



MINIMO AUTOFOLD

**Operating Instructions
and Owner's Handbook**





Contents

Introduction	page 3
Product overview	page 3
Your scooter controls	page 4
Driving your scooter	page 5
Folding & unfolding your scooter (battery fitted)	page 6
Folding & unfolding your scooter (battery removed)	page 7
Adjusting your tiller	page 7
Removing your battery pack	page 7
Removing your seat	page 7
Adjusting your arm rests	page 8
Charging your scooter	page 8
Parking brake release	page 9
Maintenance	page 9
Troubleshooting	page 10
Tips for scooter users	page 10
Disposal of product, batteries and charger	page 10
Technical specifications	page 10

Introduction to your Minimo Autofold

Welcome to the TGA family!

This manual provides important operational and maintenance information. Please take the time to read in full before venturing out on your new Minimo Autofold.

Important safety related issues will be drawn to your attention with this warning symbol:

WARNING! 

Please keep this manual in a safe place for future reference.

Product overview

Your Minimo Autofold is a class 2 mobility scooter and intended for indoor or outdoor use but is not road legal. It is designed to fold automatically in order to fit in your car boot making it ideal for trips to your local town and shops. The scooter is designed to be used by a range of clients whose mobility has been reduced or removed by a disability or chronic illness. It is capable of up to 4 mph, can climb 3-degree slopes and negotiate obstacles up to 6 cm high (**see Technical Specifications**).

The design accommodates a single user. It is a lithium battery powered four-wheeled scooter capable of a 4 mph maximum speed with the intention of it being used as a wheeled conveyance to enhance the mobility of a person with a maximum mass of 18 stone (115 kg). Suitability is dependent upon the degree and nature of disability and should be determined through a thorough risk assessment carried out by a qualified medical professional, TGA representative or approved dealer. This scooter can be suitable for assisting in rehabilitation, restoring independence and in some instances long-term alleviation of disabilities and chronic illnesses.

Consideration must be given at point of prescription to required usage with regard to your capabilities and the environment and terrain on which the product will be used. Your dealer must provide you with instruction around how to operate your scooter safely before you can independently operate your product. Consider initially operating the scooter under their supervision until you feel confident to operate it independently.

The TGA Minimo, Minimo Plus 4 and Minimo Autofold are imported into the EU by TGA Mobility Ltd and are placed on the EU market, marked as a Medical Device, and complies with the Essential Requirements of the Medical Device Directive 93/42/EEC.

Testing carried out indicates that if this product is used in line with this user handbook and maintained in accordance with a service plan, the product life cycle is five years. With ongoing maintenance and care it may exceed five years in life.

Items included with your Minimo Autofold

- Charger power lead
- 2 battery keys
- 2 RFID fob
- Remote battery connection lead
- Charger

Your scooter controls

A. Horn – Press the button to sound your horn.

B. Key Fob – Press the power button on the Minimo display panel until the light surrounding the button illuminates red, then swipe the key fob over this button to put the scooter into 'driving mode' (indicated by the light changing to blue). Always keep the fob with you when driving.

C. Battery Condition Indicator – When your scooter is switched on, the lights on the indicator will show the level of battery life. As the battery is used, the lights will individually extinguish from green to red – all lights on meaning fully charged, only red lights showing meaning your battery needs to be recharged. For more information see the 'Charging Your Scooter' section.

D. Power Button – Press the power button to wake up the system. When it shows red, it is awaiting the command from the fob to go into 'drive mode' – which will turn this to blue. Press again to switch the scooter off. (In the diagram below, the power button is shown as a blue circle, as it is hidden by the Key Fob).

