designability

Wizzybug
User Instructions

DOC-025 - Wizzybug operating manual GBR Version 2.1 Aug 2019

DOC-0025 - Wizzybug operating manual GBR Version 2.1 June 2019

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If you need to contact Designability
please have your Wizzybug number to hand

Your Wizzybug number is . . . . . .

Battery type . . . . . .

Wizzybug is manufactured by Designability and is a Class 1 Medical Device, registered with the MHRA.

All enquiries related to the content of this Wizzybug User Guide and the use of Wizzybug must be addressed to Designability or the local distributor or agent from which the WIzzybug was obtained.

Contents

The History of Wizzybug

Designing Wizzybug

Wizzybug first became available in 2007 after our team of experienced occupational therapists, designers and engineers joined together to create a fun, innovative powered wheelchair for children under 5. We sell Wizzybug across the UK and globally.

Designability worked with families and other healthcare professionals to ensure that Wizzybug reflected the specific needs of young children living with complex disabilities. Families had input into all aspects of the design, from the seating system right down to the fact its main colour would be red!

Launching the Wizzybug Loan Scheme

Designability sells WIzzybug across the UK and globally - however, it became apparent that there was a large number of families who were unable to afford to purchase one for their child. In 2010, a supportive organisation made a substantial donation in order for us to begin to offer the Wizzybugs to families completely free of charge.

In 2011, the first Wizzybug went out on loan and we have never looked back!

Each Wizzybug on the loan scheme costs £4,750 which covers the manufacture in Bath, an assessment appointment with an occupational therapist and ongoing support from our therapy team throughout the duration of each loan.

Fundraising gives children their ‘first wheels’

Designability fundraise year on year to be able to continue to loan out Wizzybugs for free. If you have a loan scheme Wizzybug, the Wizzybug you have is thanks to the efforts of our community fundraisers and generous donations from trusts and grant-giving organisations across the UK.

Introduction

We hope you and your child will enjoy using Wizzybug.

Wizzybug requires adult supervision at all times.

Please keep a close watch on the condition of your Wizzybug. The supervising adult is responsible for ensuring Wizzybug is used safely and appropriately.

Wizzybug is designed to be used indoors and outdoors (Powered Wheelchair Classification: Class B, EN 12184 standard), in accessible areas like patios, playgrounds, gardens and parks. It will run quite satisfactorily over any ground that is reasonably smooth and flat.

It is important for safety that you read these instructions on how to set up and use your Wizzybug.

Do not use if:

- components appear bent, out of shape or broken.
- there is any unusual sound coming from Wizzybug.
- use of Wizzybug in your opinion presents some risk to the user or others.

Do not adapt Wizzybug in any way without permission from Designability, as adaptations may have serious safety considerations.

If you feel Wizzybug is unsafe, do not use it. Contact Designability by calling +44 (0)1225 824103, emailing us at info@designability.org.uk or writing to us at:

Designability,
Wolfson Centre,
Department D1,
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BATH,
BA1 3NG

Overview of Your Wizzybug

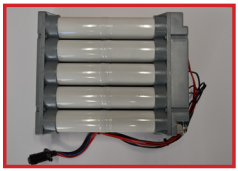
Your Wizzybug consists of the following parts:

Headrest

Seating System

Footrest

Battery (located under the seat) and charger



Nickel Metal Hydride Battery and Charger (right)

Lead Acid Battery

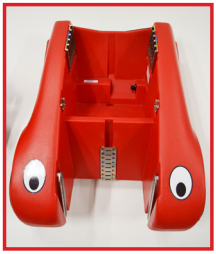
Prolite E Charger (left) and NUMAX Charger (right)

Older versions of either battery may come in a black carry bag.

Fig 1 Overview of Wizzybug parts

Controller with Joystick (see page 35 for different joystick types)

Wheel Release Mechanism



Body

Fig 2 Overview of Wizzybug Parts (side view)

LiNX Carer Control

DX Carer Control (2016)

Shark Carer Control

Rear Control Panel located at back of Body

Rear Wheel Assembly

Fig 3 Overview of Wizzybug Parts (rear view)

Adaptations *may include a Chailey headrest, a butterfly harness, Moozi joystick, a pommel, thigh adductors, anklesures, joystick variants, a play-tray, switches and a metal tray.*

