

# LUCI

## QUICK SETUP

Seven easy steps for clinicians and technicians to set up a new LUCI user's wheelchair.

### 1 ADJUST THE SEATING SYSTEM

Set up the wheelchair seating system for the user as you normally would, adjusting the seat, armrests and footplate. Get the user into a stable, functional driving position.

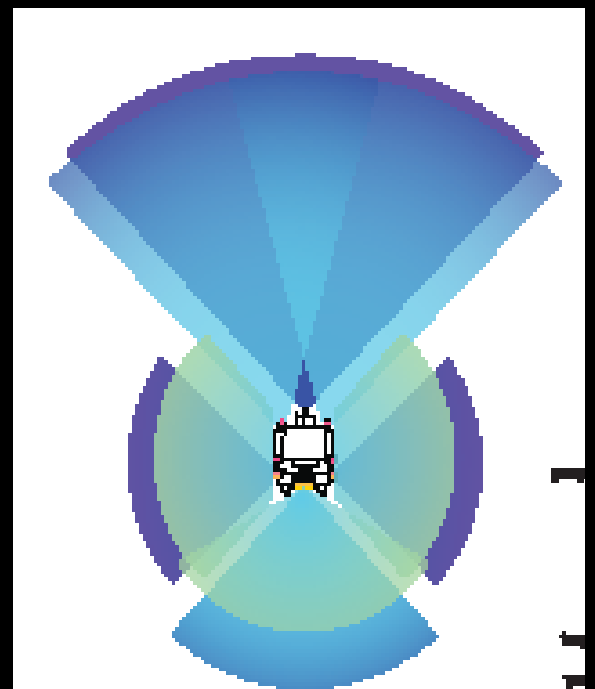
### 2 CHECK THE SENSORS

Now that the hardware is set up for the user, point out where all the sensors are. The Scout™ on the footplate and the Fusion Sensors™ along the sides and back of the SmartFrame™ must all be kept clear of clothes, feet, backpacks, etc. during use.

### 3 DISCUSS WHAT LUCI SEES

From above, it's easy to see: LUCI offers 360° coverage.

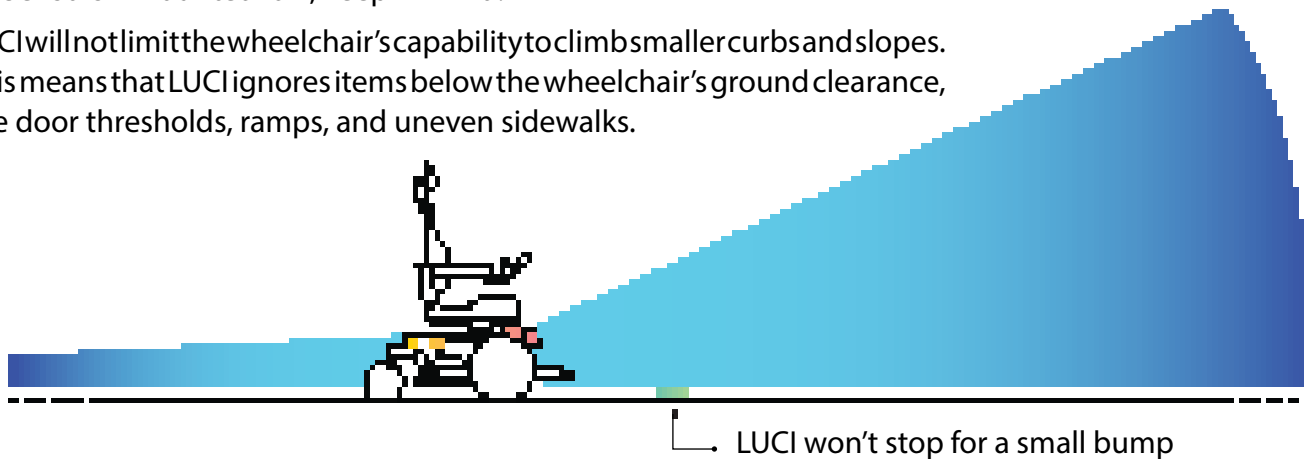
- » LUCI can detect possible collisions and drop-offs in the zones shown and slow the wheelchair down to a smooth stop.
- » Objects within about an inch of the wheelchair may not be properly detected.
- » Objects with narrow cross sections (like cables or extremely narrow table legs) may not be detected.
- » Fast moving objects traveling directly at the wheelchair or objects traveling across its path may not be detected in time to be avoided.



