

# USER MANUAL

## KINGKRAFT VARIABLE HEIGHT BASIN

Model .....

Serial Number .....

Delivery date .....

Installation date .....

### IMPORTANT SAFETY INSTRUCTIONS

Please read these instructions carefully before first using your Kingkraft product, and then keep them safely for future reference. Please also make sure that each person and any carer who uses the basin is also aware of their contents and follows the instructions each time they use the unit.



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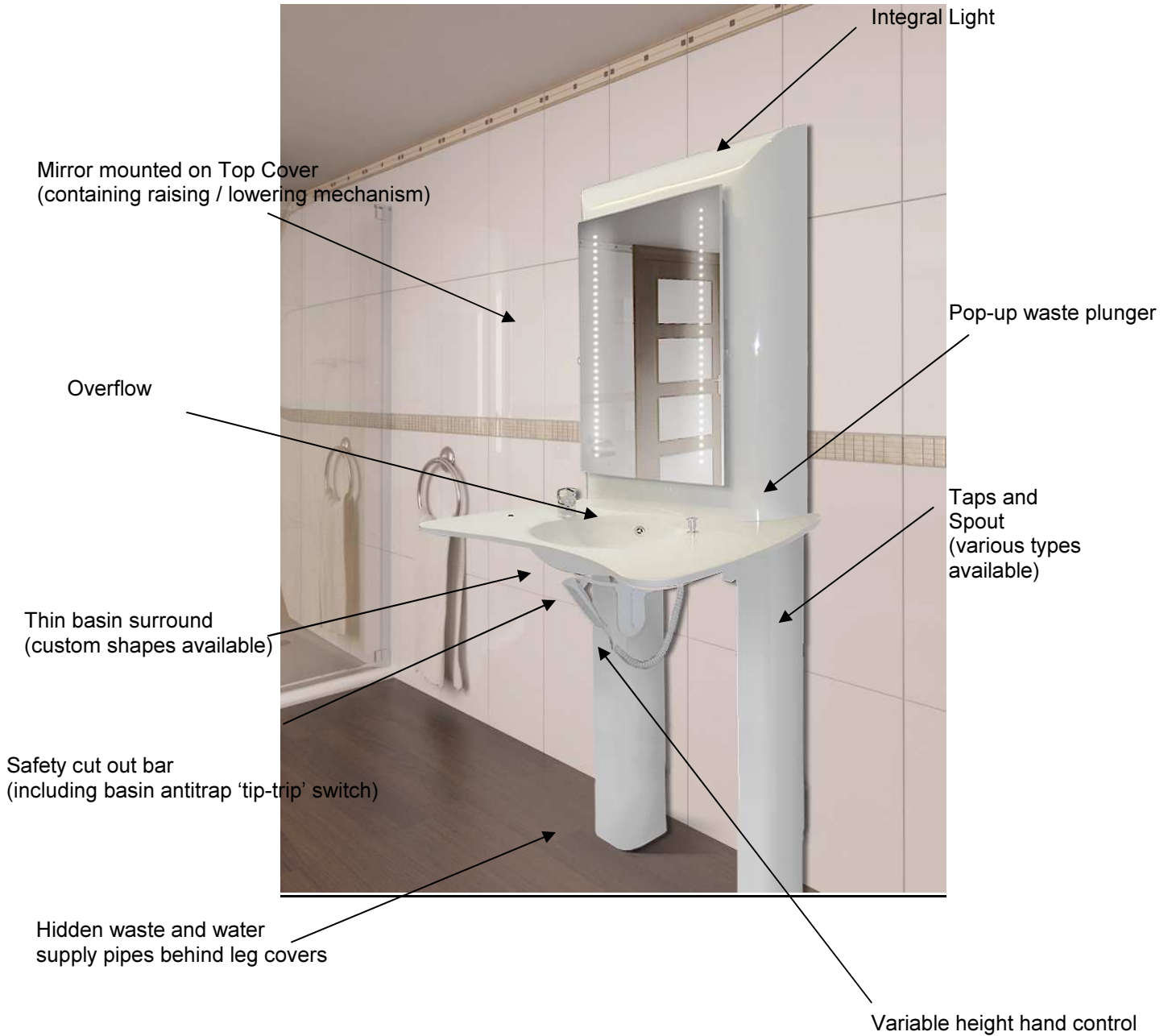
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## A KINGKRAFT VARIABLE HEIGHT BASIN

