

loco





No limitation on the destination

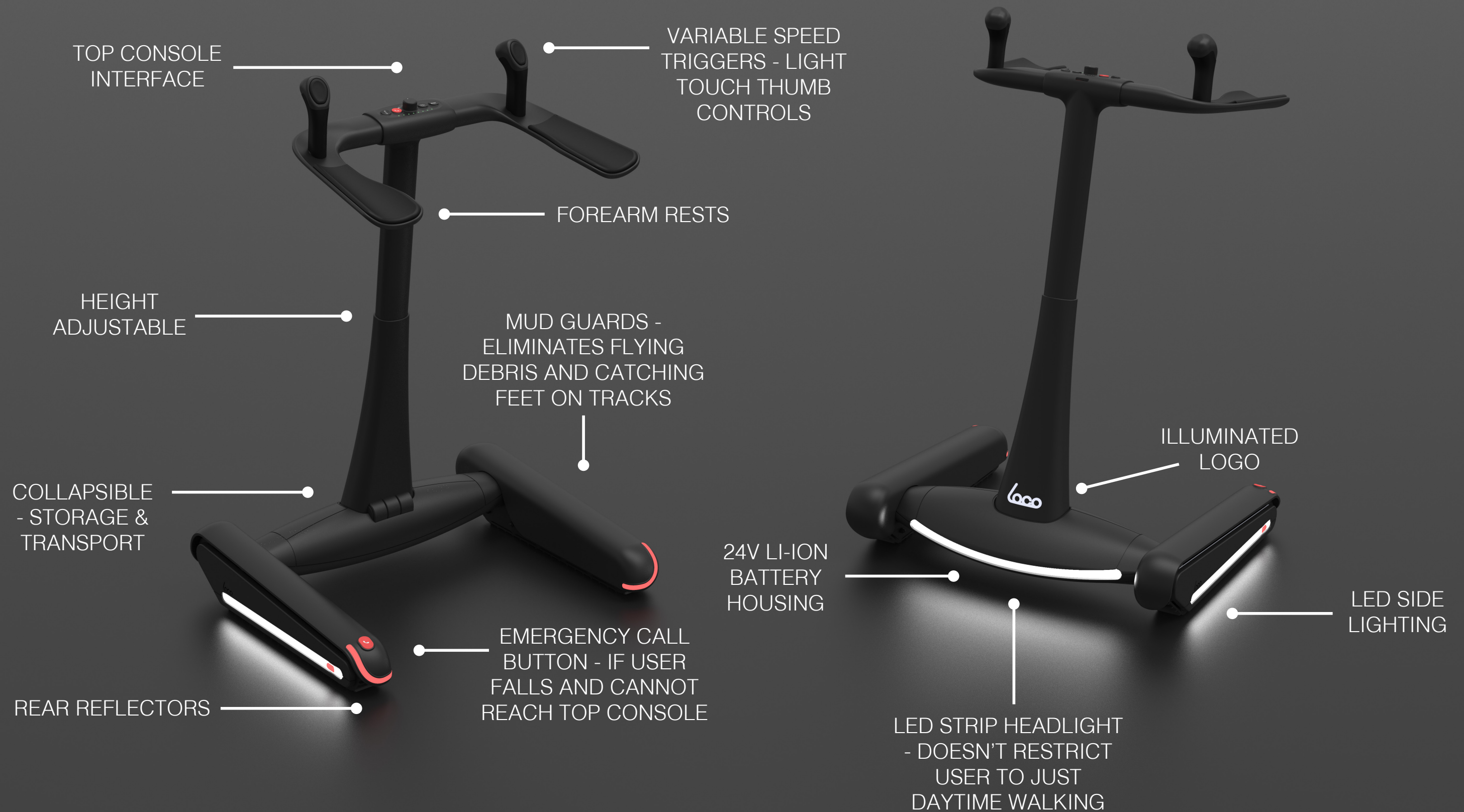
Loco, the next walking aid innovation. Allowing those with locomotion difficulties to experience the outdoors with ease and not restrict the user to a smooth flat surface. Giving them greater freedom and independence for leisure purposes, bettering their quality of life and social well-being.

