

Lynx Fuse Box and Accessory Wiring kit

Overview

The Lynx Accessory Fuse Box and wiring harness is designed to be the central electrical 'centre' for all aftermarket accessories that need to be powered in the cockpit area whether acquired from Britannia or elsewhere. The Fuse Box has 4 terminals.

The **3 RED wires** activate when the ignition is switched on and are used for items like gauges and heated grips etc. which need to switch off with the ignition.

The single **YELLOW wire** provides constant power when the ignition is switched off and is used for items that are required to be powered when the motorcycle is switched off like USB power sockets etc.

We recommend that major power consumers like heated grips have their own terminal and fuse, but items like gauges can be 'doubled up' on one terminal and fuse if you need to power more than 4 items.

IMPORTANT : If you do not use any terminal make sure you remove the fuse to avoid an accidental short circuit and strap it out of the way.

Parts included

1x 4 position Fuse Box with 4 fuses, wiring harness and Relay.

1x 12mm Black M5 screw

1x 16mm Black M5 screw

2 x M5 Nylock Nuts and washers

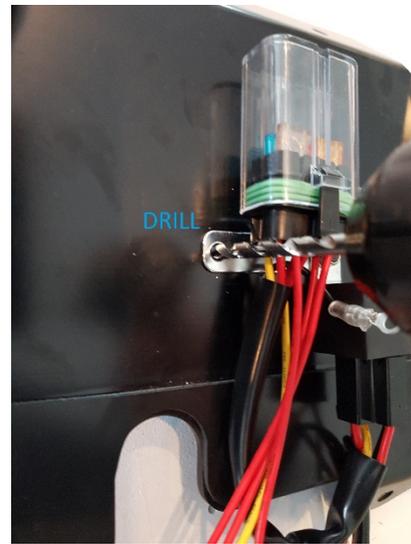
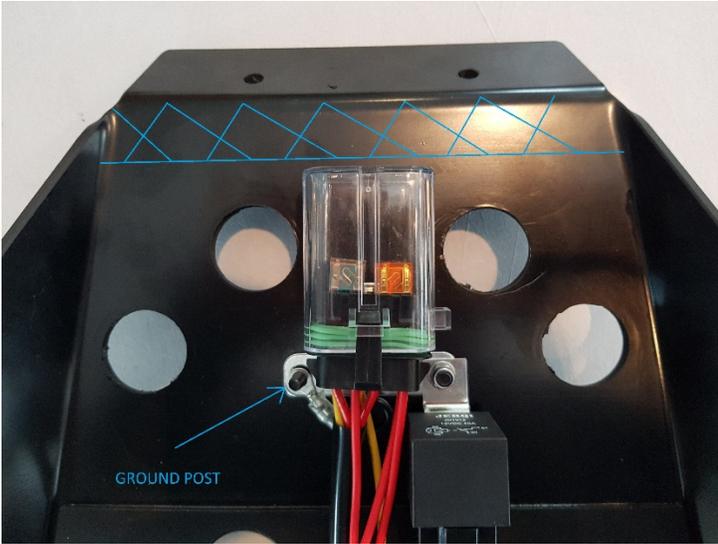
Layout

We pick up here from where you have installed your OEM speedo on the dashboard and the Blue rectangle in the attached photo shows where a typical Speedo unit would be mounted so this area is generally not used for mounting other accessories,



- The location of your Gauges and sockets will be influenced by the location of the Fuse box which will mount on the back side of the dashboard. We suggest that the fuse box is

mounted centrally on the back of the dashboard above the position of the speedo which allows the gauges and sockets to be mounted symmetrically on each side as shown.



- Note that you should avoid mounting the Fuse box or sockets and gauges in the area at the top shown in **BLUE** to avoid interference with the main fairing when installed

Mounting the Fuse Box

You will see in the Photo that the two Fuse Box mounting positions also serve to mount the Relay and the central Ground post for all accessories. Although we have shown the Relay on the right and the Ground on the left, you can mount them either way around.

- After marking the two hole positions, drill the holes for the two M5 mounting bolts.
- Mount the fuse box using the two black M5 screws using the shorter screw on the side where you are mounting the Relay and the longer screw for the ground post.
- Add a washer to the Relay side and tighten
- Place the fuse box ground ring over the Ground post screw, add a washer and then add the Nylock nut. Do not tighten now as you will be adding more ground wires later.
- Now **REMOVE THE FUSES** for the time being.