(Different versions / styles could be supplied other than the design shown below)



## **IMPORTANT SAFETY INSTRUCTIONS**



**WARNING: Any person who is incapable of fully helping themselves must NEVER be left alone with the basin even for the shortest of periods.**

This manual contains information for the Kingkraft Variable Height Basin. Special basin designs manufactured by Kingkraft may differ to those described herein. Separate instructions for these models may be required. Please consult Kingkraft Ltd.

Please make sure you read all the sections relevant to your particular model of basin

If you have any doubt about the safe operation of the basin, please contact Kingkraft immediately for advice.

- Do not sit or stand on the basin in any position or try to operate it if under any substantial load. (eg more than 20kg, 3 ½ stone)
- Kingkraft products are intended for domestic and commercial use only.
- Kingkraft variable height basins are intended only for positioning the unit for ease of use or lifting the arms of a user.
- Do not exceed the maximum loading marked on the unit.
- Only one person should be using the unit at any one time.
- If fitted, the raise/lower control handset is waterproof but should not be put into the basin when full of water or under the running spout. However, if it is accidentally dropped remove it immediately and wipe dry. Do not leave the handset underwater.

*Note that UK regulations require that, in general, no person should lift a mass of greater than 25kg unaided. Use appropriate lifting equipment if this is required to help disabled people to use the unit.*

Your basin must be installed by competent installers. If you have to move or re-install the basin for any reason, please take care to read the requirements given in the installation section. Contact Kingkraft for advice if you need any further information or assistance.

Your Kingkraft basin should be serviced at least once per year by a competent individual. The basin must be cleaned and disinfected regularly according to the instructions given herein.

Ensure that the safety notices / instructions, which accompany your basin, are conveniently available at all times. Make sure they are replaced if they become damaged or defaced. Contact Kingkraft if you need further supplies of the instructions / any notices.

Your Kingkraft product is manufactured using top quality components and assemblies. In particular, in order to minimise the risk of scalding, a special type of independently tested Thermostatic Mixer Valve (TMV) could be fitted between your hot water supply and the basin spout. The operation of these TMV's should be regularly checked, especially after any maintenance. See the section below on maintenance of your unit for further instructions. The safe temperature of the mixed water must be checked prior to using on each occasion – see further section on the water supplies.

Your basin should only be used if any powered equipment on it (eg. light, shaver socket, raise/lower system etc.) is connected to a suitable power supply protected by an earth leakage circuit breaker. Test the earth leakage circuit breaker which supplies power to your bath regularly (at least once a week), and if you are in any doubt about its operation, consult a qualified electrician before using the bath.



### **RISK OF SCALDING**

Although safety devices are fitted to minimise any risk of scalding, users must be aware that these are not fail safe. The temperature of the water in the unit **MUST BE INDEPENDENTLY VERIFIED ON EVERY OCCASION** it is used and before an incapacitated person comes into contact with the water. Ideally a calibrated thermometer should be used.

Refer immediately to the manufacturer if the water is too cold or too hot and do not use the basin until the problem is corrected.

Certain chemical additives may damage the plastic used for the covers on the basin, especially if they contain bleach or other corrosives, from which your product is made. Use only water, normal soaps and approved cleaning agents. If in doubt, please contact Kingkraft for advice about the suitability of the additives you wish to use.

Under no circumstances must acid or bleach based cleaners be used. To do so invalidates your guarantee. We recommend that your Kingkraft Bath should be cleaned with Trigene® which is available from us. See the section on cleaning below for instructions on how to safely and completely clean your unit.