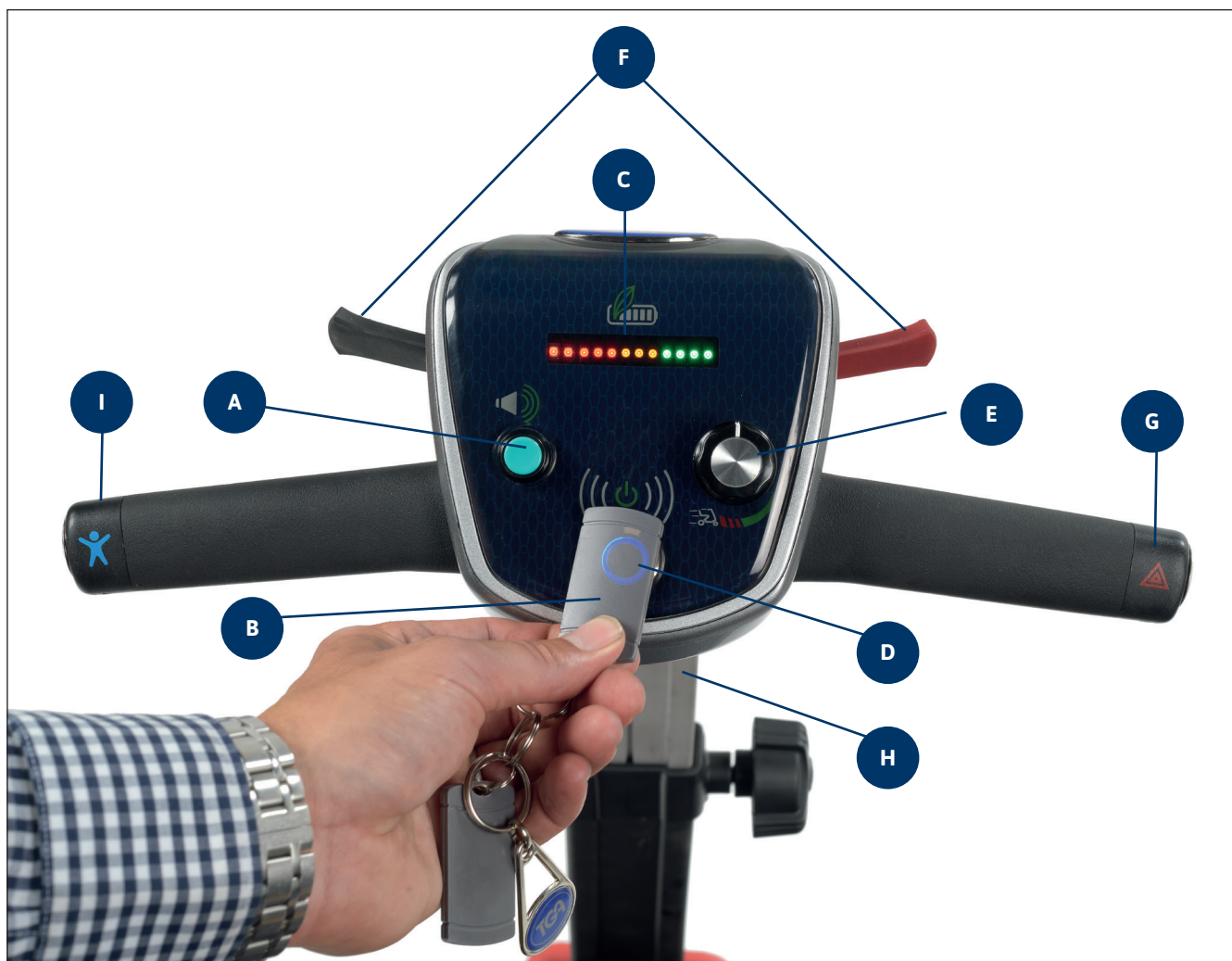
E. Speed Adjuster – This allows you to pre-select your desired maximum speed. Turn the adjuster knob fully anti-clockwise for the lowest speed and gradually rotate clockwise to increase your maximum speed.

F. Throttle Control Levers – The throttle control also adjusts the speed of your scooter. The further you move the control lever the faster you will go. To move forwards, pull the red right-hand lever towards the handlebar. You can either pull the red right hand lever or push the black left-hand lever). To reverse, pull the black left-hand lever towards the handlebar.

G. Hazard Light Button (located on the end of the handlebar) – Press, release and wait five seconds. The front light and rear lights will flash.

H. Light Switch – The switch under the control panel will operate the front and rear lights. Please note the front day-running light will always remain on while your scooter is in use. This switch will put the front light on 'full beam'.

I. Autofold Button (located on the end of the handlebar) – When the scooter is turned off, press the button and press on the foot pedal to start the automatic folding process.