Wizzybug Features

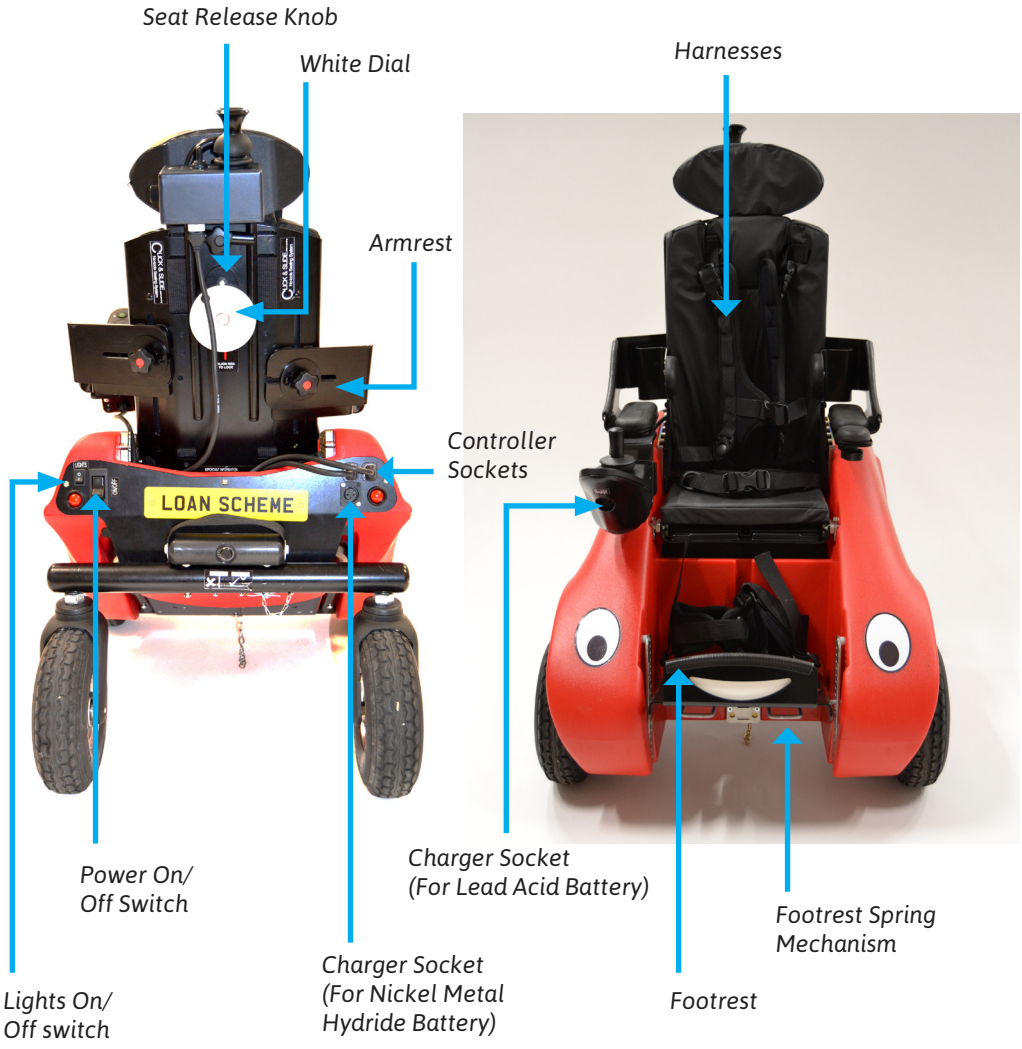


Fig 4 Overview of features


Carer Control
Controller With Joystick
Armrest Reach Adjustment Hand-Screw
Wheel Release (On Both Front Wheels)

Important Information

Please read all instructions before using Wizzybug and take extra care to acknowledge any notes where you see the warning symbol ❗: these are safety cautions.

❗ **Wizzybug should never be used without close supervision by a carer. The responsible adult should also be ready to take control of Wizzybug when near any potential hazards.**

Wizzybug is a ‘first wheels’, battery powered, mobility vehicle suitable for children aged 14 months up to 5 years. The maximum user weight is 20kg or 44lbs.

The ages specified are for guidance only and will depend on the size and weight of the child and their readiness for powered mobility.

USER GUIDANCE

Speed Always consider the appropriate speed to suit the user's ability and environment. When used indoors, or in confined spaces, Wizzybug can be driven at a low speed, enabling your child to steer around obstacles. It can also be driven at a higher speed where space allows.

Stopping For the child to stop they must release their grip of the joystick, allowing it to return to a neutral position.

If you need to stop Wizzybug urgently, you can turn off the power switch at the back of the body (Fig. 5) or manually switch to the carer control. However, the quickest way to stop the Wizzybug may be to release your child's hand from the joystick (Fig. 6).

Fig 5 On/off switch

Fig 6 Hand release from joystick

Driving on slopes The stopping distances on slopes can be significantly greater than on horizontal ground.

Driving on pavements or near steps The carer must take control of Wizzybug on pavements, near roads, accessible bodies of water, near steps or other obvious hazards.

Always use dropped kerbs to move off pavements or when crossing the road to avoid the risk of your child accidentally veering into danger. Keep your child away from the kerb edges and away from roads.

Crossing the road The carer should take full control by switching to carer control or by disengaging the wheel releases and pulling Wizzybug by the headrest.

ENVIRONMENT

It is strongly advised that you remain close by your child until they gain confidence and competence in using Wizzybug, especially if there are hazards nearby such as furniture, changes in ground levels, or busy areas. A responsible adult should always be in-between Wizzybug and any hazard.

Wizzybug prefers firm level grass and gentle slopes. Do not attempt gradients steeper than 5° (1 in 12). Wizzybug is not suitable for driving on steep banks, beaches, hilly terrain, or very uneven ground. There is a danger that Wizzybug will slip backwards and could be at risk of overturning if too steep a gradient is attempted.

Fig 7 Wizzybug incline restriction

Before use Check Wizzybug's environment for hazards such as sharp corners, risks of entrapment, drops and crushing hazards. Wizzybug is designed to fit under nursery tables but equally it may go under taller tables and/or other furniture. If there is insufficient clearance for your child to pass there may be a risk of the child crushing themselves or bumping their head.

Surface temperature of contacting parts The surface temperature of parts that come into contact with your child can greatly increase or decrease when exposed to sources of heat or cold such as radiators, prolonged sunlight or freezing weather conditions. Take extra care in adverse weather conditions.

Weather Wizzybug should not be used in adverse weather conditions or left outside in the rain. It should not be driven in puddles deeper than the wheel release cover.

Anti-static chain This is fitted underneath the body of Wizzybug and hangs down to prevent the build up of static.

If the anti-static chain is missing or unable to touch the ground, please contact Designability for a replacement.

Fig 8 Anti-static chain

Driving outdoors Wizzybug is intended for daylight use only. Carers are responsible for judging whether the light conditions are appropriate for their child.

Other children Please ensure you supervise other children near Wizzybug. In particular, close attention should be paid to ensuring Wizzybug does not collide with others, or crush hands and feet. Be vigilant of crawling babies and toddlers close-by.

Pets Take extra caution with Wizzybug when pets are present.

Storage Wizzybug should be stored indoors in a dry environment away from heat sources such as radiators.

IMPORTANT NOTES ON SEATING AND OTHER FEATURES

Never attempt to adjust the seating position with the child sitting in the seat as there is a risk of entrapment and, or injury.

Securing your child in Wizzybug For your child's safety, always use the lapstrap and full harness provided. Adjust the straps to ensure a snug fit. If you are unsure, please contact Designability for advice.

Maximum user weight 20kg or 44lb

Single occupancy only Wizzybug is only to be operated by a properly seated child and should not be used to give rides to other children.

Seating system This is only for use with Wizzybug and should never be used for any other purpose.

Seating position and mounting of the child's joystick Advice should be sought from an Occupational Therapist or Physiotherapist on the optimum seating position for your child and the selection and set-up of the control system.