## Collision Avoidance: Front & Back

LUCI can see more than 15 feet in front and more than 3 feet in back. With the FusionSensors™ mounted low, keep in mind:

- » LUCI will not limit the wheelchair's capability to climb smaller curbs and slopes. This means that LUCI ignores items below the wheelchair's ground clearance, like door thresholds, ramps, and uneven sidewalks.



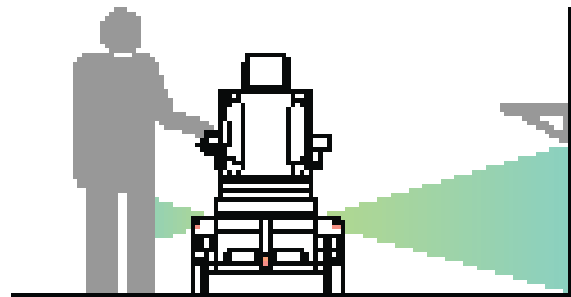
- » LUCI intentionally does not limit chair navigation for obstacles above the power base of the chair. This allows LUCI to pull into open spaces like tables or desks. If the user wants LUCI to stop at the same spot under a table every time, you can place an object under the table (like a box).



## Collision Avoidance: Side to Side

LUCI can see about 3 feet on either side of the wheelchair. Keep in mind:

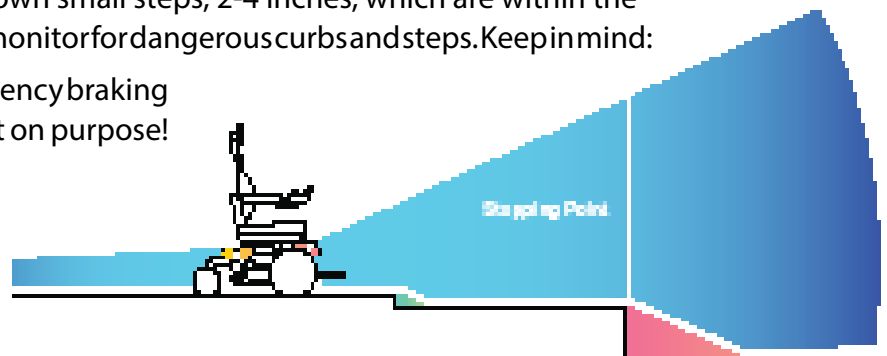
- » LUCI is tuned to get very close to things on the side.
- » LUCI will see the legs of a person, but not their toes.
- » LUCI will not see objects up high, like doorknobs, handrails, and wall shelves.



## Drop-Off Protection

LUCI will allow the wheelchair to drive down small steps, 2-4 inches, which are within the wheelchair's specified capability, but will monitor for dangerous curbs and steps. Keep in mind:

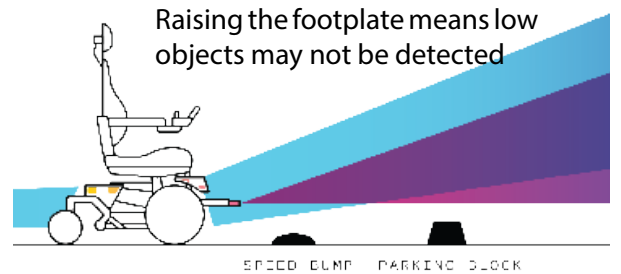
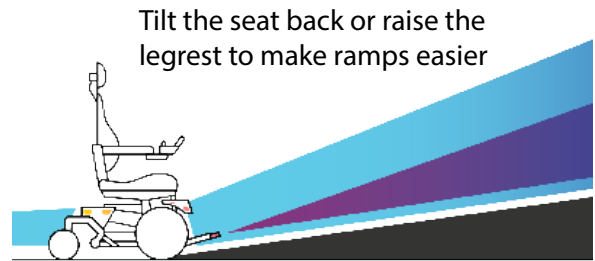
- » Drop-off protection is similar to emergency braking or airbags on a car - please don't test it on purpose!
- » If the user drives at high speed settings toward an unsafe drop-off, LUCI may not be able to overcome the wheelchair's momentum to stop in time.



