General Installation Notes

1. Seek professional advice before carrying out any work on your motorcycle that you are unsure of.
2. Disconnect and remove the battery before attempting any wiring work on your motorcycle. Always disconnect the negative terminal first and reconnect last.
3. Mount the BRAIN BOX control unit in a suitable location away from any direct source of heat and water spray. Mount the unit vertically using the holes provided and with the wires exiting downwards. Do not over tighten mounting screws.
4. You **must** ensure that the correct fuses have been installed in supply wires in accordance with the wiring diagram on page 3. These fuses protect your control unit from damage should a short circuit occur. If a fuse blows investigate cause of failure before replacing. Only replace a blown fuse with one of the same rating. BRAIN BOX uses automotive minisize blade fuses.
5. Use suitable protection, e.g. grommets, where wires pass through bulkheads, frames etc.
6. An installation that does not require all the features that BRAIN BOX provides must have unused wiring insulated. This is to prevent inadvertent connection to the motorcycle frame, other wiring or water. For this purpose we strongly recommend the use of adhesive heat shrink sleeving crimped at the open end.
7. Do not re-connect the battery until all wiring has been completed and checked.
8. Check and test all electrical functions prior to riding the motorcycle.

Specification

Electrical

Power Supply:	Motorcycle 12 Volt DC battery system.
Current consumption:	80 mA nominal.
Ignition output:	10A. (500mA recommended minimum load).
Headlamp output:	10A. (500mA recommended minimum load).
Indicator output:	10A. (500mA recommended minimum load).
Horn output:	10A. (500mA recommended minimum load).
Start Solenoid output:	Max pull in current 25A. Max hold in current 5A. (Contact us for advice if your starter solenoid falls outside these parameters.)
Module Wires:	Thin wall automotive cable manufactured in accordance with ISO 6722.

Mechanical

Case:	Moulded from flame retardant ABS plastic (UL94V-0) There are no user serviceable parts inside

Warranty

We do not compromise on quality so why should you? BRAIN BOX is covered for a warranty period of 12 months from the date of purchase. Subject to the terms listed below the warranty will provide for the repair of, or at the discretion of Zodiac, the option to replace a module which is identified as faulty or as a result of inferior workmanship or materials. Products over 28 days old may be replaced with a refurbished product.

- The warranty shall only apply to defects that occur within the 12 month warranty period.
- Proof of purchase is provided.
- The BRAIN BOX is returned to Zodiac or its agent as instructed.
- The warranty does not cover any defects caused by accidents, misuse, fair wear and tear, neglect, tampering with equipment, improper or inexpert installation, or any attempt at adjustment or repair other than by Zodiac approved agents.

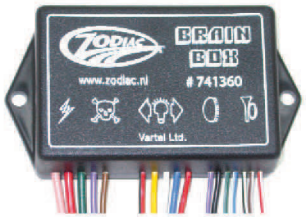
Further Information

If you would like further information on BRAIN BOX, ***or*** other Zodiac custom parts, bike builds, part builds, or would like to order a catalog, please contact us through mail: sales@zodiac.nl.

ZODIAC BRAIN BOX

Introduction

Thank you for purchasing BRAIN BOX; another quality product from Zodiac, Europe's leading custom design house. BRAIN BOX offers a simple but elegant solution to your custom bike electrical set up providing the interface between the rider and the bikes main electrical ancillaries as shown in the diagram on page 3. BRAIN BOX is designed to operate with up to six handlebar control switches (not supplied). These switches allow the BRAIN BOX module to provide the rider with control of the following bike functions:



- Engine Start.
- Engine Stop.
- Indicator Left.
- Indicator Right.
- Horn.
- Headlamp Hi/Lo Beam.

Control Switches

BRAIN BOX is designed to work with momentary "push to make" push button switches. These switches are readily available* in many custom handle bar control kits and offer a clean "switch less" look to the handlebars. When pressed the switches connect the BRAIN BOX switch wires to ground (chassis).

Control Switch Operation

The handlebar control switches operate in the following manner.

Engine Start Switch.
Press and hold to enable the starter solenoid, release on engine start.

Engine Kill Switch.
Once started, the engine can be stopped by pressing the kill switch. This cuts the supply to the ignition circuit. Release the switch on engine stop.

Turn Signal Switches.
BRAIN BOX is supplied with automatic turn signal cancelling mode enabled but can easily be reconfigured to manual only turn signal cancelling. (See below).

In automatic mode, momentarily pressing either turn signal switch will activate the appropriate turn signal. The turn signal will automatically cancel after 10 flashes. During these 10 flashes you can chose to manually cancel the signal by pressing the same switch again. Pressing the opposite turn signal switch will automatically cancel the current turn signal and activate the opposite turn signal. Pressing and holding a turn signal switch prevents the signal from automatically cancelling until the switch is released.

In Manual only mode the indicators do not automatically cancel after 10 flashes. In this mode momentarily pressing either turn switch will activate the appropriate turn signal continuously. Press the same switch to cancel the turn signal. Pressing the opposite turn signal switch will automatically cancel the current turn signal and activate the opposite turn signal.

Changing Between Auto & Manual Only Turn Signal Cancelling

You can toggle between automatic and manual cancelling by using the following procedure:

1. Switch Ignition on.
2. Press and hold the engine "**kill**" switch until you hear a short confirmation blip from the horn. (This will take approximately ten seconds to occur).
3. Turn Ignition Off.

You have now changed between Automatic and Manual turn signal cancelling. Follow the same procedure to change back.

Cont.....

*If you experience difficulty in obtaining suitable switches or would simply like further advice please do not hesitate to contact us.

