

*A step towards the*  
**FUTURE**



COMPARED TO THE STANDARD SEALEGS,  
WHICH ARE VERY MULTI-USAGE, THE ELECTRIC  
E4 IS VERY SPECIFIC AND TARGETED AS A  
SOCIAL BOAT FOR PEOPLE THAT APPRECIATE  
THE FINER THINGS IN LIFE.



# BOAT REVIEW SEALEGS ELECTRIC E4



Top & Bottom  
Right:  
Doing what it  
does best.

Bottom left:  
The Alloy console  
has a prominent  
one piece acrylic  
screen.

**S**EALEGS founder, Maurice Bryham, built the first electric Sealegs in 2001, and over the years the company has tinkered with electric traction control. Now, thanks to battery technology, motors and controllers being more cost effective, the idea of an electric Sealegs has become commercially viable. The Sealegs Electric E4 is the result.

Sealegs admit that the E4 is a prototype, and not yet a full production model. That the company can utilise to work out the systems and to ensure that it is fully functional to the extremely high standards that they want before selling to the public. All the same systems will be used for E5, which will be a production ready version available late 2019. The major difference between E4 and E5 will be a more basic aesthetic design – E4 was designed to impress as a show craft.

Another important aspect was the E4 had to be visually striking and a total departure from the look of the Sealegs range. Sealegs also wanted to

show what they could do at the luxury end of the market. Wow, have they achieved that! The Electric E4 looks stunning and is wild in its appearance and is nothing like any other RIB on the market. It has unique features never seen on a RIB before and along with the electric adaptation and innovative patented amphibious technology, it must rate as one of the best boats Sealegs has built.

Don't be surprised to see the electric drive system appearing in other Sealegs models. The company point out that while there will always be a place for the current petrol/hydraulic system, electric drive may very well become the standard mode in future Sealegs.

## MORE SPACE

Compared to the standard Sealegs, the layout is very different. Gone is the large engine box concealing the marinised Honda 22HP air-cooled inboard engine, as the compact power pack is now all inside the console. This has been replaced with a very social area aft, which Sealegs refer to as the X-Lounge. Forget

There is a lot of details in the layout accentuated by the unique sponson seating.

about fishing from this cockpit, it's all about alfresco entertaining — definitely wine and cheese, not pillies and squid. Not only is there seating provided for four internally, there's also sponson bench seating either side. This is formed from a high-density foam, upholstered over and then velcroed to the tubes. I have never seen anything like this on a RIB before, and as Sealegs are promoting this as their upmarket prestige model, they couldn't have done it better. Right down to the choice of types of vinyl, patterned stitching and the custom lighting built into the fold up table, the X-Lounge is all about being trendy, swish and appealing.



The helm seats in E4 are twin bench seats on Kiwi-made Jolt Rider Sport shock mitigating bases. They have a high impact, dual stage, cross-over dampening system, that provides a controlled rebound. Although my run on Auckland Harbour was relatively calm, I can see where the suspension seats would come into their own in the rough water. You can set the height to suit and are they are available with fore and aft sliders.

The alloy console, upholstered either side, has a prominent one-piece 12mm acrylic screen that carries on below the forward cushions and forms an intricate part of the elegance of the console design. The dash has been kept clean and functional with just one 24" Simrad screen catering for every possible navigation, entertainment, engine and system function, plus an electric joystick to control the land motion of the craft. The steering wheel is multi-functional with all wheel controls, stereo, headlight and even the horn controls built in. Great with everything on the wheel and close to hand. If you decide to add a shade solution to the E4, it would need to be carefully designed to continue the boat's natural flair and style. Best thing is if you still want the electric traction system but more of a basic layout for fishing, diving or commercial use you can have it.

## THE SYSTEM

The electric system starts with a single 7.5kWh Lithium-Ion battery pack that sits under the centre console. This will take 4-5 hours to fully charge and is reasonably compact and light weight. There is a battery management system paired to it, plus an onboard charger to charge the 48volt battery and an independent charger to look after the house and start batteries. The 48 volt runs the Sealegs componentry and custom lighting while the 12 volt looks after all the standard boat functions. The E4 has a powerful marinised asynchronous brushless hub drive motor and high torque planetary gearbox in each leg.

Also tucked away in the console are the speed controllers for the electric motors, battery management system and the 'brains' behind the switching and other control aspects of the system. All the development work for the control system on the boat has been done by Sealegs, using their proprietary amphibious traction and control system (AmpTracs). This provides all the boat and amphibious functions, plus gives you data readout for the outboard.

The hydraulics have not entirely gone away as the boat still uses hydraulics to raise and lower the legs and for steering. The big difference is that all the Sealegs componentry runs from an electric power source.

