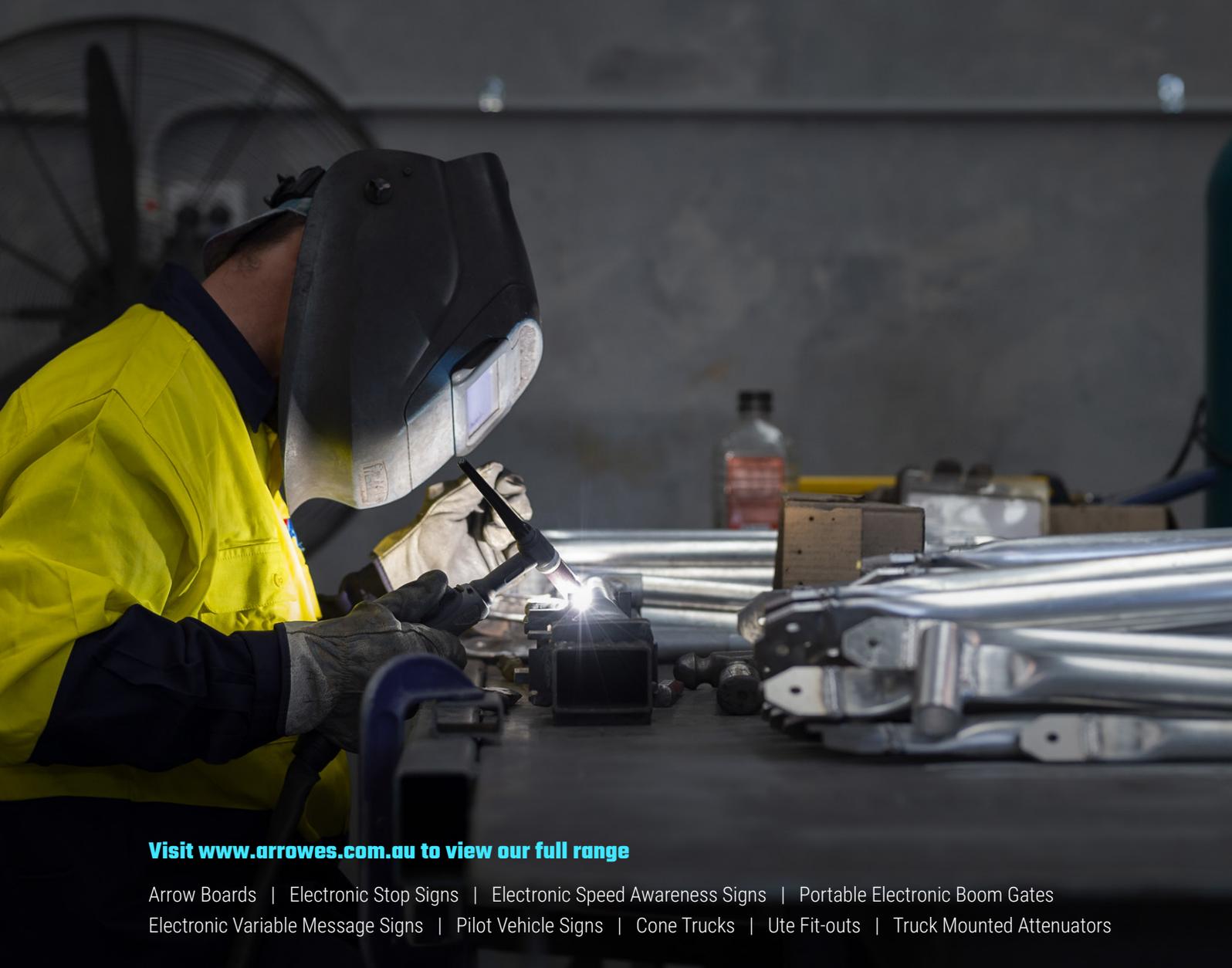
We work closely with local and regional suppliers across Queensland and the broader Australian supply chain to ensure high-quality components, reliable production and responsive support.

By partnering with Australian manufacturers wherever possible, we strengthen local industry while delivering dependable products and service for our customers.

Find out more about how the eSERIES® can help your team:

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Visit www.arrowes.com.au to view our full range

Arrow Boards | Electronic Stop Signs | Electronic Speed Awareness Signs | Portable Electronic Boom Gates
Electronic Variable Message Signs | Pilot Vehicle Signs | Cone Trucks | Ute Fit-outs | Truck Mounted Attenuators



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ROADING SAFETY