Driving your scooter

Before driving your scooter, make sure the battery is fully charged and check the tyres do not appear to be soft (see **Maintenance** section for details of monthly checks and tyre pressures). Do not press the 'on' button before sitting on your scooter. When transferring onto your scooter from a seated position, lower the armrest to give easy access to the seat. Always ensure both your scooter and the chair/wheelchair you are transferring from are stable and have wheels locked/brakes applied. When comfortably sat, ensure that the seat is secure. Ensure the armrests are in the correct position.

Set your speed to low, hold the tiller handlebars with both hands and gently apply pressure to the throttle control lever to move forwards. The more pressure you apply to the lever, the faster you will go. Remember to always come to a stop before changing from forward to reverse.

Releasing the throttle control lever automatically operates the motor brake to slow down your scooter to a stop. Once stopped, the parking brake will automatically engage.

Use the tiller to steer your scooter left and right. Simply move your left hand towards you to steer left and your right hand towards you to turn right. Always slow down before turning.

To reverse, pull the black left-hand throttle control lever towards the handlebar. The speed in reverse is reduced automatically for safety; while reversing your scooter will 'beep'. Before reversing, check the area behind you is clear, and continue to check while reversing.

To negotiate kerbs, you should always approach as head-on, (square), as possible. If you are going up, select a low speed setting then drive until both front and back wheels are on the pavement. If going down, proceed slowly until on the road, then switch to a suitable higher speed to cross the road safely.

Watch your battery condition indicator. The distance you can travel depends on many factors. Range is influenced by many environmental conditions – hills will substantially decrease the range, for example. Establish what you can obtain around your locality by gradually increasing the distance and checking the battery indicators at the end of each journey.

Should the battery run out before you get home, there is a 'free wheel' mode that will allow someone to push your scooter home. This is operated via the parking brake release. See the instructions label at rear of your scooter. You must never use free wheel mode with an occupant on the seat.

WARNING!

The Minimo Autofold will automatically slow down when turning corners. However, you should ensure you take extra care when turning, especially when changing direction from moving forward in a straight line.

WARNING!

When driving your Minimo Autofold over surfaces that could be slippery, slow down and take extra care. This includes, but is not limited to, icy surfaces, frost covered surfaces, surfaces covered in leaves and wet surfaces. Attempting to turn on a slippery surface without slowing down could result in your scooter continuing on in the same direction and not turning, especially when travelling down an incline.

WARNING!

You should be especially vigilant when traversing across a slope or gradient. When traversing a slope, your centre of gravity changes so there is more danger of tipping sideways. You can reduce any risk to yourself by travelling slowly. Be aware that any additional loads being carried such as shopping bags, can also affect the centre of gravity of you and your scooter.

Driving inside shops and buildings

When inside, it is your responsibility to drive slowly and safely and not damage your surroundings or hurt other people.

Using the footpath – If you are on a scooter you are no longer a pedestrian. You must give way to pedestrians as per the Highway Code.

In a crowded precinct, market area, or footpath – It is your responsibility to ensure you do not run into anyone or do any harm with your scooter.

WARNING! Watch out for: ⚠️

- **Children – they may run in front of you.**
- **Elderly people – they may be unable to quickly move aside to let you pass. Give way.**
- **Disabled people on foot – they too may be unable to move aside for you.**
- **People with visual problems or impaired hearing – give them space and time.**
- **Other scooter users.**

Portable Ramps

This scooter cannot be driven up portable ramps exceeding the specified gradient. Due to the nature of portable ramps, it is recommended that the user dismount, and the scooter is moved up the ramp by a person with the strength and agility to be able to fully manoeuvre the scooter safely using the free wheel function.

WARNING! Transportation in Vehicles ⚠️

This scooter is not suitable to use as a seat in a vehicle. It has NOT been crash tested. Users must transfer to seating in the vehicle. The scooter must be stowed safely in the vehicle, in a luggage compartment or similar.

Driving on the road

Your scooter is defined by the Department for Transport as a class 2 mobility scooter and therefore it is NOT road legal.