Cutting holes for gauges and switches

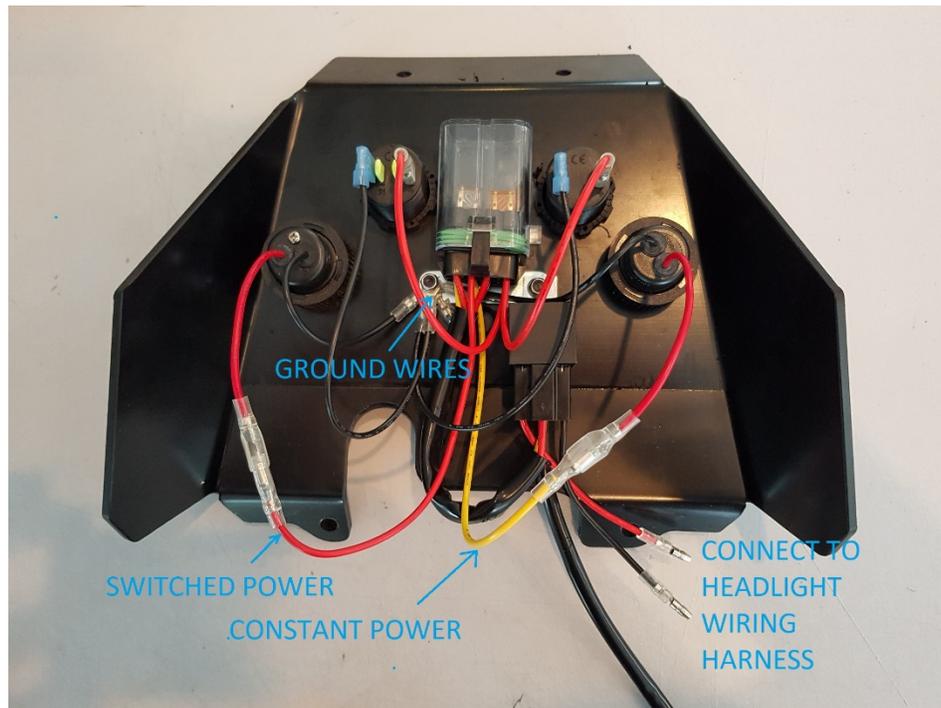
The gauges and power sockets supplied by us all use the same size hole and we use a 1-1/16 (or 1-1/8th)" hole-saw for this purpose.



Whatever method you use to form holes for your instruments remember the old Carpenters saying “measure twice and cut once !”

Installing the wiring harness back to the battery

- Remove the Seat, side panels and gas tank (or at least ‘lift’ it to be able to run the Fuse Box wires back along the frame) to the battery compartment.
- Feed the positive and negative wires from the Relay between the forks and triple clamps and back along either side of the frame to the battery and connect the positive and ground rings to the battery (Ground Ring first)
- Find a useful place to store the harness fuse in the battery area. Make it easily accessible from under the seat in case you need to replace the fuse.
- The wiring harness may be longer than required so, working from the front, leave just enough spare cable to allow the bars to sweep freely from lock to lock and then work back to the battery securing the wiring with cable ties and then strapping any excess wiring at the battery compartment.
- Finally connect the two Bullet connectors to the Lynx Headlight harness which allows the Motorcycle headlight circuit to ‘trigger’ the Fuse box relay so the fuse box’s switched terminals can become live.



Installing the switches and gauges

Each of the accessory components we supply will have come with the appropriate Positive (RED) and Ground (BLACK) connection wires and the gauges have + and - marked on the back of the units.

- Install all of your sockets and gauges including any other items from other aftermarket suppliers.
- Connect a **RED** positive wire from the fuse Box to each accessory that you wish to have SWITCHED by the ignition and the **YELLOW** positive wire to any accessory that you wish to have powered at all times.
- Attach a BLACK ground wire from each accessory and 'stack' all Ring ends onto the GROUND POS
- When all GROUND rings are on the GROUND post, add the washer and tighten the M5 Nylock nut
- We have supplied different fuse sizes, so choose an appropriate fuse and install them now and then fit the cover. As a guidance, use a 5amp fuse on the USB , but a larger 10amp or more should be used on the 12v and DIN power sockets. Gauges only need a 5 amp fuse or less.

Now turn on the ignition and check that all of your accessories are working.

NOTES on Accessories

Twin USB power socket

This rugged socket will power or charge any USB component up to 4amps. It will not be obvious, but the rubber cap has a magnet inside which actuates a switch in the USB. When the cap is on, the

socket is switched off, but when the cap is removed, the socket will light up green to indicate that it is on. Note that this does not apply to the 12v socket although it looks similar.

Volt Gauge

The volt gauge is particularly useful for indicating the health of both battery and charging system and can be used as follows :

1) When you turn on the ignition (bike not started), the gauge will show the health of the battery which should show in excess of 12.5 volts. If it is less than this, the battery should really have a 'top up' from a charger. If it is less than 12 volts, then the battery will definitely need a charge and if static charging does not bring the voltage up to 12.5 volts or above, then it is an indication that the battery is not good.

2) Once you have started the bike, the volt gauge will be showing the charging voltage from your stator NOT the voltage of the battery on its own. A healthy charge from the stator should be typically between 13 and 14 volts with no significant accessories turned on except the OEM items like the lights, fuel pump etc. If the charging voltage drops below 13v with no accessories turned on, you may have a problem with your charging system.

The key part in establishing whether you have too many accessories switched on for your bike to cope with is the difference between your battery voltage (1) and your charging voltage (2). With the bike running you will see that the voltage drops each time you switch on an additional accessory. This isn't obvious with something like phone charging, but will definitely be noticeable with heated grips or clothing and also when your High beam is turned on. The easy way to know whether you are pulling too much power from the battery is to make sure that the charging voltage (2) never drops below the static battery voltage (1) because if it does, you are pulling more power out of the battery than is being pushed into it !

Temperature gauge

You will see that the gauge has a sensor plugged into the centre two terminals. The sensor needs to be placed where it receives fresh air preferably where it is not affected by other heat sources that would affect the readout. This is difficult on a motorcycle where it is always going to be near another heat source, but we have found that the temperature behind the dashboard works as well as anywhere so although the wire is much longer than needed, just bundle the wire up and zip tie it somewhere behind the dashboard .

Other accessories

You may have other items like a GPS or heated grips which can be wired to the fuse box system. This is very straight forward and all you have to do is attach the positive to the fuse box and the ground wire stacked with the other items on the ground post and that's it.

You are now COMPLETE and can return to and finish the fairing installation.