Existing walkers struggle on rougher terrain, limiting where the user can explore which includes; cobbled paths, woodland trails and sandy beaches. To overcome this, Loco offers power assisted walking controlled via two independent triggers. This in combination with the forearm support relieves the weight of the user, enabling and encouraging them to walk further and for a longer duration, enhancing stamina and improving fitness. Loco moves via an electronic tracked system which involves a rubber tread and four smaller rollers in-between the fixed corner bearings, all powered via a sprocket chained system, sending power directly to a raised idler wheel at the front. The tracks large surface area will displace the users weight, obstacles in the way are not a problem and steep gradients are now more accessible ensuring a smooth ride. The gyroscopic sensor and accelerometer create a sense of reassurance, notifying a pre-saved emergency contact if an accident has occurred. However having a low centre of gravity makes it easier for the user to raise it back up.

Loco focusses on inclusivity, reducing the capability demands of the product which results in more people being able to use it, improving their user experience. This ranges from those in later life to those going through stroke rehabilitation or anyone with difficulty ambulating.

With the aim to unstigmatise assistive devices, Loco looks nothing like current boxed rollators. Featuring an unthreatening soft aesthetic with a single vertical support, creating a utilitarian ergonomic design, making the anatomical more minimal. Merging minimal design with functionality.



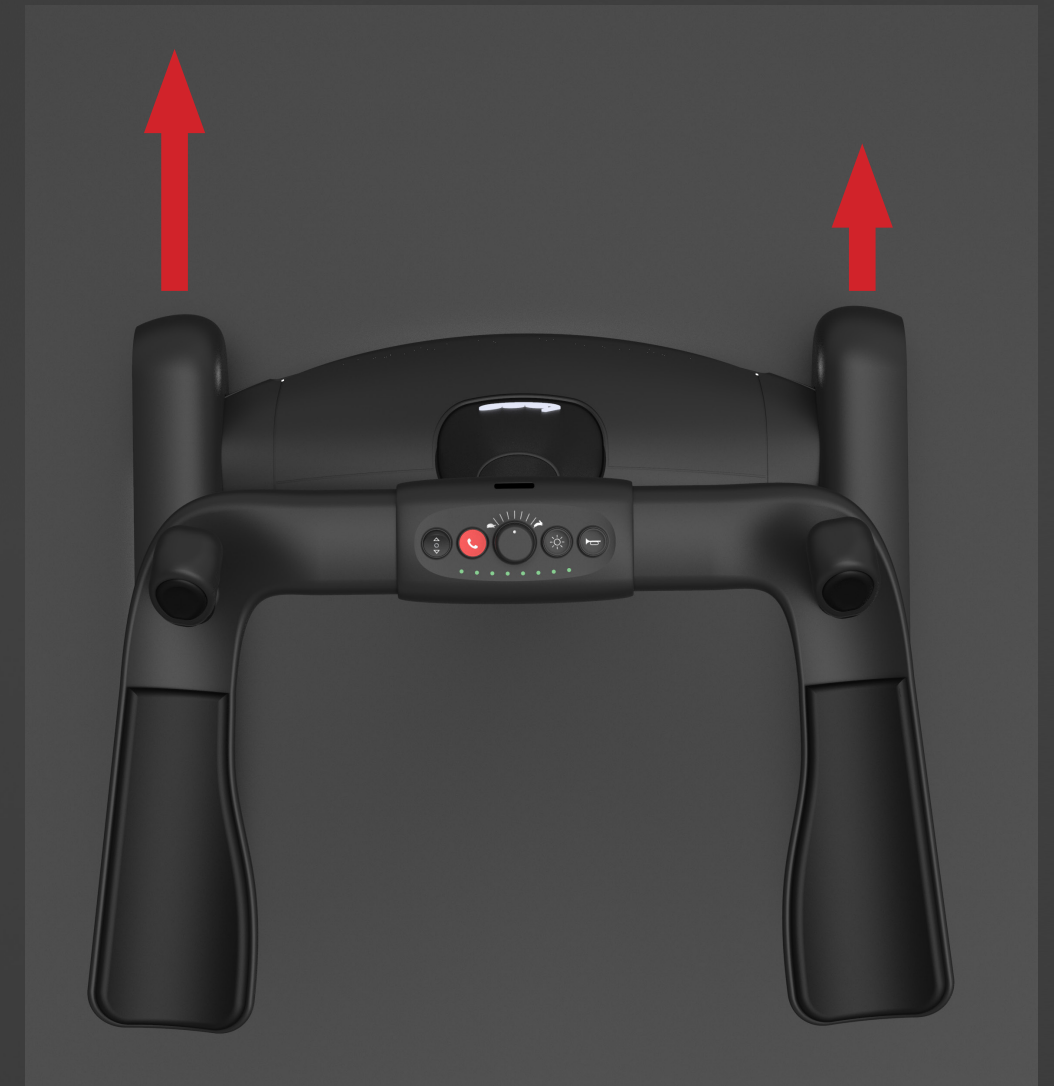


FUNCTIONALITY, COMFORT, INCLUSIVITY AND SAFETY.

All are qualities thoroughly developed within the main interaction point of Loco. Two variable speed triggers control each track, creating the ability to manoeuvre the product with ease without jolting the user, made inclusive for those with little dexterity and arthritic pain. Rather than bending individual joints, the users opposable thumb gently nests onto the angled trigger needing little force to take off, eliminating the chance of strain over time.

Ensuring for maximum safety, housed within the padded rests are momentary contact push switches acting as a circuit breaker and two step engagement procedure with the product before setting off.

Perfectly ergonomic, the camber of the rests loft into the horizontal support, comfortably nesting around the base of the hand and wrist. This ensures the user has a firm grip around the fixed trigger, creating a sense of reassurance and confidence of the product.



INCLUSIVE ALTERNATIVE CONTROLS.

Tactile controls which produce a haptic response gives the user reassurance they have been interacted with and a response will occur. Offering inclusivity to those who aren't skilled nor interested in using a phone to operate. Loco gives the user the option to retrofit a phone mount in order to track their progress visually, creating opportunity for more motivation and build up a fitness profile.

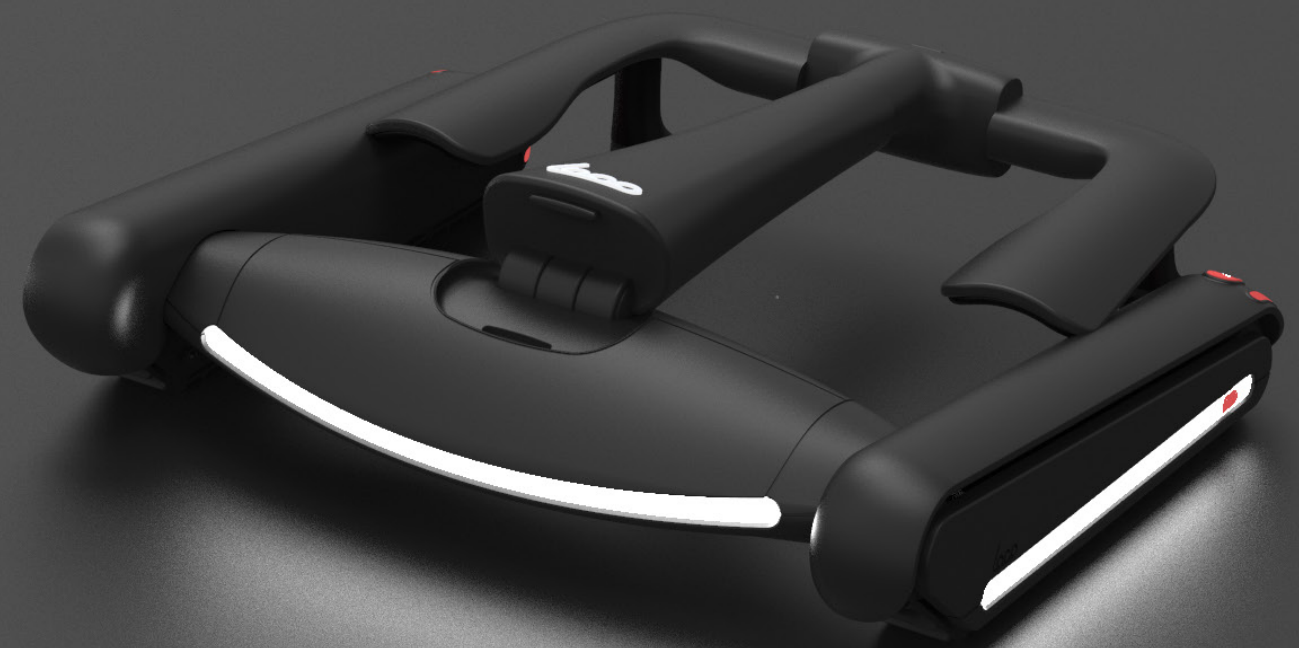
Universal icons in combination with appropriate controls for each feature avoids confusion, creating a more comfortable experience especially for those with little dexterity and pinch strength.