If your unit has any electrical controls, switch off the supply at the wall isolator (mains units) before attempting any maintenance, including cleaning.

Do not use pressurised water jets to clean any areas of the basin and keep water jets away from any controls, when cleaning around the basin. Do not steam clean.

Do not attempt maintenance unless the basin is empty.

Check the unit frequently for damage, especially the mains cord. If you find signs of damage, do not use the basin and contact Kingkraft as soon as possible to arrange for service and repair.

## **GENERAL DESCRIPTION**

Washing should be a practical, easy and enjoyable process. Your Kingkraft product has been developed over a number of years and is specifically designed to be "User and Carer Friendly".

The Variable Height Basin is designed primarily to aid washing at a comfortable height for the user and to help reduce any carer fatigue. The Basin can also be used to help raise the users arms / upper body to a comfortable height / position for them to complete tasks independently.

The thin surround of the basin allows maximum space underneath the unit for wheel chair access whilst providing plenty of area to aid support and practical placement of bathroom products.

Various tap and spout designs are available. See Kingkraft for specific type supplied.

The Basin is designed to be used in conjunction with most types of mobile wheelchairs and the surround can be customised to accommodate / avoid controls etc.

The variable height adjustment allows the basin to be raised to working heights suitable for most carers and users, which minimises the risk of back-strain and fatigue.

(The basin can also be supplied on special request with the controls positioned conveniently for the bather to use themselves if there is a sufficient degree of independence).

The maximum hot water temperature can be pre-set and regulated by a thermostatic mixer valve, incorporating over-temperature shutdown protection.

Please ensure this information is available for all users, and that its contents are understood and the instructions are followed by all carers and users of the basin.

# **OPERATING INSTRUCTIONS**

## **Mains Powered Variable Height Basin –**

Firstly check that the proposed raising or lowering operation will not cause injury to personnel or damage to nearby equipment. Press the buttons on the handset as required to raise or lower the unit. To stop the operation, simply release the button.

The handset must not be submerged or subjected to pressurised water cleaning.

### ***To lower the basin***

- Press the right hand button on the hand control:

### ***To raise the basin***

- Press the left hand button on the hand control:



When the lifting frame is moving, the maximum load noise, 1 metre away, does not exceed 65 dBA. Please carefully read the instructions which apply to your model of basin. Maximum working load is 130Kg, but this is in extreme load circumstances and should be avoided at all times.

### ***General***

The system uses an actuator mechanism powered via a controller which is connected directly to the mains power supply. A handset is provided which operates at low voltage for maximum safety.

If there is any doubt about the safety of the unit, do not use it and contact Kingkraft immediately.

### ***Care of the unit***

The system must not be overloaded by trying to raise more than the specified loads. Should overload occur, damage may be caused to the unit and it may fail to operate.

The unit is designed to operate in a bathing area but it should not be submerged and pressurised water must not be used in cleaning the components.

If any physical damage to the actuator or cabling occurs then do not use the unit until it has been examined and rectified by a competent person and declared as safe.

### ***Fault finding***

The unit must be installed by a competent person who must connect it to a circuit breaker mechanism provided by others to ensure safety. If a fault has occurred in the electrical supply the circuit breaker is designed to cut out. The fault must be traced and rectified by a competent person before the reset switch on the circuit breaker is operated. The frame and control system itself should not be tampered with as it is designed only for repair by a competent person. In all cases, advice should be sought from Kingkraft.