Folding & unfolding your scooter (with the battery fitted)

Folding

To fold your scooter in order to put it into a car boot, stand it up or store it, follow these steps:

1. Fold the back of the seat down and the arms back (see Adjusting Your Seat).



2. Press the power button to turn the scooter off.



3. Press the Autofold button on the left-hand side of the handlebar. It will glow orange for around five seconds. Within this time, push down on the foot pedal for around three seconds to start the automatic folding process.



4. Once folded you can then lift your scooter using the handle at the rear and stand it on its front wheels to move around in the folded position.



Unfolding

To unfold your Minimo Autofold, simply press the Autofold button until it shows an orange light and then press on the foot pedal for around three seconds. The scooter will then unfold automatically.



WARNING! ⚠️

- Always take care when folding and unfolding your scooter that your hands and fingers are clear of moving parts.
- The automatic folding process may stop if an obstruction is preventing it to fold fully.

Folding & unfolding your scooter (with the battery removed)

You can fold and unfold your scooter with the battery removed. This enables you to charge your battery remotely from the scooter or remove the battery in order to travel on a plane. To fold and unfold your Minimo Autofold with the battery removed:

1. Remove the battery as explained on page 6, 'Removing your Battery Pack'
2. Connect the remote battery connection lead that was supplied with your scooter to the charging socket on the top of the battery, and to the charging socket on the side of your scooter, ensuring that they are firmly located.
3. Carry out the same folding and unfolding procedure, detailed previously as if the battery was located on the scooter.
4. After folding or unfolding your scooter with the battery removed, you must remove the remote battery connection lead and store it safely. Refit the battery in order to drive your scooter.

WARNING! ⚠️

Never drive your scooter with the battery removed and connected to the side charging socket.

Adjusting your tiller

If you'd like to adjust the height of your tiller, simply turn the adjustment wheel anti-clockwise until the top part of the tiller moves freely up and down. Then just move the top half of the tiller to the height you would like and tighten the adjustment wheel by turning it clockwise until tight.



Removing your battery pack

To remove the battery pack, first ensure the pack is unlocked by inserting the key into the pack and turning it 90° anti-clockwise to the unlock position. Then simply lift the pack up using the handle provided.



Removing your seat

To remove your seat, follow these two simple steps:

1. Pull and rotate the red circular knob located under the seat so that it is locked open.
2. Slide the seat forwards slightly and lift away from the base.



To replace the seat reverse these steps.

WARNING! ⚠️

Always ensure the seat is locked in place before attempting to get on. Failure to check this could result in injury.

Adjusting your arm rests

Your scooter has both height adjustable and rotating armrests. To adjust the height of your armrests, follow these two simple steps:



- 1.** Press the silver button located halfway up either armrest.
- 2.** Slide the armrest to a suitable position and height and release the silver button. The armrest will locate into the nearest pre-set position when you apply gentle downward pressure.

To rotate the armrests, follow these two simple steps:



- 1** Press the silver button located at the bottom of the armrest.
 - 2** Rotate the armrest backwards 90 degrees until it locks in place.
- To rotate the armrest forwards simply reverse these steps.

Charging your scooter

Only use the charger supplied with your scooter as other makes of chargers have not been tested and may permanently damage your batteries. Your battery charger is designed and tested for use with your scooter, so it may not be suitable for others.

The battery can be charged either fitted to your scooter or when removed, remotely, from your scooter. When charging remotely, please follow the instructions below starting at number 2. To remove the battery see 'Removing your Battery Pack' on page 6.

To charge your batteries, follow these simple steps.

- 1.** Switch OFF your scooter.
- 2.** Ensure the charger power lead is firmly plugged into the body of the charger.
- 3.** Plug the round plug on the charger lead into the socket located on the battery pack. Plugging the charger in automatically cuts all power to the electronics so your scooter cannot be driven. Alternatively, you can plug the charger lead into the socket located on the side of the Minimo Autofold – particularly useful when the scooter is folded.
- 4.** Push the plug from the mains power lead into a suitable wall outlet and switch on.
- 5.** A green light will flash before turning red, to indicate the battery is charging. The green light will come on when your battery is fully charged.
- 6.** When your battery reaches its maximum charged state, stop charging. Do not charge for over 24 hours.
- 7.** Although to get out of trouble the batteries can be put on charge for a short period of time, it is always best to go through a complete charge cycle each time. Excessive short period charging will be detrimental to battery life.
- 8.** Depending on the depth of the discharge, the minimum time taken to recharge serviceable batteries fully will vary between 4 and 10 hours. Please note that this time

may increase as batteries get older. During periods without use it is necessary to charge the batteries every 4 weeks.