Footrest The footrest can be provided with anklesures to position the feet securely. Please use anklesures if they have been provided for your child. If anklesures are not required, ensure your child's feet are kept securely within the footrest well. Feet overhanging at the front or side could be at risk of injury. Take the footrest off when not in use if children are likely to try to crawl and pull themselves up on Wizzybug. The lip of the footrest could present a hazard.

Fig 9 Anklesures on footrest

Transfers Always conform to best practice principles of moving and handling. Your child's therapist should be able to recommend the optimum way to help your child get in and out of Wizzybug. A walk-in transfer is easier if the footrest is removed.

No child should be allowed to crawl on or climb onto Wizzybug. All children who are in close proximity of Wizzybug should be supervised at all times.

Adjustment of seating system Regularly review your child's seating in Wizzybug and make adjustments as required. Wizzybug is not a dedicated seating system. Wizzybug should not be used for extended periods of time and should only be used when it is within the Wizzybug body. Usage should be periodic and close attention always paid to a child's comfort and posture in Wizzybug.

Dynamic head supports These should never be used in conjunction with Wizzybug.

Resistance to flammability The seat cushions, arm pads, main body and controllers comply with international standards for resistance to ignition sources.

Wizzybug life It is estimated that Wizzybug will perform as intended for up to 5 years (neglect, misuse or abuse not withstanding). Refer to the warranty information within this manual (page 52).

How to Assemble Wizzybug

Assembling Wizzybug Care must be taken to ensure that you do not place your fingers in-between mating parts while assembling Wizzybug.

Wizzybug consists of the following component parts:

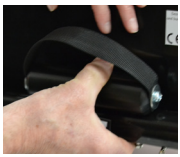
- Body
- Rear Wheel Assembly
- Battery
- Tray
- Seating System
- Footrest
- Carer Control System

REAR WHEEL ASSEMBLY

Attaching the rear wheel assembly to the body

1. Lift up the rear end of the body using the webbing handle.

2. Locate the prongs securely into the two holes in the rear wheel assembly beam. Please note that the wheel bar only locates in one way round, the label should be facing outward, as shown to the right and the two metal pins on the bar should face inwards.



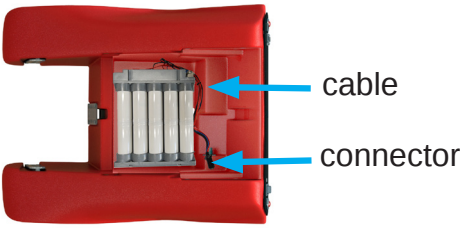
3. Fit the spring clip horizontally in the groove (attached by a short chain) to the protruding tapered pin as shown. This secures the rear wheel assembly beam to the body.

4. Rotate the spring clip under the rear wheel assembly beam for protection.

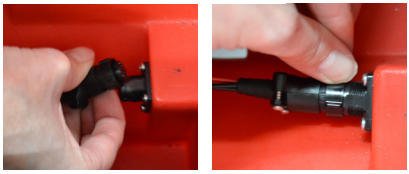
THE BATTERY

Fitting the battery

1. The battery fits into the box under the seat with the cables coming out from the opposite side to the connector socket (see diagram).



2. Align the connector and plug so that the connector pins can be easily pushed into the plug. Once it is located, rotate the collar clockwise to secure.



3. Ensure straps and wires are positioned appropriately to prevent damage and to avoid them interfering with the seat adjustment.

SAFETY INFORMATION ON ELECTROMAGNETIC INTERFERENCE

Wizzybug complies with international standards regarding Electromagnetic Interference (EMI). However, electromagnetic fields, such as those generated by radio and television transmitters and mobile phones can influence the function of Wizzybug. Also, the electronics used in Wizzybug can generate a low level of electromagnetic interference, which is within the tolerance permitted by law.

For these reasons you are advised to observe the following precautions:

- Do not switch on or operate portable transceivers or communication devices (such as radio transceivers) when the Wizzybug is switched on.
- Avoid getting close to strong radio and television transmitters.
- If Wizzybug should be set in motion unintentionally, switch it off immediately.
- Adding electrical accessories and other components or modifying Wizzybug in any way can make it susceptible to electromagnetic interference. Keep in mind that there is no sure way to determine the effect such modifications will have on the electronic system.
- Take extra care when Wizzybug is around other electric-powered wheelchairs.

ATTACHING THE FOOTREST TO WIZZYBUG

The footrest can be attached before or after the child is seated.

- Squeeze the spring mechanism under the footrest.
- Push the footrest into the back slot at the required height then release the spring mechanism to engage the footrest pins in the side slots required.
- Ensure the footrest is locked in the required position before using.
- The height is adjustable using the metal grid and colour codes.

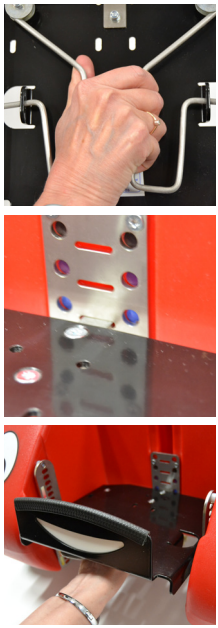


Fig 10 Attaching the footrest to Wizzybug (from top left, clockwise) Spring mechanism, height of the footrest - showing the back-plate with the coloured pin slots, footrest tilt adjustment using the side slots.

The footrest can be level or tilted to match the tilt-in-space angle of the seat position. Ideally your child's feet should sit flat on the footplate.

Use the colour-coding to set the height and angle of the footrest. The colour-code at the back of the footrest matches with a choice of slots of the same colour positions at the sides. If you choose the lowest same colour position on the sides the footrest is level.

The footrest can be tilted upwards or downwards by choosing a different position for the locating pins at the sides.