## Safety / Anti-Trapping Devices -

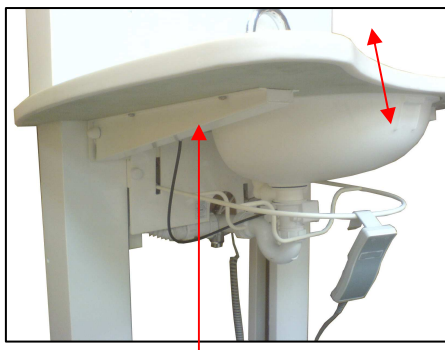
*These have been fitted to deduce the possibility of anything becoming trapped underneath the basin whilst the unit is being lowered.*

*There are two separate devices fitted:*

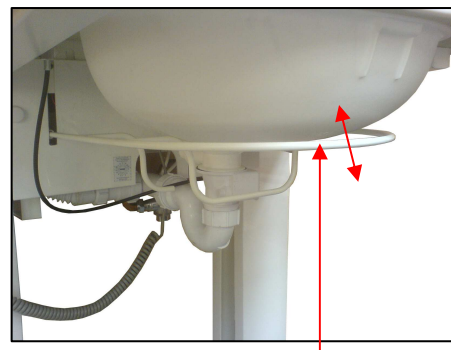
- a) A safety 'bar' underneath the basin that if raised / pivoted upwards the power to the unit is cut off and stops the movement immediately.
- b) The basin and surround is mounted on two pivoting arms, which allow the unit to hinge upwards if something is underneath the unit. This operates the same as the safety bar.

*These precautions do not eliminate all possibilities of trapping and the operator of the basin raise lower function must be aware at all times of what is below the basin and the positioning to avoid any trapping.*

*These devices only stop the unit from moving if activated and kept in the activating position. If they are returned to the lowest position the unit will operate freely once more. The unit will not automatically reverse direction, freeing anything trapped underneath. The raise button must be pressed to release the unit from any obstruction.*



The basin mounted on pivoting arms



The safety 'bar' under the sink

### Running the water:

If the basin is not required to hold the water, make sure the pop-up waste is up / open.

The hot water tap should be turned on as described below and allowed to flow into the basin with the pop-up waste open to allow any cold water to flow away which maybe in the system.

This process should be continued until the water temperature is perceived to be constant and to the temperature required.

This operation will allow the mixed water temperature to increase to the required level and permit the carer and / or user to check that the maximum temperature is safe prior to placing hands under / washing.

If the water temperature does not achieve a comfortable level there may be a fault and the basin or water supply and should not be used until the fault is rectified.

If the basin is required to hold water, close the pop-up waste by operating the push-pull lever.



**Tap Controls:**

If installed with supplies under high water pressure there is a possibility of the basin overflow not coping with the flow rate and overflowing over the basin rim.

**Turning the Hot + Cold Tap ON / OFF:**

To operate the mixer tap, simply turn the lever to the right to get hot water.

Turn the lever back to the middle to turn the flow off.

Turn the tap lever to the left to get the cold water.

Mixed temperatures are blended when the lever is towards the middle setting.

Please see the Rada Product Manual, supplied with this document.



***REMEMBER:*** THE TEMPERATURE OF THE WATER MUST BE CHECKED ON EVERY OCCASION BEFORE A DEPENDANT PERSON USES THE BASIN

The basin may be specified with a bath spout that can be turned out of the way (Swivel Spout). If the swivel spout is fitted, ensure it is positioned over the basin bowl prior to using the taps / IR controls.

### ***Cleaning your basin***

Some parts of the basin are made from polypropylene plastic and requires only a very mild non-abrasive cleaning agent to keep it clean.

The basin and surround are constructed from 'Corian' and is hard wearing.

Under no circumstances must acid or bleach based cleaners be used to clean this product. To do so invalidates the guarantee

Kingkraft recommend that your basin should be cleaned with TRIGENE® which is available from Kingkraft in ready to use 500ml trigger sprays or concentrated in 1ltr. and 5ltr. sizes. Always follow the instructions of the Trigene containers.