Forward of the console is a day bed and, what some might find unusual, no anchor, cleats, or bow roller. The solid nosecone (hides the hydraulic forward lift ram) and deck area are all clean and uncluttered. Sealegs points out that an anchor system is available - just they chose not to fit one on the prototype.

## LAND & SEA

Reviewing a Sealegs is very different to other boats, as you start on the boat on the land and head to the water at up to 10 kph. This way you get to experience the on-land capability and find out just how simple

# BOAT REVIEW

## SEALEGS ELECTRIC E4



### SPECIFICATIONS

|                           |  |
|---------------------------|--|
| <b>Model &amp; Model:</b> | Sealegs Electric E4                                  |
| <b>Price</b>              | POA  |
| <b>Type:</b>              | Amphibious RIB                                       |
| <b>Construction:</b>      | Alloy Hull/Hypalon Tubes                             |
| <b>LOA:</b>               | 7.30m  |
| <b>Beam:</b>              | 2.71m  |
| <b>Deadrise:</b>          | 21 deg   |
| <b>Height on trailer:</b> | 3.20m  |
| <b>Dry weight:</b>        | 1390 kg  |
| <b>Test Power:</b>        | Evinrude 200 ETEC G2                                 |
| <b>Power Onboard:</b>     | 48 volt 7kWh Lithium Battery                         |
| <b>Max Speed:</b>         | 42 knots   |
| <b>Speed on Land:</b>     | 10 kph   |
| <b>Propeller:</b>         | 15 1/8 x 20 Rebel                                    |
| <b>Power options:</b>     | 150-200 Outboard                                     |
| <b>Fuel Capacity:</b>     | 180 litres   |
| <b>Flooring:</b>          | U-Deck   |
| <b>Lighting:</b>          | Custom   |
| <b>MFD:</b>               | Simrad NSO Evo3 24"                                  |
| <b>Entertainment:</b>     | Fusion Apollo 770                                    |
| <b>Contact:</b>           | <a href="http://www.sealegs.com">www.sealegs.com</a> |

### FUEL & PERFORMANCE DATA

Fuel capacity: 180 litres

| RPM  | Knots | L/h  | L/NM  | Range (NM) |
|------|-------|------|-------|------------|
| 1500 | 5.2   | 4.1  | 0.790 | 200        |
| 2000 | 6.5   | 8.7  | 1.400 | 110        |
| 2500 | 7.2   | 15.4 | 2.200 | 73         |
| 3000 | 11.0  | 21.4 | 2.000 | 81         |
| 3500 | 20.0  | 21   | 1.100 | 140        |
| 4000 | 26.0  | 28.2 | 1.100 | 140        |
| 4500 | 31.8  | 36.8 | 1.200 | 130        |
| 5000 | 36.0  | 43   | 1.200 | 130        |
| 5500 | 40.0  | 68   | 1.700 | 95         |
| 5700 | 42.0  | 69.4 | 1.700 | 95         |

To allow for adverse conditions, range is calculated on 90% of the fuel capacity.

The Sealegs Electric E4 is rated for a 150-200hp single outboard.

the boat is to drive on land with its triple pack of System 60 AES (Amphibious Enablement System) legs.

In the case of the E4, you have up to 1.5 hours of on-land drive time and approximately 20 typical return deployments on a single charge. You have two-wheel or all-wheel drive options and regenerative braking. It's also a great attraction when heading onto or off the beach.

Once you are deep enough in the water, you power up the outboard, bring the legs up into their on-water position, and the rest is no different to driving a conventional boat. The reverse is exercised when you return.

The Sealegs Electric E4 is rated for a 150-200hp single outboard, with our craft powered by an Evinrude ETEC 200 G2, with side panels in matching colours to the boat. Top speed was 42 knots, and it delivered a comfortable and economical cruise in the light conditions on Auckland Harbour of around 31.8 knots which saw a fuel use of 36.8 lph and a range of about 130 nm.

The alloy hull of the E4 is based on the existing Sealegs 7.1 but with a few structural tweaks, a 200mm extension and larger fuel tank. It's also a little heavier than the 7.1, although only marginally. The Hypalon tubes are made by Lancer Industries (now owned by Sealegs parent company) and finished with custom laser-cut logos either side.

### SUMMARY

If you aren't into your fishing but looking for a boat that's going to turn heads every time you drive down the road or on the water, then the Sealegs Electric E4 should do the business. Flashy - especially at night with all the lights on - but practical as well. It also comes with Sealeg's well proven handling and performance reputation.

With electric being the way of the future in virtually all transportation, Sealegs have a winner on their hands, and in time I would imagine that most of their boats would be sold with this system. It is a promising step forward for Sealegs and clearly shows they are not afraid of embracing new technology, much like they did 17 years ago. ⚙️