## Understanding the Scout

Scout is LUCI's forward facing sensor, and the first line of defense in collision avoidance. In order to work properly, it needs to be level with the ground or pointing slightly up. Keep in mind:

- » For users whose normal driving position points the footplate down at the ground or significantly up toward the ceiling, please contact LUCI for help adjusting the Scout.
- » If the Scout is level with the ground, a ramp may show up as an obstacle. Tilting the seating assembly or elevating the footrest will allow you to drive up the ramp.
- » If the Scout is elevated off the ground, LUCI's ability to see low objects (parking blocks, etc) in front is decreased.



## Tip Protection

LUCI tip protection tracks the orientation of the wheelchair as the user drives, and alerts them to unsafe slopes with an audible beep and a flashing yellow light on the dashboard.

- » Every wheelchair manufacturer publishes maximum allowable angles for safely driving up and down a steep ramp or driving across side slopes for their wheelchair.
- » The wheelchair's actual tip limit may be different from the manufacturer's published limit due to seating assembly position, user positioning, user weight, attachments, or ground conditions.
- » As the wheelchair exceeds manufacturer tilt thresholds, the yellow LUCI Status light will blink faster and the beeping will become faster.
- » If the wheelchair does tip over, LUCI will sound an audible alarm, the LUCI Status light will turn red, and all wheelchair motion will be stopped.
- » In the MyLUCI app, users can choose to have a Tip Alert sent to a caregiver or loved one.



## Remember:

A power chair, like all motorized vehicles, should be operated with an awareness of the dangers in the environments of use. Sloped ground and high speeds cause momentum that can prevent LUCI from bringing your wheelchair to a complete stop before a drop-off or before colliding with a detected object. Once LUCI detects anything, however, the driver will be 'assisted' by the slowing of the chair.

For more information about what LUCI sees, go to [luci.com](http://luci.com).

# LUCI<sup>®</sup>

## SETUP

Start Setup

### 4 RUN THE LUCI SETUP TOOL

When you turn on a wheelchair that has a new LUCI unit installed, LUCI will be in Demo Mode. To get LUCI out of Demo Mode and prepare it for use, follow the steps below.

#### Launch the LUCI Setup Tool

1. Press and hold the LUCI button on the Dashboard until it beeps and begins to flash quickly.
2. On your mobile device (laptop, tablet or smart phone), search Available Wi-Fi Networks and connect to the LUCI Setup Wi-Fi network. The network password is LucSetup.
3. A browser window will open to the LUCI Setup Tool and guide you through the setup process.



#### Note:

Part 1 of the setup process can be completed at any time.

Part 2 customizes LUCI for the wheelchair user and must be done with the end user.

#### Follow the On-Screen Instructions

You will know you have succeeded when the "Setup Complete!" screen is shown.

If you wish to further customize the user's LUCI experience, select Customize LUCI. There, you can change the user's reaction time, wheelchair boundaries, override behavior, collision avoidance and drop-off protection behavior, sound settings, and much more.

Once the setup is complete, restart the wheelchair.



A Wi-Fi connection is not required to complete the setup process.  
Wi-Fi is required to access some utilities and receive over-the-air software updates.

Ask the user for their home Wi-Fi network and add it using Add Other Networks in Wi-Fi settings.

\* Users should connect to their home Wi-Fi, and it's much easier if you help them get it done now. If the user does not know their home Wi-Fi network, they should set it up as soon as possible, using the instructions in the User Guide, so that they can stay up to date with the latest over-the-air software updates, and take full advantage of LUCI's capabilities.



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## TAKE A TEST DRIVE!

Now that LUCI is configured for the user, take a test drive.

First, review the Dashboard lights:

- » Green Personalized Status light means LUCI is properly set up. If that light isn't on, check for the Wheelchair Key.
- » Green Wi-Fi and Cellular lights mean you're connected. Keep LUCI connected to Wi-Fi when you can.
- » Green LUCI Status light means go!
- » Yellow LUCI Status light means caution.
- » Red LUCI Status light means there is a system error; if the red light persists, try restarting the chair.





