Innovation with Style

A stylish and attractive design, low cost of operation and a host of passenger-friendly features combine to make Enviro400 Britain’s definitive double deck bus.

Massively popular with operators large and small, thanks to Enviro400’s unique combination of innovation, style and seating capacity, it is available in single or dual door specifications with a wide range of interior options - and is fully compliant with ECWVTA legislation.

Enviro400 is optimised as an integral design with a 100% ADL chassis and body combination but is also fully engineered as a body solution for alternative chassis options.

The range also includes the diesel-electric Enviro400H, now firmly established as Europe’s most popular hybrid bus.

- A stylish double deck that enhances the image of any fleet
- An attractive and welcoming interior with best-in-class seating
- A leader in the UK and now making an impact in overseas markets
- More customer choice with a range of overall lengths, seating and door layouts and a wide number of customer interior and mechanical options
- Excellent access with large entry door, super-low entry, wide gangway and step-free flat floor
- Powerful, economic six-cylinder Cummins EEV engine
- Choice of Voith or ZF automatic transmissions
- Hybrid drive option with circa 30% fuel and CO₂ reductions
- Maximum seating capacity combined with excellent passenger comfort
- A technically advanced, proven and reliable bus with lower overall operating costs
- Easy access for low cost servicing & repair
- Backed by the unswerving commitment of ADL’s famous customer support operation.
**Style with Strength**

Its unmistakable style makes the Enviro400 instantly recognisable, giving it real street presence. It’s based on Alexander Dennis’s proven frame and paneling system. This minimises weight, maximises fuel efficiency and provides durability and ease of repair.

**Spacious and versatile interior with better access**

Enviro400’s interior has a stylish look and outstanding practicality - more seats and features than comparable buses. It’s welcoming and bright, featuring modern colours, textures and shapes, with a wide choice of finishes and features. Careful attention to packaging makes best use of space without compromising passenger legroom and comfort. Enviro400 features a wide-entry fully compliant with ECWVA legislation, no steps and a gently sloping floor with wide gangway through most of the lower saloon.

**Driving pleasure**

The driver benefits from an attractive and ergonomically designed compartment, with fully adjustable seat, steering column and instrument binnacle. Other features include a colour Vehicle Information Centre monitoring all software and running data as well as providing a rapid access portal for the vehicle’s diagnostics.

**Body and chassis**

The chassis has been developed in concert with the body, ensuring a seamless interface between the two technologies. It has exceptional manoeuvrability, a reputation for reliability, durability and low cost of operation. The powertrain is laid out to provide excellent access for routine servicing and maintenance, minimising downtime, and uses the ever-popular popular Cummins six-cylinder engine, with SCR EEL emissions technology. Using only premium transmission components, the Enviro400 promises years of reliable service.

**Better reparable**

Lower cost of operation has been achieved through attention to detail. Notable examples include the use of a quickly detachable rear side front chassis member and body panels, or the revolutionary fuel tank. Shaped to parallel the stair profile, it allows efficient body packaging, yet is more accessible for maintenance than a conventional tank.

---

**The sky’s the limit for Enviro400 open top tourist buses**

There’s no limit to the unique views passengers can enjoy from the top deck of the Enviro400 open top tourist bus.

Derived directly from the Enviro400 city bus, it’s a purpose designed tourist vehicle sharing the same standards of durability, maneuverability, serviceability and passenger facilities. A compact 11m in length, it can carry 80 seated passengers, with 51 on the upper deck. It’s economic to buy and operate yet will stand up to the stop-start rigours of intensive city centre tourist duty.