WARNING! ⚠️

- **DO NOT smoke or use a naked flame while your batteries are being charged.**
- **DO NOT use the charger if it has received a sharp blow, been dropped or otherwise misused in any way.**
- **DO NOT dismantle your charger.**
- **DO NOT leave your charger plugged into your scooter with your charger switched off as this may discharge your batteries.**
- **For a complete charge – do not switch off, unplug or interrupt the recharge cycle until it has completed.**

WARNING! ⚠️

All TGA lithium battery packs contain a temperature sensor. When this sensor records a temperature of 10°C or lower, the internal circuit board will stop the battery charger from working in order to protect the battery cells. Once the battery pack reaches a temperature of approximately 20°C it will then allow the charger to start working again. This is only relevant if the pack drops below 10°C, so long as the battery pack is stored and remains above 10°C then the charger should work as normal; standard room temperature is sufficient.

Parking brake release

Your scooter is fitted with a manual parking brake release. This is located at the rear of your scooter just above the right-hand rear wheel. The back position is normal use, pushed forwards releases the brake and allows your scooter to be pushed, (free wheel mode). There will be no power to drive when the brake is in this position, however when switched on the battery condition indicator lights will flash indicating a fault mode.

WARNING! ⚠️

Never operate the manual parking brake release lever when your scooter is on a slope.

WARNING! ⚠️

Never sit on your scooter with the parking brake released. The scooter will have no effective braking system when in free wheel and must only be used to manoeuvre the product unoccupied.

Maintenance

We recommend that your scooter has an annual service and maintenance check by either TGA or an approved mobility specialist. There are, however, a few tips you can follow yourself to keep your scooter in good condition.

- Keep all components clean and dry.
- Keep your tyres inflated according to the technical specification. Low tyre pressure will degrade your scooter's performance, so it is very important that you check them frequently.
- Check your tyres for wear and replace them as soon as there is any sign of excessive wear.
- Your scooter uses lithium maintenance free batteries which are leak-proof regardless of their position, so charging the battery is the only maintenance required. **DO NOT** leave the batteries flat though, charge them every 4 weeks if your scooter is being stored or not in use.
- Check any accessible electrical cable connectors are fully home and secure.
- Battery replacement is dependent upon use. When your batteries lose power too quickly, it is likely they need replacing. If you want to change the batteries inside the battery pack yourself, installation instructions are included with the replacement batteries from TGA.
- Make sure all repairs relating to electrical or mechanical components are carried out by TGA or an approved mobility specialist only.
- Do not apply oil or grease to any components. Sealed bearings and nylon bushes eliminate the need for lubrication.

Seat Upholstery

You can use a damp cloth and a little soap to keep your seat looking good. Do not use abrasive cleaning materials as this will damage the coating of your seat. Upholstery can also be damaged by chemicals so do not over apply. Ultraviolet light can also reduce the life of the material coating your seat.

Bodywork

You can clean the plastic bodywork of your scooter by lightly washing it with clean, soapy water. Car polish can be used to keep the paint and bodywork in pristine condition. Do not use abrasive cleaners or strong detergents as this will fade the colour. Do not pressure wash.

Parking Brake

You can check if the parking brake is functioning correctly by testing if you can push your scooter when it is switched off (or switched on with the speed control throttle in the neutral position and the parking brake lever in the rear/drive position). If your scooter can be pushed as described, the motor brake may be faulty.

WARNING!

If the above is the case, do not use your scooter and contact TGA or an approved mobility specialist.

You can also test the motor braking when driving your scooter. If you let go of the throttle control lever it should lose speed very quickly. If you notice a change in the normal stopping time/distance you should contact TGA or an approved mobility specialist.