Next, try this:

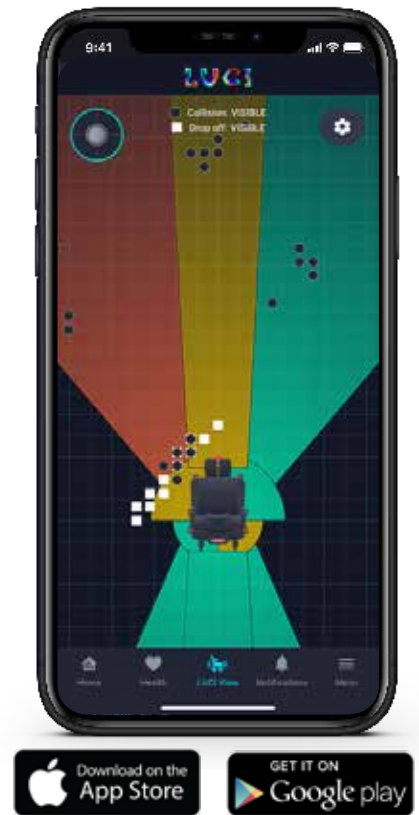
- » Demonstrate the yellow LUCI Status light by standing directly in front of the wheelchair, with your legs in front of the Scout. Then walk in a circle around the chair and watch the LUCI Status light change from green to yellow, as you block the side and rear FusionSensors™.
- » Stand in front of the Scout, so that the LUCI Status light is yellow. Ask the user to drive forward - LUCI will protect you from getting hit. Then, move slowly away from the chair while they continue to drive forward. Do the same thing for driving backwards.
- » Repeat the demonstration for turning - stand to the side of the wheelchair so that the LUCI Status light is yellow and ask the user if they can turn into you. While the user is still trying to turn (the chair should be stopped) step away from the chair and allow them to spin.
- » Place a soft, moveable object (a box or large pad) ahead of the user. Ask the user to drive forward and have LUCI stop the wheelchair at the object. Then, have the user push the LUCI Button once to override and allow them to push the object out of the way.
- » Make sure the user understands that LUCI's sensors are there to help, but that doesn't mean that they can see everything. Even with LUCI, the user should operate the chair to the best of their ability.
- » Have the user drive as you normally would for driver training or an evaluation. On the drive, point out that LUCI can help the user smoothly navigate down a hallway and around corners, and can provide confidence for navigating crowds by matching the speed of a person in front of the chair.
- » Put the user in a situation where they need to use the LUCI Button to override - for example, to push through a swinging door or to get close enough to transfer out of the chair.

## 6 DOWNLOAD THE MYLUCI APP

At this point in the process, we recommend that you have the user follow the instructions in the email that was sent to them, to finish setting up their MyLUCI account.

Once the account is set up, the user can download the MyLUCI app, available on Android and iOS, login and explore the many benefits. A few things to focus on here:

-  LUCI View - Access LUCI View for a bird's eye view of your surroundings.
-  Support Team - Enter contact information to invite family and caregivers and specify what data each person receives.
-  Change Settings - Update wheelchair boundaries, override behavior and other common settings.
-  Manage Health - Access information from LUCI-compatible heart-rate tracking devices such as Apple Watch or Wear OS devices.



## 7 FINAL SETUP CHECKLIST

- Complete the Setup Tool and confirm you received a "Setup Complete" message.
- Let the user know they will receive an email invitation giving them the option to set up a MyLUCI account if desired.

LUCI isn't a replacement for wheelchair skills training. Have the user demonstrate each of the following skills. Check them off once you are confident the user is able to demonstrate or understand each:

- User understands What LUCI Sees (use the pictures in this document as an aide).
- User understands the lights and button on the Dashboard (use the Dashboard Reference Cards as a guide).
- User understands the sounds associated with LUCI functions (override and motion stopped).
- User is able to use the blocked sensor light to determine if something is close to the chair.
- User is able to successfully navigate the wheelchair using LUCI.
- User understands the override function and is able to access and demonstrate its use.
- User has been provided with the User Manual and has been encouraged to read and be familiar with its contents.

**FOR MORE INFORMATION OR HELP**  
Visit [luci.com](http://luci.com) or call 615-813-LUCI (5824); option 2.

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