A sample TR101 trigger spray may be included with a new basin

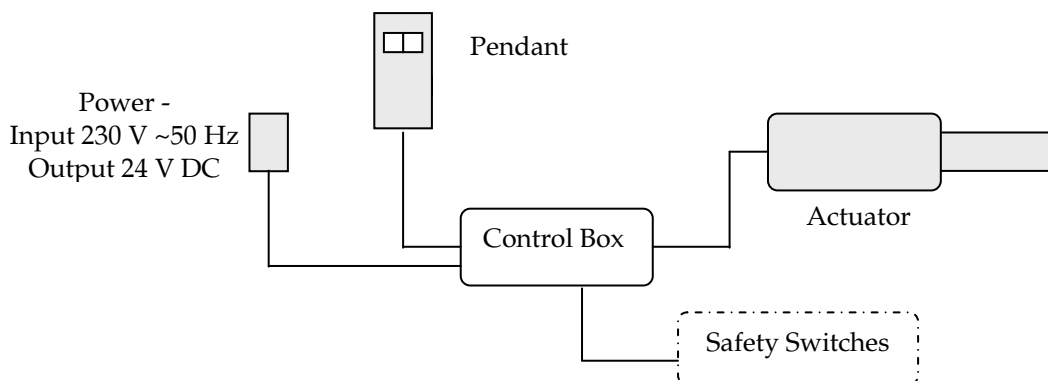
### ***General cleaning / disinfection:***

- Use Trigene® trigger spray TR101 pre diluted to 1:10
- As Trigene® is considered safe and non-corrosive it can be used on every area of the basin. Trigene® presents no hazard to the user in normal use.
- Leave for five minutes before rinsing / wiping off.

## **Below is a diagram representing the basic electrical circuit incorporated into the basin.**

Do not open the electrical boxes, unless advised by a Kingkraft engineer. Fuses should be changed by Kingkraft Engineers or qualified electricians and replaced with the correct specified fuse. Do not immerse the power cord in water or run over it /trap it with mobile devices.

### **Raising / Lowering Mechanism –**



## **INSTALLATION**

Your Kingkraft product should be only installed by competent installers. However, if you have to move or re-install the basin for any reason, please take care to read the requirements given in the installation section below. Contact Kingkraft for advice if you need any further information or assistance.

Units with electrical services must only be wired in accordance with the IEE Wiring Regulations, especially as regards zoning and equipotential bonding. Kingkraft products are intended for operation only in a bathroom type location where exposed mains connections and unsealed switches etc. are not permitted.



### **The unit must not be connected via a plug and socket**

The power supply to the basin must be wired into the supply via an isolator which supplies only the basin and must have double pole switching with contact separation of at least 3mm. If the isolator is not within sight of a person maintaining the basin unit, it must be lockable in the 'off' position.

We recommend that your Kingkraft basin is connected via a Residual Current Circuit Breaker (RCD/RCBO) with an operating current of not greater than 30mA

With the exception of the control handset, all parts of the basin control system which are connected to any electrical supply must be inaccessible to any person using the basin and must be fixed firmly into position.

Take care to ensure that the wall and floor on which the basin is to be placed can withstand the full weight of the unit load and a user leaning on it.

Full installation instructions are available from Kingkraft.

## **MAINTENANCE**

Most maintenance required by Kingkraft products is simply a visual inspection to check that the unit is in safe working order. A check-list for these items may be found below.

If you find any faults with the unit, ensure they are rectified immediately and in any event before the basin is next used. If in doubt about any repair procedure, please contact Kingkraft for advice or to arrange a service visit.

Thermal mixer valves (TMVs) require special maintenance and testing to ensure they are safe and continue to operate effectively. These requirements are set down in the Department of Health guidance document '*Safe hot water and surface temperatures*', published by HMSO, ISBN 0-11-322158-4. Under special circumstances, for example in a domestic dwelling, if specified by the user, the thermostatic mixing valves used by Kingkraft may not be tested to the DO8 standard or may be omitted.

The maintenance procedure for TMV's is as follows. This procedure should be carried out at least annually for baths in domestic premises, and more frequently where the bath is used by more than one person or in hard water areas.