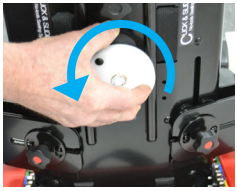
SEATING SYSTEM

Fitting the seating system onto the body

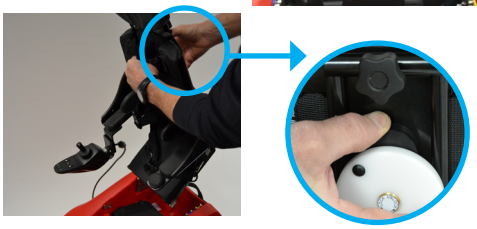
The seat depth can be adjusted. This is colour-coded and matches the colour-coded seat angle holes on the body. Information on how to set the seat depth, tilt-in-space, and recline the backrest can be found on page 33.

1. Check the harness straps are fastened within the seating system. This will prevent them getting caught as the seat is fitted, adjusted or removed.

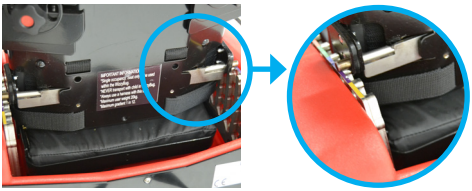
2. Turn the white dial fully anti-clockwise to unlock the seat.



3. Lift the folded seat by holding the straps, with your fingers under the white dial and with your thumb pressing on the black seat release knob above.



4. Lift the seat by the white dial or the harness. Do not lift by the headrest! Lower the front pins into the metal, angled slot. Then, lower the rear of the seat until it sits on the seat grid brackets. Press down on the black seat release knob, then lower and locate on the black seat.



5. Now rotate the dial fully clockwise to lock the seat into position. If there is resistance turning the white dial into the locked position, the pegs may not be properly engaged. Re-adjust the seat again to allow the pegs to engage and try to lock the dial again. Do not force the white hand dial into position.
Do not use the seat unless the white dial is securely in the locked position. The black spot will point down when the seat is in a locked position (as shown to the right).

6. Connect the joystick and carer controls to the sockets on the rear of Wizzybug. The connector will only fit one way around. The sockets are interchangeable. Hook the carer control onto the back of the headrest.

Fitting the armrests

The armrests are secured to the backrest using a screw, plate and pin fixing system on the backrest of the seat.

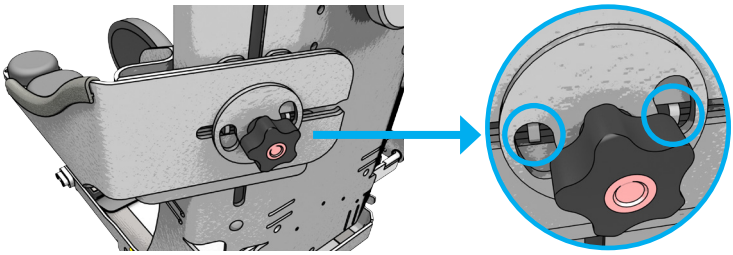


Fig 11 Fitting the armrests and thoracic supports (two pins shown on right).

Assembly of the armrest and thoracic supports is carried out, as shown in Fig 11. The armrest, with the thoracic supports if required, slot in between the rectangular and circular plate and are secured by tightening the black hand-screw. It is important to ensure that the protruding pins are located and visible through the circular plate and that the whole mechanism is secure. The two pins will only locate horizontally.

The height and width of the armrests and thoracic supports can be adjusted by sliding them up and down the slots provided (as shown in Figs 12-14). They should then be fully secured as described above.

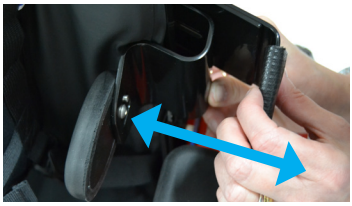


Fig 12 Thoracic support adjustment

Fig 13 Armrest support height adjustment

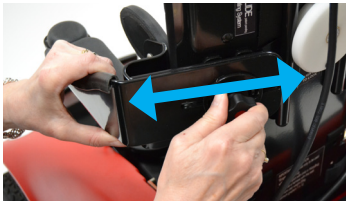


Fig 14 Armrest support width adjustment

Do not try to remove the adjusting hand-screw from the threaded bar.

Take care when adjusting the armrests and thoracic supports if the child is seated in the Wizzybug.

Adjustments may be required when considering clothing requirements like winter coats.

How to Disassemble Wizzybug

REMOVING THE FOOTREST

Squeeze the spring mechanism to disengage the footrest from the slots and pull out.

Fig 15 Removing the footrest

REMOVING THE SEATING SYSTEM FROM THE BODY

1. Check the harness straps are fastened within the seating system. Ensure all connectors are detached from the sockets at the rear of Wizzybug. Unhook the carer control from the bar on the back of the headrest.

2. Unlock the white dial by turning fully anti-clockwise.

3. Press down on the black seat release knob (positioned above the white dial).

4. Lift the seat, guiding it free of the Wizzybug body. Do not lift by the headrest. Lift only by the white dial or the harness straps.

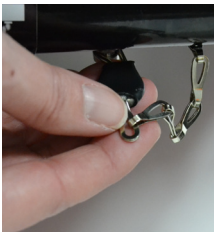
REMOVAL OF THE BATTERY

1. To disconnect, first unscrew the collar on the charger then pull the connector out.

2. The battery can then be removed. Don't lift by the cables.

REMOVING REAR WHEEL ASSEMBLY FROM BODY

1. Twist spring clip outwards and pull to remove from pin.



2. Lift up using the webbing handle, this will disengage the rear wheel assembly from the body. You may need to apply more force with the heel of your hand to the rear wheel assembly beam should it fail to disengage readily.

Wheels

The wheels are low maintenance, puncture proof, rubber wheels and require no inflation.

There are two positions for the wheel release, engaged or disengaged.

Engaged (In Drive)
The wheels are ‘in drive mode’ when the wheel releases are engaged. Wizzybug can then be driven either by the user or by the carer.

Do not attempt to pull or push Wizzybug whilst in drive mode.

Ensure that both front wheel releases are engaged before driving Wizzybug.

Disengaged (Out of Drive)
The wheels are ‘out of drive mode’ when the wheel releases are disengaged. Wizzybug cannot be driven by the carer or user control but can be freewheeled by the carer in order to move Wizzybug manually for transportation, crossing a road or if the battery is flat. It is easier to pull Wizzybug backwards than to push it.