Controls; Forward/Off/Backwards, Emergency call button - pre saved contact dialled via bluetooth connection from users phone, Variable speed dial - adjusts maximum speed of the product (0.1-3mph), Lighting and Horn - this is usually situated on the handling points, however due to the possible dexterity issues of the user this could be a potential hazard.





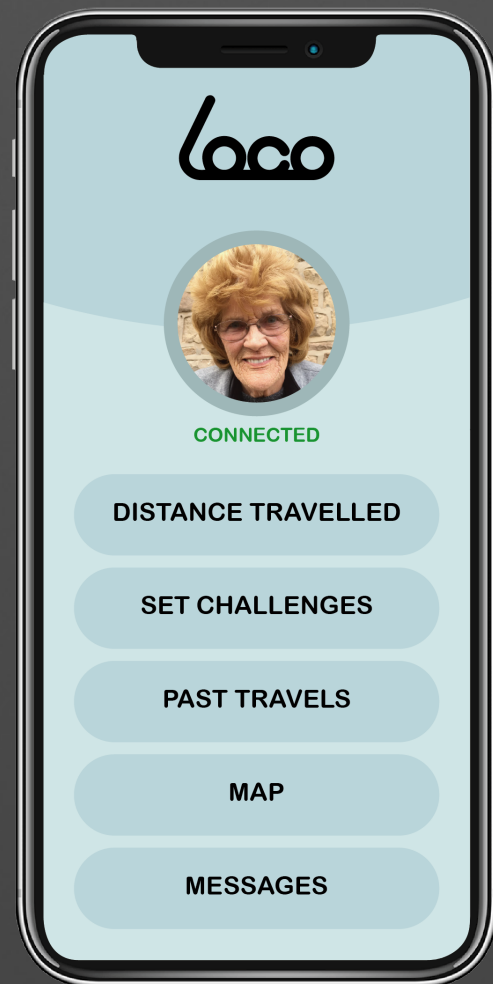
For this type of utilitarian product, function, safety and convenience needed to be in keeping with the minimal aesthetic. Loco can height adjust and fold in one swift motion by raising the forearm rest which releases fixed internal pins around a pulley, this way the crutch pins are hidden and doesn't negatively impact the clean visual. This also releases a latch at the base of the vertical support, allowing the stem to lay back or be held whilst finding a suitable height to avoid bad posture.



Focussing on softness to avoid the intimidating look, a range of pastel colours have also been chosen to accent the product. Due to the application, this produces a slight retro charm which is becoming more of a trend amongst younger generations, but also fitting for the elders to reminisce on the past and feel young again, which is what the product intends to do. Contrasting colour options classic blue and black aim to be inclusive for those who want a more masculine product. Blue chosen as the power colour representing stability, reliability and serenity.



Loco has great potential for a commercial service by being rented out at theme parks, stately homes, woodland resorts, beaches and in the countryside. Existing walkers are manufactured considering frugal principles and made accessible for all, a large percentage of the population are prepared to pay for a product like this which massively enhances their quality of life, however some would not be financial able to afford it. Therefore offering this as a service allows for greater inclusivity, ensuring those who would benefit from this don't miss out.



Loco offers the user a mobile app connected to the product via bluetooth, enabling them to build up a fitness profile, set challenges and track improvements.

With a combination of tracking technology and messaging service, Loco allows users to connect. Friends, family, nurses and carers can all connect to one another, monitoring them, charting progress, setting targets and leaving positive messages of reinforcement for the user.

The app is an optional inclusive feature, designed for a range of health care guidance, promoting fitness and encouraging constant improvement.

As part of the service community aspect, Loco features a QR code on each individual machine, allowing the user to leave a story, polite message or their personal review/ experience using the product for the next user. Connecting the physical world with digital.