### *1. Check the temperatures of the inlet and outlet for the TMV as follows:*

- 1.1 Record the temperature of the hot and cold water (inlet) supplies;
- 1.2 Turn the control knob to fill the basin so the water flow is at maximum and record the temperature of the water flowing into the basin.
- 1.3 Set the control knob so that the flow of water into the basin is at a minimum and that the water temperature as it flows into the basin is as high as possible. Record the temperature of the water flowing into the basin. (N.B. do not set the flow of water so slow as to allow it time to cool down before it reaches the measuring apparatus).
- 1.4 While measuring the temperature of the water flowing into the basin, turn off the cold water supply to the mixer valve and record the maximum temperature reached.
- 1.5 Continue to monitor the temperature of water flowing into the basin after the cold water supply to the TMV has been switched off and record the final temperature reached.
- 1.6 Compare the temperatures measured with those recorded during the last maintenance checks on the mixer valve (or with the initial commissioning temperatures which are recorded in the documentation accompanying your new basin)
- 1.7 If any of the temperatures has altered by more than 1°C, or if the maximum temperature recorded exceeds 43°C, the TMV requires maintenance as in section 2 below.
- 1.8 Retain the records of temperature measured for future reference (a sample record sheet is provided below.)

### *2. Checks on the TMV*

- 2.1 Check all in-line and integral strainers are clean.
- 2.2 Check all in-line and integral check-valves and anti-back siphonage devices are in good working order.
- 2.3 Check all isolating valves are fully open.
- 2.4 Repeat stages 1.1 to 1.6. If the temperatures measured have not stabilised within a degree or two of those recorded on the last maintenance check, the valve must be removed for specialist servicing. Contact Kingkraft for further advice.

Record of unit maintenance Basin No. \_\_\_\_\_

	Operation	Tick OK	Comments
1.	Check water path(s) clean		
2.	Fill basin with water and check for adequate operation of drain.		
3.	Check presence / legibility of warning notices		
4.	Check all labels on basin intact and legible		
5.	Check frame for excess corrosion		
6.	Check operation of TMV (S)		
7.	Check earth bond for metal frame		
8.	Check power supply cord for damage		
9.	Check operation of RCD		
10.	Check all other wires and electrical enclosures for damage		
11.	Check pipes etc. for leaks		
12.	Check all knobs and handles securely attached		
13.	Check all controls easily operated (i.e. not too stiff).		
14.	Fill basin with water and check operation of lifting mechanism to top and bottom of travel.		
15.	Check for unusual noises or vibration when lifting / lowering basin		
16.	With basin empty and at top of travel, gently place a load onto the front edge of the basin to check for loose fittings and instability.		
17.	Record date maintenance carried out		
18.	Record name of person carrying out inspection		

Record of maintenance of Thermostatic Mixer Valve(s)  
Basin No. \_\_\_\_\_

1.	basin controller? Specify	
2.	Type/model of TMV	
3.	Pre-set temperature limit	
4.	Location/access to TMV	
5.	Location of hot and cold water isolation valves	
6.	Hot water supply pressure	
7.	Cold water supply pressure	
8.	Hot water supply temperature	
9.	Cold water supply temperature	
10.	Outlet temperature at maximum flow	
11.	Maximum outlet temperature at minimum flow	
12.	Difference between maximum temperature recorded on this occasion and at last maintenance	
13.	Date of inspection	
14.	Name of inspector	

Record and maintenance action taken in the box below.

## **GUARANTEE DETAILS**

The Variable height Basin is guaranteed in the U.K. for a period of twelve months from the date of delivery against defects arising from faulty material, inferior workmanship or construction.

The result of incorrect handling of the basin shall not be covered by the guarantee.

In line with the company's policy of continual product improvement, we reserve the right to carry out improvements to the specification without notice.

### **WEEE** (Waste Electrical and Electronic Equipment Regulations 2006)

The aim of this Directive is to minimise the impact of electrical and electronic equipment on the environment when products become waste. All electrical components on this product must be disposed of in accordance to the WEEE 2006 regulations, either through reuse, recovery, recycling or environmentally sound disposal.

If this Kingkraft product is at the end of its life or electrical parts are replaced during its life-cycle by people other than Kingkraft Engineers, please contact Kingkraft to discuss arrangements regarding the disposal of any of the electrical equipment.



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