Ensure that both front wheel releases are disengaged before moving Wizzybug.

When the wheels are out of drive mode there is no braking action. Careful supervision of a child is needed if they are sitting in Wizzybug with the wheel release disengaged.

Do not put wheel releases into the disengaged position while on a slope!

To engage or disengage the wheels, slide the small lever in the centre of the wheel. This will engage or disengage the wheels.

For newer models of Wizzybug, the green dot position indicates that the wheels are engaged (in drive).

Fig 16 Wheel releases

Seating System

The seating system is designed to be very adjustable. It is important to use the settings to adjust the seat so your child is in a functional and comfortable position. Feeling secure is key to helping them enjoy being mobile.

We recommend consulting a physiotherapist or occupational therapist to get advice about the optimum seating position for your child.

The seating system on Wizzybug is adjusted without tools. It may take a little practice, but once mastered is very quick and easy to use.

! Never attempt to adjust the seating position with the child sitting in the seat as there is a risk of injury.

SETTING THE SEAT DEPTH

There are 5 colour coded seat depth slot positions to adjust the seat depth between 155mm and 245mm (6.1” and 9.7”)

orange	green	royal blue	purple	yellow
155mm/ 6.1inches	177.5mm/ 7 inches	200mm/ 7.9 inches	222.5mm/ 8.8inches	245mm/ 9.7inches

Fig 17 Seat depth colour codes and slots

Adjusting the seat depth when it is out of the Wizzybug body

Please note that it is easier to adjust the seat when it is fitted in the Wizzybug body.

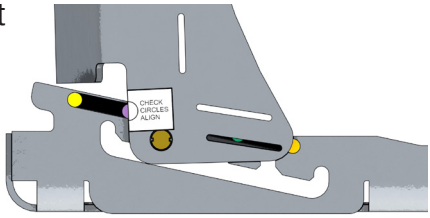


Fig 18 Sticker semi-circles

To adjust the seat when it is removed from Wizzybug, firstly push the backrest down and slide it along to find the seat depth slot on the seat base.

Ensure that the sticker semi-circles are in alignment.

Sliding the seat towards you may be easier. Note the click when the seat is locked in position.

ADJUSTING THE SEAT WHEN IT IS FITTED IN THE WIZZYBUG BODY

The child must not be seated in Wizzybug when any seat adjustments are made.

- Move the seat one seat position at a time.
- Removing the armrests will make adjusting the seat easier.
- It is easier to start by engaging in one of the top holes in the seat angle grid. You can then readjust back or down to select the hole required for the seating position you are trying to achieve.
- When the seat is engaged the locking mechanism will work freely.
- Seat base depth adjustment should always be done using the top holes in the grid. When the required seat depth is reached, the seat can then be located in the desired tilt position.

To make the seat depth longer you will need to move the backrest backwards.

1. Unlock the backrest by turning the white dial on the seat fully anti-clockwise.

2. Pull the seat base upwards at the rear with one hand, while pushing the seat backrest forwards as far as it will go.

3. Press and hold down the black seat release knob. This pulls the pins in until you release them back into a new grid position.

4. Move the backrest up and over the pegs, back to the next seat position. Repeat the process until you get to the seat depth required.

5. Select the correct hole for the seating position required.

6. Re-lock the backrest by moving the white dial on the seat fully clockwise.

To make the seat depth smaller you will need to move the backrest forward

1. Unlock the backrest by moving the white dial on the seat fully anti-clockwise. Press down and hold the black seat release knob. This pulls the pegs in until you release them back into a new grid position.
2. Move the backrest up and over to the next forward seat position.
3. Select the correct hole for the seating position required.
4. Lift up the seat base.
5. Repeat process until you get to the seat depth required.
6. Select the correct hole for the seating position.
7. Re-lock the white dial fully clockwise.

SETTING THE TILT-IN-SPACE ANGLE

The seat angle is set using the seat angle grid in the body base. For each seat depth position there is a colour coded slot within the grid. Each vertical slot has ten seat angle holes, five at the back of each slot and five at the front.

Fig 19 Seat angle slots

By locating the seat at the top of the grid you will achieve a level seating position of 0°. Using the lower holes will enable you to achieve a maximum tilt in space angle of 15°.

Fig 20 Adjusting the seating

SETTING THE BACKREST UPRIGHT OR IN A SLIGHT RECLINE

If you use the front row the backrest position will be an upright 90°.

If you use the back row the backrest position will have a slight recline of 97°.

SETTING THE HEADREST HEIGHT

The headrest height can be adjusted by undoing the black hand-screw, turning anti-clockwise, whilst holding the headrest. Lift or lower the headrest gently. Secure in place by turning the hand-screw clockwise.

Fig 21 Adjusting the headrest height

Metal Tray and Switches

The tray, if supplied, is designed especially for use with alternative controls and is easy and quick to remove. Please note that the metal tray is an optional extra.

The tray is manufactured specifically to fit on the left or right hand side. It will only fit the side for which it was manufactured.

To fit the tray, pull the black hand-screw outwards and lift the wrist pad up and out of the mounting block. Let it hang suspended by its rubber tether. Take hold of the tray and again pull the black hand-screw outwards. Lower the mounting pin of the tray into the mounting block until the tray rests on the support plate. Release the black hand-screw. Rotate the tray slightly, until the black hand-screw locates in place.

To remove the tray repeat the above procedure in the reverse order.

Use of switches

Large button switches can be mounted on a tray and pressed to move Wizzybug. Four switches can be used to drive Wizzybug: forwards, backwards, right or left. Each switch has a wire and connector that is plugged into the DX Switch Module which plugs into the DX joystick.

Use of Moozi

The Moozi is a low profile switch joystick designed by MERU for use mounted on a tray. Connection is through a DX Switch Module which is plugged into the DX joystick.

Control System

Wizzybug is supplied with:

- a LiNX control system or Dynamic Shark control system as standard (Figs 22 to 24), or a Dynamic DX control system which is used if switches are needed (Fig 24)

Fig 22 LiNX control

Fig 23 Shark control

Fig 24 DX control

- a carer control (Figs 25-27).