- **DO NOT operate your scooter in extreme weather conditions, i.e. heavy rain.**
- **DO NOT drive through deep water. This could damage the main electronic controller, or other electronics.**
- **DO NOT store your scooter in damp conditions. This may affect the electronics if left for long periods of time**
- **DO NOT hose down or pressure wash your scooter. Water could be forced into the electronics and cause permanent damage.**

Troubleshooting

If your scooter does not start, check the following:

- Make sure the 'on' button has been pushed and the blue light is showing. If it is then the battery condition indicator will be displayed, if it is showing empty then recharge batteries.
- Check parking brake is released

If the battery condition indicator fails to operate when the scooter is on, check the following:

- Make sure your battery charger is not plugged in to the scooter, this will prevent your scooter driving.
- Check parking brake is released
- Check the battery pack connection

If your scooter will not charge, check the following:

- Check the lights on your battery charger are on and that the charger is plugged into a working wall socket.
- Check your battery charger is connected to your Minimo Autofold charge socket correctly

WARNING!

If you find for any reason your scooter does not reduce speed when you let go of the speed control lever, press the power button to stop. This operation should only be carried out as an emergency.

Tips for scooter users

- Your Minimo Autofold is designated as a class 2 scooter, which is a 4 mph pavement scooter and can only legally be used on the road when either crossing over or because there are no footpaths.
- Class 2 scooters must not be driven on dual carriageways, motorways, bus lanes or cycle tracks.

Insurance

There is no legal requirement for insurance, but TGA advise to have cover for fire and theft, accidental and malicious damage and third-party damages. For more information call TGA.

Breakdown & Recovery Service

Again, not a requirement but a very good idea to enable you have total peace of mind.

Mobile Phone

It is strongly recommended you carry a mobile phone at all times while out on the scooter in the possible event of a breakdown, accident or health-related issue.

Carrying Loads

Do not overload. It may make your scooter unstable and reduce its range. Place heavy loads inboard – in the middle – not behind the back wheel which can lighten the steering or can cause the front end to lift off the road on a bump, and not at the front which might make steering heavy. See maximum weight capacity in the specifications.

Airline Checking

11.5Ah lithium batteries are permitted on aeroplanes. Airline personnel may insist on removing the battery cover to verify its contents. It is important to check with the airline before travelling. An airline compliance certificate is available from TGA. Due to circumstances out of TGA's control, it is not possible to board an aeroplane with a lithium battery exceeding 11.5Ah. This is due to an instruction/information provided by the Civil Aviation Authority. The Minimo Autofold folding scooter comes complete with a 11.5Ah battery and therefore can be transported on aeroplanes.

Product Options and Accessories

Listed on the TGA Mobility Ltd. website, (www.tgamobility.co.uk), are any optional specifications for your product. The website also shows available accessories and spares with guidance around which products the accessories are intended to fit.

Warranty

Conditions of warranty will be detailed on the documentation supplied at the time of ordering / supplied with your new scooter. Consumable components such as tyres, light bulbs, fuses, brake pads, seat cushions and motor brushes, are excluded from warranty.

Technical specifications

Length	97 cm
Width	53 cm
Folded Dimensions	83 x 53 x 47 cm
Seat Depth	35 cm
Total Weight	27.5 kg (61 lbs)
Wheel & Tyre Size front	17 x 4 cm
Wheel & Tyre Size rear	22 x 7 cm (2.80/2.50-4)
Battery	24v 11.5Ah (up to 25v)
Motor	4-pole 270 watt
Controller	Dynamic controller 50
Charger	2.5 amp
Max Speed	4 mph (6 kmh)
Approximate Range	up to 10 miles (15 km)
Max Carry Capacity	115 kg (18 stone)
Max Gradient	3 degree
Ground Clearance	6 cm
Vehicle Class	2
Tyre Pressure	25psi front, 30psi rear
Operating temperature	-20°C to +40°C*

Storage temperature range -20°C to +40°C

*At extreme low temperatures, the batteries may freeze and your scooter will be unable to operate. In extreme high temperatures, it may operate at slower speeds due to a safety feature.

Disposal of product, batteries and charger

The symbols shown below mean that in accordance with local laws and regulations your product should be disposed of separately from household waste.

When this product reaches the end of its life, take it to the local collection point designated by your local authority. Or return it to TGA for recycling in accordance with UK Environment Agency regulations. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects the environment.

NOTE: Ensure you are the legal owner of the product prior to arranging for the product disposal in accordance with the above.



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