Hazard Warning Signal
You can enable the Hazard Warning Signal by pressing both turn signal switches at the same time. The Hazard Warning Signal will continue until both switches are pressed again or the ignition is turned off. Note that the Hazard Warning Signal does not auto cancel.

Horn Switch.
Press to sound the horn.

Headlamp Hi/Lo Switch.
Pressing this switch will toggle the headlamp between Hi and Lo beam. In our diagram the lights are switched on when the ignition key is set to the 3rd position. When the ignition is first switched on BRAIN BOX sets the headlamp to Lo beam.

Installation

The following table and diagram provide information to enable the competent installer to carry out a successful installation. The information should be used in conjunction with the General Installation Notes and Specifications found on the back page of this booklet. **In particular we draw your attention to note 4 regarding the importance of fusing your unit correctly.**

If you are at all unsure about your wiring skills, or any other aspect of the installation, we strongly recommend you seek the advice of a qualified automotive technician before commencing any work.

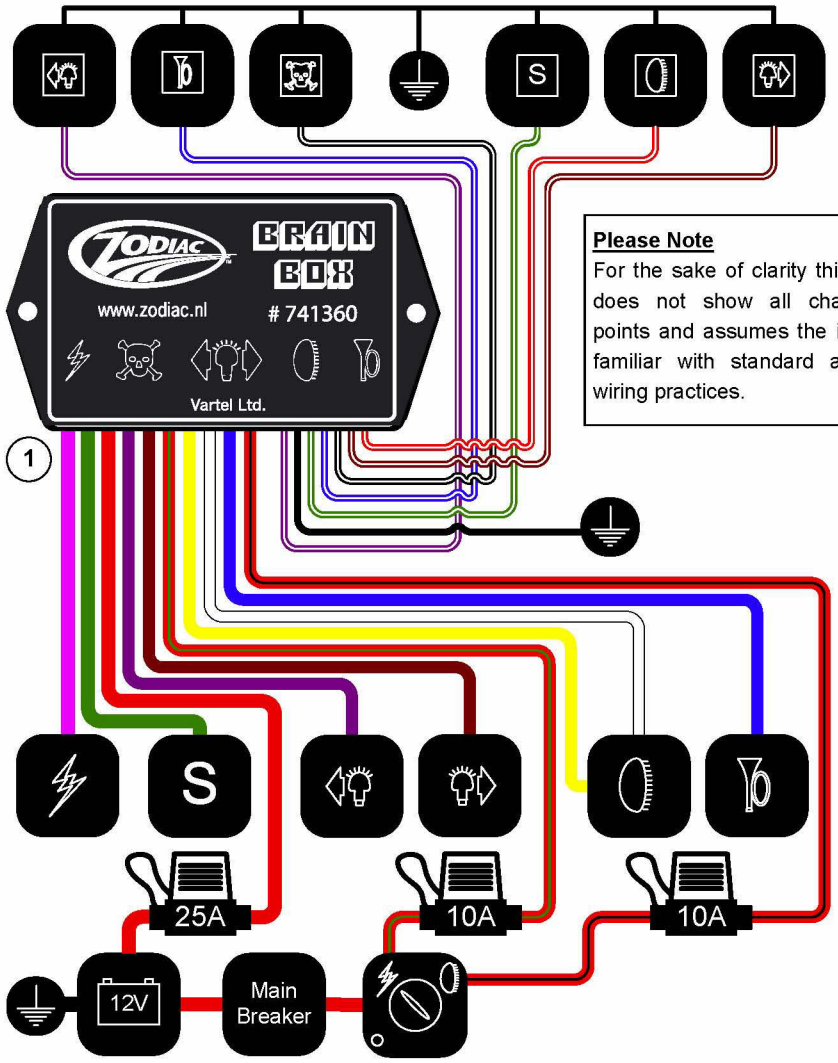
Wire ID*	Colour	Tracer	Function	Notes
1	Pink	NA	Ignition Supply Out	Feed to Coil / Ignition unit
2	Green	NA	Starter Solenoid	Feed to Starter Solenoid
3	Red	NA	Ignition Supply In	From Battery +12V (Fused 25A)
4	Purple	NA	Indicator Left	Feed to Turn Signal Left
5	Brown	NA	Indicator Right	Feed to Turn Signal Right
6	Red	Green	Auxiliary Supply	Module Positive Supply (Fused 10A)
7	Yellow	NA	Headlamp Hi	Feed to Headlamp Hi Beam
8	White	NA	Headlamp Lo	Feed to Headlamp Lo Beam
9	Blue	NA	Horn	Feed to Horn
10	Red	Black	Headlamp Supply	From Ignition Key Switch 3rd Position (Fused 10A)
11	Purple	White	Switch 1	To Turn Signal Left Switch
12	Black	NA	Ground	Module Negative Supply
13	Green	White	Switch 2	To Start Switch
14	Blue	White	Switch 3	To Horn Switch
15	Black	White	Switch 4	To Kill Switch
16	Brown	White	Switch 5	To Turn Signal Right Switch
17	Red	White	Switch 6	To Headlamp Hi / Lo Switch

*In the following diagram Wire ID's are drawn from left to right, 1-17.

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Wiring Diagram

To be used in conjunction with table on P 2.



Please Note
For the sake of clarity this diagram does not show all chassis/earth points and assumes the installer is familiar with standard automotive wiring practices.

Important Information
The wiring information contained in this booklet is only applicable to BRAIN BOX units with serial numbers 000200 upwards. Your serial number is located on the back of the BRAIN BOX unit and will look like this :"S/No. 031203/000200". Where 000200 is your serial number.