Fig 25 LiNX carer control

Fig 26 Shark carer control

Fig 27 DX carer controls
(new version on left, old on right)

Add-ons such as switches and alternative joysticks may be supplied with the DX control, if required.

Setting up the controls

The joystick and carer controls are designed to give proportional control, meaning the more you push the faster you go, within the speed limits set. The joystick and carer control both plug into either of the two sockets on the back of Wizzybug's body. It does not matter which socket is used, but they will only plug in one way up. Ensure cables are tucked away safely and are not left trailing. Clips are supplied to use as required. The joystick control can be set on the left or right hand armrest and the angle is adjustable using the armrest support.

Fig 28 Control sockets

Fig 29 Storing excess cables

Switch on Wizzybug using the main on and off switch on the back panel. Then switch on at the joystick control using the central power button.

Fig 30 Main on and off switch

Fig 31 LiNX power button

Fig 32 Shark power button

Fig 33 DX power button

If you have a LiNX joystick, use the speed dial to set the speed (Fig 34).

If a carer is controlling the Wizzybug using a LiNX carer control, set the speed by pressing the speed button (Fig 35) on the carer control repeatedly to cycle through the speed settings.

Fig 34 LiNX speed dial

Fig 35 LiNX carer control speed button

If you have a Shark joystick use the hare and the tortoise buttons (as shown below) to set the speed.

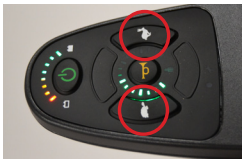


Fig 36 Shark tortoise and hare buttons

If you have a DX joystick use the blue button to set the speed as shown in the table.

1	2	3	4	5	A
Joystick	Joystick	Joystick	Alternative Controls	Alternative Controls	Carer Controls
SLOW	MEDIUM	FAST	SLOW	FAST	User carer control speed control

Fig 37 Speed settings on DX

The carer control can be switched to either carer or child use, and has a separate speed control. When the carer control is in use on the LiNX controller the carer control ON/OFF button will be lit in green. On a Shark joystick an amber man is displayed on the joystick and on the DX joystick an “A” is shown on the control panel.

Fig 38 Switch between child use and carer use by pressing the ON/OFF button on the carer control (for a LiNX) or flicking the switch on carer control (for a Shark or DX)

For the LiNX and the DX2 controller, the person who first switches on their controller controls the Wizzybug. The carer can override the child’s control at any time by pressing the ON/OFF button on the carer control.

For a Shark or DX controller, the carer control only overrides the child’s control once they have released their joystick to a neutral position. The child still is able to switch Wizzybug on and off using the joystick power button.

Positioning of the joystick

Reach adjustment

The position of the joystick can be adjusted using the black hand-screws.

Fig 39 Reach adjustment on Wizzybug

It is possible to reposition the joystick unit closer to the armrest by repositioning the black hand-screw under the armrest in the rear hole of the armrest plate.

Height adjustment

The height of the joystick can be set by adjusting the height of the armrest. The armrest height is adjusted using the black hand-screw on the backrest.

Angle adjustment

The angle of the joystick can also be adjusted using the same black hand-screw.

Fig 40 Height adjustment of the joystick

Fine adjustments using an Allen Key

Further adjustments to the height and angle of the joystick unit in relation to the end of the armrest can be achieved by using the supplied 3mm Allen key (Fig 42) to adjust the position of the small metal screws and sliding to the desired position.

Fig 41 Rotational movement of the joystick

Fig 42 3mm Allen Key

Desk adjustment

It is easy to move the joystick out of the way to allow close access to nursery desks or tables.

The hand rest

This can be moved forward or backwards or rotated using the black hand-screw underneath the armrest.

Fig 43 Black hand-screw

Battery and Charging

First Charge

On delivery Wizzybug is supplied with either a lead acid battery or a nickel metal hydride battery (see page 8). Your battery will be fully charged on delivery. If however Wizzybug has not been in regular use we would recommend charging the battery for a minimum of 12 hours before you use it to ensure maximum capacity.

Introduction to Charging

Make sure you use the right charging socket for the type of battery in your Wizzybug. If you are unsure please refer to page 8 to check if you have a lead acid or nickel metal hydride battery.

Notes

- **Never use a damaged battery.**
- Warning - never use the charger if you suspect it is damaged.
- Always switch off the mains switch before connection or disconnection of the charger.
- Wizzybug cannot be driven whilst being charged.

If at any point you require advice, contact Designability (page 58).

Charging a lead acid battery

1. Put the silver connector into the charging socket on the front face of the joystick.

2. Switch on Wizzybug using the rear main switch, then switch on at the joystick.

3. Plug the charger into the mains supply and switch on; the red power light will come on.

   For a Prolite E charger, a second LED will come on after a few seconds: Red indicates that bulk charging has commenced and yellow shows the battery is about 80% charged.

Prolite E Charger

   For a NUMAX charger, the orange LED indicates bulk charging.

Numax charger 1

   For both charger types, a green light shows that the charger has switched to float charge and the battery is ready for use. The charger may be left connected until Wizzybug is ready for use.

4. Wizzybug must be switched on when charging. However, whilst charging, Wizzybug will not respond to joystick control and cannot be driven. When Wizzybug is being charged the lights on the battery indicator on the joystick control will scroll and flash.

5. When you are ready to disconnect the charger, turn off the mains supply first, then switch off at the joystick. Unplug the charger from the mains supply, then unplug the silver connector from the front of the joystick.

The need to charge your Wizzybug will depend on how much it is used. However, we would suggest that if it is used daily, then charge Wizzybug daily. It is not possible to overcharge the lead acid battery.

When the charger is connected the joystick will lock and Wizzybug will not be drivable.

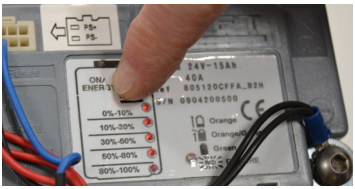
Charging a nickel metal hydride battery

1. Switch off Wizzybug main power.

2. Plug the charger into the socket on the back of Wizzybug.

3. You can check the percentage of battery power remaining by removing the seat.

   Then press the button on the battery label and observe which energy level LED lights up, as shown.



