

The switchbox and all cables connected to it must be securely affixed to a smooth secure surface.

The switchbox must not be used for safety related appliances.

All unused outputs (cable glands) must be sealed with the supplied rubber cable gland blanking plugs.

When inserting a blanking plug into the gland tighten the gland nut with the same force as if there was a cable fitted as described in the installation guide.

**All outdoor equipment (including the switch box) must be connected to the main supply via an earth leakage circuit breaker (ELCB).**

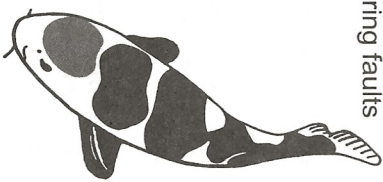
The switchbox is designed to be maintenance free. To clean it, switch off and isolate the mains supply to the switchbox and clean it with a damp cloth using water and a mild detergent.

To the maximum extent permitted by law, the manufacturers, importers, distributors and retailers of this switchbox are not responsible for any damage, injury or losses of any kind caused by the improper use or installation of this switchbox.

All warranties pertaining to this switchbox shall become null and void in the event of any improper use, modification or installation.

For details of the Kockney Koi and Yamitsu range of pond and aquatic products visit:

**WWW.YAMITSU.COM**



## Technical Data

### Mains supply

Voltage: 220/240V AC

Current: Max 14.35A AC

Power: 4-Way Max. 3300VA

3-Way Max. 2800VA

Frequency 50 / 60Hz

Cable size for mains power supply:

3 x 2.5 mm sq minimum

Cable size for the output lines:

3 x 1 mm sq each minimum

### Outputs

High Capacity Max. 1800VA protected

Output: with 8amp fuse

Standard Max. 500VA protected

Outputs: with 2.5 amp fuse

### General

Temperature range: -25 C to + 70 C

Housing: Rated to IP66

CE Standards: EN50081T1

EN50082T1

Pending VDE certification

### Max Dimensions (L x H x W):

4-Way 195 mm x 135 mm x 65 mm

3-Way 170 mm x 135 mm x 65 mm

### Accessories included:

Mounting bracket & fixing screws

### Guarantee:

One year from the date of purchase on materials and manufacturing faults

Patent pending

# Yamitsu Switch Box

220/240V



## Features

- Mains supply indicator lamp
- Individual indicator lamps for each switched output
- Maximum total output:
  - 4-way 3.3KV - 3-way 2.8 KV
- One high capacity 1800W output
- Three standard 500W outputs (two on 3-way unit)
- Supplied with easy fit mounting plate that eliminates the need to drill holes in the unit

## Applications

The unit is suitable for outdoor pond products that require a safe switchable connection to the mains power supply such as:

- water pumps pond lights
- air pumps fountains
- pool heaters pond vacuums
- outdoor lighting

The unit is weatherproof to IP66 and each switch is individually colour coded to provide a quick "at a glance" identification of each circuit. It is ideal for aquatics, ponds, greenhouses, garden sheds, patios, boats, caravans etc.

## Safety

This switch box has been designed with safety in mind. Its unique quick install mounting plate alleviates the need to drill any holes in the watertight casing (which could allow water to enter). This ensures the unit maintains its IP66 waterproof safety rating.

## Important

Never make any holes in, or in anyway modify, this unit.  
This switchbox must only be connected to a suitable earthed electrical supply.

## Pre-installation Notes

These instructions are important and must be followed to ensure the safe operation of this unit.

The unit must be connected to a mains supply that is capable of supplying 16 Amps continuously. This supply must be protected with its own 16 Amp fuse. If a 13 Amp fuse is used the maximum total wattage available from this unit will be reduced to 2800 watts. The fuse can be a 16 Amp screw plug cartridge or a 16 Amp automatic circuit breaker with B characteristics.

**The switch box must be connected to the mains supply via an earth leakage circuit breaker.**

Only use round cables of between 8-13 mm diameter. The cable must be suitable for the type of equipment and its location. **Do not use oval cable, bell wire or similar.** The cable cross-section for the power supply must be at least 3 x 2.5 mm sq. The cable cross-section for the outputs must be at least 3 x 1 mm sq. Position the switchbox in a sheltered position where there is no risk of flooding. Only install in a position where the switchbox cannot be damaged.

**Never use a damaged switchbox!**

The switchbox and any cables connected to it must be securely fastened to the wall. All cables with the yellow-green conductor must be earthed. Only connect electrical appliances where the maximum power consumption is clearly specified. Do not position the switchbox close to flammable, hot, dangerous or corrosive materials. Do not position the switchbox in direct sunlight.



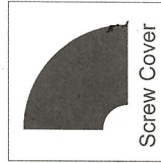
## Installation Guide

Ensure that you read the above "Pre-Installation Notes" before commencing.

**The installation should only be carried out by a qualified electrician.**

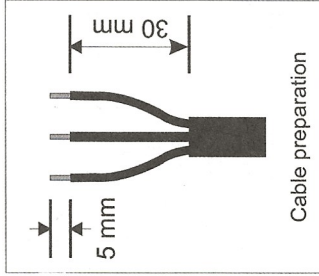
Secure the mounting bracket for the switchbox on a smooth surface with the screws provided. Slide the switchbox onto the mounting bracket until it locks into position. Isolate (turn off the mains power supply) to the external fuse to the switchbox. When you are sure the mains power to the unit is disconnected proceed as follows:

Remove the four screw covers using a small electrical screwdriver and the four retaining screws beneath them. Place them in a safe location for later re-assembly. Remove the switchbox lid.