**Hybrid tourist bus**

An innovative tourist double deck is the latest addition to ADL’s best-selling range of hybrid-electric buses. Designed to provide exceptionally low emissions and fuel economy combined with all the style and utility of a pace-setting tourist vehicle, the Enviro400H hybrid is raising the stakes for tourist operations around the world.
Fuel Savings & Emission Reductions from Proven Hybrid Technology

The Enviro400H combines all the benefits of a standard diesel vehicle with Alexander Dennis hybrid technology - reducing fuel consumption and greenhouse gas emissions by over 30 per cent. The breakthrough technology derives from a pioneering partnership between ADL and BAE Systems. It is the result of a far-reaching and meticulous development programme involving hundreds of millions of miles of in-service trials and operations. As a result ADL is now leading the way with this revolutionary technology and is now Europe’s leading supplier of hybrid buses.

ADL hybrids are available today as standard production options. They offer proven and reliable technology that integrates seamlessly into any fleet. The Enviro400H uses a revolutionary hybrid solution designed specifically for buses and brings together cutting-edge innovation with familiar engine, powertrain and axle units. Importantly, the Enviro400H’s lithium ion batteries do not need mains recharging during their extended life cycle, providing the ideal solution for operators seeking the ultimate in greener, cleaner buses.

World class customer support

ADL is committed to supporting the Enviro400 - like all products - to the highest level, ensuring that they return maximum operational revenue with minimum downtime.

ADL employs a team of 300 people dedicated to aftermarket support. Skelmersdale in North West England is at the heart of ADL’s worldwide parts and service operation. This 50,000ft² facility carries a £15 million inventory of parts - 30,000 parts lines, with 2,000 lines shipped every day. At 96% ‘first pick’, parts availability sets the standard for the industry.

There is a single point of contact for all parts and service enquiries through a sophisticated UK based call centre staffed by fully trained and knowledgeable personnel. Next day parts delivery is guaranteed in the UK, while 24-hour service support is provided by a team of highly skilled engineers located throughout the country, providing swift response to service needs from their fleet of mobile workshops.

There’s a whole range of fixed price service and parts contracts available, each tailored to the exact needs of the customer, including fixed price parts packages running from 1 to 10 years.

Single Point of Contact Call 0845 358 9988
The Enviro400 is Britain’s leading double deck bus. Its attractive look combines a stylish exterior with radical interior solutions that provide greater seating capacity.

The whole vehicle is designed with the needs of the passenger, operator and driver in mind, and is available in single or dual door forms with a wide range of interior options.

Enviro400 is available as a fully integrated vehicle on an ADL chassis, or as a body solution for alternative chassis manufacturers.
Low Floor Double Deck Bus
10.2m - 11.4m

CHASSIS SPECIFICATION

Engine
Cummins ISBE6.7EV 6 cylinder turbocharged and intercooled diesel engine certified to EEV emission standards. Euro5 standard optional.
Displacement: 6.7 litres
Power: 250 PS (186kW) @ 2300 rpm
Torque: 1020 Nm @ 1200-1600 rpm

Gearbox
Choice of Voith D854.5E 4 speed or ZF 6HP1203B 6 speed automatic gearbox both fitted with integral retarders and interlocks.

Front Axle
ZF RL75 deep drop I beam axle.
Capacity 7500kg. Lock angle 55°.

Rear Axle
ZF AV-132 drop centre axle. Capacity 13,000 kg.

Suspension
Full air suspension mounted within chassis frame floor contours eliminating component intrusion in passenger saloon areas.
Front: Two 305mm (12”) air springs. Multilink location. Anti-roll bar. Two double-acting dampers.
Rear: Four 255mm (10”) air springs. Multilink location. Anti-roll bar. Four double-acting dampers.
Features: Fast kneel facility on front suspension, reduces height typically from 325mm to 245mm.

Steering Gear
ZF 8098 integrally powered, variable ratio steering gear. 457mm two spoke steering wheel.
Adjustable steering column mounted with driver’s binocular, interlocked with the handbrake for safety.

Frame
Welded modular platform.
Material: Steel channel, rectangle and angle sections. Frame Section: 160mm x 80mm x 8mm thick.
Finish: Two-pack epoxy compliant corrosion-resistant paint applied at Final Finish stages of manufacture.

Braking System
Full air operated category 1 Anti-Lock Braking system 430mm disc brakes with separate systems front and rear.
Park: Air-released, spring-actuated on rear wheels.
Hand control valve.
Compressor: Knorr Bremse “Phoenix”.
Knorr Bremse air dryer.

Wheels and Tyres
Tyres: 275/7OR22.5 XZU3 Incity tubeless radial tyres.
Wheels: 7.5” x 22.5” spigot mounted, steel wheels.

Cooling System
Rear mounted offside side by side cooling pack incorporating intercooler with electronically controlled hydraulic fan drive.
Separate coolant header tank with sight glass and offside fill point.
Flyscreen is fitted in front of radiator to minimise dirt ingress.

Fuel tank
Capacity of 275l
22.5l AdBlue tank mounted under staircase.

Electrical Equipment
24 volt, single pole negative earth.
Batteries: Two 12 volt maintenance-free, 200 amp/hour capacity. Mounted on ‘slide-out’ carrier under driver’s cab. Battery boost socket supplied.
Alternator: 155 Amp. Fast fuse and overvoltage protection.
Actia multiplex system with colour TFT screen on driver’s binocular for driving information and diagnostics.
Prestolite MIO IR starter motor.

Instrumentation
Stylish instrument and control binocular with all instruments clearly visible. Colour TFT screen displaying running and diagnostic data.
Speedometer, tachometer and temperature gauge.
Warning lights: air pressure, battery charging, coolant level low, direction indicators, handbrake, main beam and master stop.
Warning buzzers: Air pressure low and coolant temperature high.
All safety circuits wired through master stop lamp. Warning circuits integrity test system. Instrument panel illumination wired through sidelights.

General Options
- Electronic water header tank level indicator
- Ramp interlock
- Tachograph
- Left hand drive
- Driver’s cab air-conditioning
- Hubodometer
- Full vehicle “squat”
- Pressure release radiator cap
- Ferry lift
- Spare wheel and tyre
- Fuel System: Identic/Pozilock fill system
- Identic AdBlue fill system
- Stainless steel fuel tank
- Radiator filter
- Cooling pack induction filter
- Alloy wheels

Other Options
- Audible trafficators
- Driver cancelling indicators
- LH indicator stalk
- Spiral Staircase
- Separate start batteries
- Maintenance free gel batteries
- Monbat AGM low maintenance batteries

Body Build Integration
- Clean frame joints for simple body frame interface
- Chassis frame outriggers for body pillars
- Riser frame section to rear seat
- Radiator air intake ducting
- One-piece integrated instrument panel with plug and sockets
- Driver seat mounting frame and footplate
BODY SPECIFICATION

Structure
The structure is jig built from aluminium extrusions and stress panels to ensure full structural integrity. Dissimilar metals are treated with dielectric paint and the completed vehicle is undersealed upon build completion.

Exterior Panels
Aluminium panels are used, butt jointed and bonded to the frame. The side skirt panels are easily detachable for speedy replacement. The roof is aluminium sheet and bonded to the frame. The front and rear domes and glazing surrounds are GRP mouldings. The low-level front and rear panels are ABS mouldings with bumpers in three sections designed for quick removal and/or replacement.

Glazing
The vehicle is available with bonded or gasket glazing with single piece windscreen offering first class visibility. Hopper windows, tinted glass and heated windscreen are available.

Doors
The entrance is fitted with a 1200mm wide twin leaf slider door with active seals to improve sealing. The two-door variant has a twin leaf sliding plug door providing a clear exit platform.

Interior Trim
The interior is wipe clean laminates tailored to the users requirements and to match seat moquette and floor colouring.

Floor Covering
A hard-wearing vinyl floor covering is offered as standard in a variety of colours and patterns.

Heating and Ventilation
The standard vehicle is supplied with blown air heating in both saloons with forced air ventilation from the front dash area in the upper saloon. Integrated driver’s air conditioning system supplies cool or warm air directly to the driver. Systems which comply with the very latest Tfl vehicle specifications can also be supplied: A variable rate powered air extract which provides over one hundred air changes per hour in the upper saloon. Upper saloon air chill system providing cool air via roof ducting over the full length of the saloon. The optional systems can be supplied independently or together as a fully integrated heating and ventilation system controlled to preset vehicle temperatures by the vehicle system.

Electrical System
The electrical system is fully multiplexed with the electrical centres located behind the driver’s area and in the upper saloon 5-way seating area, with large access panels for easy maintenance. The system provides on-board vehicle diagnostics via the driver’s screen. Marker lights, side/tail, indicators, stop lights, fog and reverse lights are all supplied as LEDs as standard. CCTV and Real Time information systems are available as options.

Seating
Various seat types can be fitted from bus seats to coach seats, plus belted options.

Destination Gear
For London, TFL blinds are fitted. Mobitech electronic destination gear is standard on non-London vehicles. Alternative electronic destination gear is available.

Entrance Ramps
The two doors has a powered ramp at the middle door as standard with a choice of suppliers. The single door vehicle is fitted with a manual ramp as standard with optional powered ramps available.

DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall Length</th>
<th>Wheelbase</th>
<th>Front Overhang</th>
<th>Rear Overhang</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2m (2 door)</td>
<td>10200mm</td>
<td>5250mm</td>
<td>2650mm</td>
<td>2300mm</td>
</tr>
<tr>
<td>10.9m (2 door)</td>
<td>10900mm</td>
<td>5950mm</td>
<td>2650mm</td>
<td>2300mm</td>
</tr>
<tr>
<td>10.9m (1 door)</td>
<td>10900mm</td>
<td>5950mm</td>
<td>2650mm</td>
<td>2300mm</td>
</tr>
<tr>
<td>11.4m (1 door)</td>
<td>11400mm</td>
<td>6450mm</td>
<td>2650mm</td>
<td>2300mm</td>
</tr>
</tbody>
</table>

WEIGHT DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>10.2m</th>
<th>10.9m</th>
<th>11.4m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Axle plated weight</td>
<td>6300 kg</td>
<td>6300 kg</td>
<td>6300 kg</td>
</tr>
<tr>
<td>Rear Axle plated weight</td>
<td>11500kg</td>
<td>11500kg</td>
<td>11500kg</td>
</tr>
<tr>
<td>Gross plated weight</td>
<td>17800 kg</td>
<td>17800 kg</td>
<td>17800 kg</td>
</tr>
<tr>
<td>Design gross weight</td>
<td>18000 kg</td>
<td>18000 kg</td>
<td>18000 kg</td>
</tr>
</tbody>
</table>
Low Floor Double Deck Bus
10.2m - 11.4m

**SEATING CONFIGURATIONS**

** Capacities **

**Lower Deck**

- **10.2m (Single Door)**
  - Overall length 10.2m • Seated 29 or 28 + 1 wheelchair

- **10.2m (Two Door TfL)**
  - Overall length 10.2m • Seated 26 or 24 + 1 wheelchair

- **10.9m (Single Door)**
  - Overall length 10.9m • Seated 32 or 31 + 1 wheelchair

- **10.9m (Two Door TfL)**
  - Overall length 10.9m • Seated 28 + 1 wheelchair

**Upper Deck**

- **10.2m (Single Door)**
  - Overall length 10.2m • Seated 41

- **10.2m (Two Door TfL)**
  - Overall length 10.2m • Seated 41

- **10.9m (Single Door)**
  - Overall length 10.9m • Seated 47

- **10.9m (Two Door TfL)**
  - Overall length 10.9m • Seated 45

Alexander Dennis Limited
Dennis Way, Guildford,
Surrey GU1 1AF
Tel: +44(0)1483 571271 Fax: +44(0)1483 301697
www.alexander-dennis.com
Email: enquiries@alexander-dennis.com

Alexander Dennis’ policy is one of continuous development. The right is reserved to change specifications of the models and items described. For the latest details always consult Alexander Dennis (R61)