4. Connect the charger to the mains supply. Maximum charge should be reached in about 12 hours.

5. When you have finished charging, disconnect the charger from the mains supply. Then unplug the charger connector from the back of Wizzybug.

Wizzybug can be used even if full charge has not been reached. However, if repeated partial charges are carried out, an extended charge of a further 12 hours is recommended to restore the battery to maximum capacity. No damage will be caused if Wizzybug is left charging for longer periods.

To prevent Wizzybug from being driven when the charger is connected the control system is automatically turned off. If the rear lights are left switched on, these will also be automatically turned off.

Maintenance of Battery

To ensure maximum battery life is retained, recharge for 12 hours at least every 3 months.

Always handle the battery with care to avoid damage. Avoid storing the battery in temperatures above 25°C as this can reduce the performance and life of the battery.

If you anticipate not using Wizzybug for extended periods (6-8 weeks or more) charge the battery for at least 5 hours, remove from Wizzybug and store in a cool, dry place.

WARNINGS

Always use the charger supplied with Wizzybug.

Using other types of battery charger may cause damage to the battery, wiring, charger, and in extreme cases, fire.

Do not cover charger when in use.

Always use the correct charging socket for your battery (either lead acid or nickel metal hydride).

See pages 40 to 42 for guidance on how to look after the battery.

IF THE BATTERY LEAKS, STOP USING IMMEDIATELY. Make sure the Wizzybug charger is disconnected from the mains.

If liquid or gel from the battery comes into contact with skin or clothes wash immediately with soap and water. If it comes in contact with your eyes, wash with clean water and immediately and consult a doctor.

Moving

Do not lift Wizzybug with a child in the Wizzybug seat.

When in freewheel mode, Wizzybug may be moved by hand between locations. For example from nursery and car, or to a storage or charging position. Freewheel mode also enables your Wizzybug to be moved if it has a completely flat battery.

To move Wizzybug by hand, move each wheel release lever (as described on pages 28-29) to the disengaged position. Pull Wizzybug backwards, by the headrest. Wizzybug is easier to roll backwards than forwards.

Fig 44 Pull Wizzybug by the headrest, with wheel releases disengaged to transport

Lifting and Handling

When fully assembled, Wizzybug should always be lifted by two adults working together. Do not attempt to lift it on your own.

The lifting points are the front wheel arches and the rear wheel assembly bar. Always use good lifting techniques, bending from the knees and use a lift command to ensure both parties lift together.

Please refer to manual handling best practice if you are unsure or need advice on how to lift Wizzybug safely (refer to page 45).

Fig 45 Standard lifting points

Fig 46 Alternative lifting position

Transportation

Wizzybug has not been crash tested for use in a vehicle.

You must not allow any child to be seated in Wizzybug while it is in a vehicle.

The Wizzybug seat must only be used in Wizzybug and not be used separately.

Before transporting Wizzybug in a vehicle, ensure that Wizzybug wheels are engaged at all times (refer to page 29). If the wheels are disengaged move the lever to the opposite position (refer to page 29). Lift Wizzybug, one side at a time and rotate the front wheel forwards, by hand until wheels lock.

Travelling by car

Ensure Wizzybug is stored securely in the boot of the car while transporting.

Depending on the size and style of the car, it may be possible to transport Wizzybug fully assembled. Ensure that both front wheel releases are engaged. If your vehicle has a spare seat strap, this can be used to secure Wizzybug by passing the belt across the body and inserting into its locking point.

Wizzybug can also be transported dismantled.

Hoisting

There are no designated hoist points on Wizzybug. If you intend to hoist Wizzybug, please contact Designability for advice. Please refer to good moving and handling guidelines for further advice: www.nhs.uk/Livewell/workplacehealth/Pages/safe-lifting-tips.

Flying with Wizzybug

Check with your airline operator before travelling with Wizzybug. They may need to know Wizzybug's dimensions and weight and the type of battery fitted. Please contact Designability for a copy of our 'Flying with Wizzybug' instructions to help avoid possible damage.

Shipping

Wizzybug can be shipped by land, air or sea only when it has been dismantled. Performance of Wizzybug can only be guaranteed if it has been shipped in its original packaging (if supplied).

Queries

If you have specific requirements or questions about transporting Wizzybug, contact Designability on:

+44 (0)1225 824103
or info@designability.org.uk

Troubleshooting

Problem	What to do	If this doesn't work
1. Joystick not turning on.	1. Check main power switch on rear is on – try again 2. Check battery is properly connected under seat 3. If the battery is nickel metal hydride, remove battery and press button that says "Push to test" if this indicates zero power re-connect to Wizzybug.	If you are unable to resolve the problem satisfactorily, stop using and ring Designability for assistance
2. The joystick controller is not working. When the ON/OFF switch is pressed, a red, amber and green light flash three times together **(LiNX only).**	The joystick has been locked. Press the horn twice within ten seconds to unlock. A beep will confirm it is unlocked.	Stop using. Ring Designability for assistance.
3. ON/OFF button on the joystick is flashing red **(LiNX only).**	This indicates a fault code. Turn the controller off and on again.	Count the number of flashes and ring Designability for assistance.
4. The red light on the joystick battery gauge starts flashing **(LiNX only).**	Turn off all power (including the lights) and recharge the battery.	Stop using. Ring Designability for assistance.
5. The joystick battery gauge drops to the last red light **(Shark and DX only).**	Turn off all power (including the lights) and recharge the battery.	Stop using. Ring Designability for assistance.
6. Joystick turns on then lights scroll right to left, joystick beeps and turns off. (**Shark Only).**	The joystick has been locked. Turn on again and press horn button 3 times in quick succession. This will unlock the joystick.	Stop using. Ring Designability for assistance.
7. The joystick controller is not working. The spanner light is flashing on joystick **(Shark Only).**	Turn controller off and on again. Recheck joystick. If spanner is still flashing then it's displaying a fault code.	Count the number of flashes in each sequence and ring Designability for assistance