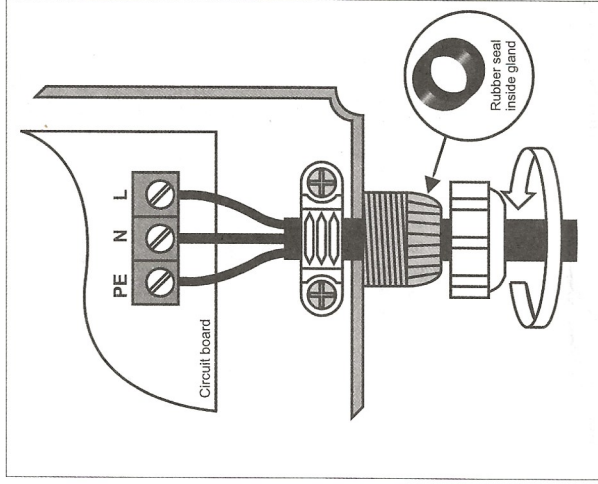


There is one 1800 Watt switch and two or three 500 watt switches. The ratings for each output is marked on the lid. Select a switch to match the rating of the equipment you intend to connect to the unit. Release the outer gland nut for that switch and remove the rubber hole-sealing plug. Remove the two screws holding the associated cable restraining clamp and remove the clamp.

Remove approximately 30 mm of the outer insulation from the end of the cable to be connected to the unit. Remove about 5 mm from each of the inner wires. Insert the power cable through the loosened outer gland nut and then through the



inner gland rubber sleeve (inside the outer gland moulded to the box). Push the cable through until the outer insulation passes approximately 5 mm past the cable restraint. See below.



Tighten the coloured cable gland nut. If this is not tightened correctly, it may result in a leaking cable gland. **Remember: The switchbox is as weatherproof as you leave it!**

Insert the wires into the cable terminals on the printed circuit board as follows:

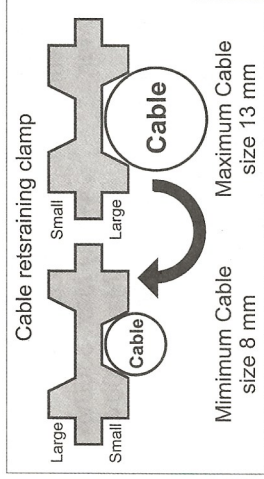
Connect the blue wire to "neutral" (N).  
Connect the brown wire to "live" (L).  
Connect the yellow/green wire to "ground/earth" (PE)

Once all three inner wires are in their correct terminals, tighten the screws.

**Never** insert the wires in any other order as this is dangerous and may cause serious damage to the switchbox.

Locate the cable restraining clamp you removed earlier. You will see that it is reversible and the recesses on each side

differs in size (See figure below). Select the side that will best fit the diameter of



the cable you have used and place it over the cable. Insert the two clamp screws and screw them in until they firmly grip the cable. Replace the lid and lid fixing screws. Tighten the screws diagonally ensuring that the cover is closed evenly. Replace the screw covers.

Ensure that any electrical appliances you have connected to the switchbox are properly installed before switching on the mains power to the switchbox.

## How To Use

The mains power supply indicator (marked "Mains supply") should illuminate whenever there is power to the unit.

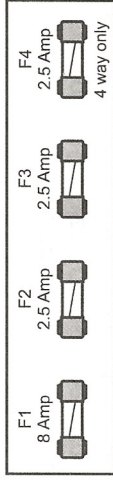
Press the appropriate switch to activate the connected appliance. The corresponding indicator will illuminate to show that power is being supplied to that appliance.

If one of the fuses fail, the associated indicator light will extinguish and any appliance connected to that switch will no longer function. Before replacing the fuse, you should refer to the appliance manufacturer's handbook and follow their guidelines for checking what may have caused it to overload the fuse.

## Fuse Replacement

Switch off and isolate the mains power to the switchbox.

Ensure that the "Mains supply" lamp is off. Remove the four screw covers using a small electrical screwdriver and the four retaining screws beneath them. Place them in a safe location for later re-assembly. Remove the switchbox lid. For safety reasons it is essential that the correct fuse is used whenever replacing a fuse. See below.



Output 1 is rated at 1800 Watts and an 8 amp 250V fuse must be used. Kockney Koi 8 amp replacement fuses are colour coded with a black dot. The remaining outputs are rated at 500 Watts and a 2.5 amp 250V fuse must be used. Kockney Koi 2.5 amp replacement fuses are colour coded with a white dot.

**Do not use any fuse that is not colour coded**, unless you are certain of its value. Fit the replacement fuse into the correct fuse holder. Replace the lid and lid fixing screws. Tighten the screws diagonally ensuring that the cover is closed evenly. Replace the screw covers. Turn on the mains power supply. The Mains Power indicator light should illuminate.

## Notes

The switchbox is an electrical device, which must be installed or mounted by a certified electrician only.

The switchbox must be operated with an external 16-amp fuse @ 3.3kw or 13-amp @ 2.86kw.

Do not use the connecting cables to carry, move or pull the switchbox.

Do not expose the switchbox to any other forces.