8. The joystick controller is not working **(DX joystick system only)**. Displays red flashing key.	The joystick is disabled – use the blue magnetic key (supplied with Wizzybug) and slide over number display to unlock the joystick.	Count the number of flashes each sequence and ring Designability for assistance.
9. The joystick controller is not working **(DX joystick system only).** Green flashing key.	If speed setting 4 or 5 are selected reset to 1, 2 or 3. as 4 and 5 are only available with the optional switches connected. If speed settings are correct, then the key is flashing a fault code.	Count the number of flashes each sequence and ring Designability for assistance.
10. The seat fails to engage in the Wizzybug body properly.	1. Remove the seat and ensure that the seat back pivot pin is located in a notch on both sides. 2. Check the front lugs are correctly positioned within their location points (as shown on p.22). 3. Check the pins are locating in the holes. 4. Fully remove the seat and check that the seat backrest is fully engaged in a seat base slot- the circles should be aligned. If not realign the seat and backrest and try again.	Contact Designability for assistance if this does not work. (see page 58 for Designability contact details)

Fig 47 Troubleshooting

Specification

Maximum Current	120 amps
Turning Circle	470mm / 18.5in
Overall width of vehicle	560mm / 22in
Overall length of vehicle	650mm / 25.6in
Total weight of vehicle	31.3kg / 69 lbs
Weight of heaviest part	16.4kg / 36 lbs
Maximum speed	2.9km/hr or 1.8 mph (speed can be limited)
Obstacle climbing	40mm / 1.6in
Obstacle clearance	40mm / 1.6in
Dynamic stability uphill	13°
Static stability downhill	21°
Static stability sideways	11°
Seat width	235mm / 9.3in
Seat depth	155mm - 245mm or 6.1 - 9.7in
Seat height	360mm or 14.2in
Backrest angle	Adjustable from 90 - 97°
Backrest height	410 - 430mm
Seat Plane Angle (Tilt)	0 - 15°
Footrest to seat	150mm - 275mm or 16.1 - 10.8in
Leg to seat surface angle	90°
Max weight of user	20.0kg / 44lbs
Standard Battery (lead acid) Upgrade Battery (nickel metal hydride)	24V, 9Ah, SLA 24V, 15Ah, NiMH
Overall Height (headrest not fully extended)	870mm / 34.3in
Minimum width of corridor in which Wizzybug can be turned to be facing in the opposite direction	900mm / 35.4in
Measured sound power level	Indoor <65dB Outdoor <75dB
Battery nominal voltage	lead acid = 12V nickel metal hydride = 24V

Fig 48 Specifications

Maintenance and Servicing

- Perform regular, close visual inspection of your Wizzybug to identify any damage or wear that may need repair.
- The body and upholstery can be kept clean with a damp cloth and mild detergent. Do not soak the body in water.
- Always store Wizzybug in a secure and dry environment.
- If Wizzybug is not in regular use, it is still essential to recharge the battery periodically to maintain the battery's longer term performance.
- To ensure maximum battery life is maintained, recharge for 12 hours at least every 3 months.
- The sticker eyes and smile may become worn over time, Designability is able to supply a replacement set.
- If the tyres become excessively worn, please contact Designability.
- Please check harnesses regularly for wear and tear. Contact Designability for replacements if necessary.
- Harnesses and anklesures can be laundered at 60°C. Using a laundry bag will help protect your washing machine. Cushion covers can be laundered at 30°C. Do not tumble dry any Wizzybug parts.

All servicing needs should be referred directly to Designability or your local agent as applicable.

Warranty (only for sales)

If Wizzybug is faulty through any defects in material or workmanship within 12 months from date of delivery, we will repair or, at our option, replace parts free of charge.

If it is agreed that Wizzybug needs to be repaired at Designability we will make arrangements with you for carriage to and from our workshop from anywhere within the UK and Republic of Ireland. For users based outside the UK and ROI please refer to your local agent or contact Designability for advice.

Modification of Wizzybug without Designability's permission will invalidate the warranty.

This does not affect your statutory rights.

Disposal (UK only)

Waste Electrical and Electronic Equipment Policy Statement

The Waste Electrical and Electronic Equipment Regulations (WEEE), EU Directive 2002/96/EC, was adopted into UK law on 2nd January 2007 with full implementation from 1st July 2007. These regulations require that, at the end of its useful life, electrical and electronic equipment, when being disposed of, must be recycled and, or disposed of in accordance with the EU directive as it is applied in the local laws of that State. These regulations go further by making the manufacturer or importer (the producer) of the goods responsible for their disposal, or recycling in the correct manner.

Designability recognises and accepts its obligations and has taken the following steps to ensure compliance:

Costs
Compliance with these new regulations comes at a cost that will be borne by Designability.

Labelling
Wizzybug features the approved crossed out wheeled bin symbol (see Glossary) clearly marked on the devices or their packaging. Additionally, printed information is provided in the Glossary outlining the significance of the symbol.

Product design
Designability recognises the benefit to the environment of this legislation and, as a result, is designing products that allow for recycling and less adverse environmental impact.

Disposal service
Please contact Designability or your local agent if applicable to arrange return for disposal.

Glossary of Symbols found on Labelling

Model or Part Number of the Device


Consult Operating Instructions

Serial Number of the Device


WEEE Directive – parts must be recycled where possible

Batch code or lot number


Manufacturer


Sufficient for (number of devices contained in a pack)


Temperature limits (for storage)


Keep dry


Do not use if packaging is damaged


Follow Instructions for Use


Manufacturing Date


CE Mark


Wizzybug is not intended to be used as a child's car seat in a motor vehicle.

Table of Figures

Contacting Designability

Designability
Wolfson Centre
Department D1
Royal United Hospital
Bath BA1 3NG

Tel: +44 (0)1225 824103
Fax: +44 (0)1225 824111

Email: info@designability.org.uk

Website: www.designability.org.uk

Contact us if you need advice on accessories, servicing or repairs.

Please quote your Wizzybug number (written on the inside cover of this guidebook or under the seat of Wizzybug) when making enquiries through Designability.

Distributor Contact Information

Name:

Address:

Tel:

Email:

Website: