



Remote Control Systems INSTALLATION KITS

PO BOX 578 CASINO, NSW 2470, AUSTRALIA
PHONE: INTERNATIONAL ++614 2902 9083
AUSTRALIA (04) 2902 9083

Web: <http://www.rcs-rc.com> Email: rcs@rcs-rc.com

RCS # BATTERY-PNP.

DIY INSTALLATION KIT FOR ONBOARD USE.

BATTERY R/C INSTALLATION KIT FOR ALL BACHMANN® & ARISTOCRAFT® LOCOS FITTED WITH A STANDARD P'n'P SOCKET.

The kit can be used with any brand of R/C equipment.

2 x wires (Red M+ & Black M-) are for the motor control. They may be back to front. Default ESC direction can be reversed at the ESC.

2 x wires (Red + & Black -) are for the loco battery supply.

2 x wires (White F & Yellow R) are for the front & rear light controls.

CONTENTS

The **RCS # BATTERY-PNP** kit contains the following components:

1 x PCB mounted with attached wires.

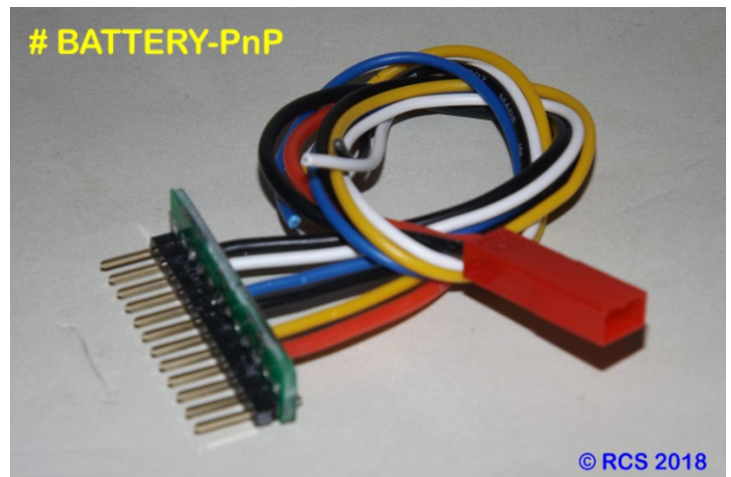
Although this is RCS specific & is for battery R/C only, it could be used by other brands of R/C.

NOT SUPPLIED BUT RECOMMENDED

1 x # **FUT-SWITCH** or 1 x # **JST-SWITCH**.

These are used with on board batteries and provide an ON - OFF switch & a cable with a 2.5 x 5 mm socket where that size plug is used by the battery charger.

They both have JST compatible outputs.



© RCS 2018

TOOLS REQUIRED.

Medium, small and very small size Phillips head screwdrivers, side cutters and small pliers.

A drill with an assortment of drill sizes for mounting the various switches etc.

A fine tipped soldering iron, resin core solder plus some heat shrink tubing for insulation for tinning wire going into the screw terminals.

Silicone adhesive for securing components where necessary.

SUITABLE BATTERIES.

The minimum voltage required is 6 volts for the # **COBRA ESC 160**, # **COBRA-260** & # **OMEGA-10** 24 volts nominal is the max.

We use and recommend Li-Ion battery packs. 3s - 4s and 2600 mah where possible.

In ideal situations expect up to 500 re-charges. You must use a Li-Ion specific charger.

Over charging and too much current draw will shorten that life span drastically.

Our battery packs have built in pcb protection against over charge, over load and short circuit.

INSTRUCTIONS.

Installation is simply removing the factory fitted P'n'P plug & replacing it with the # **BATTERY-PNP**. Make sure the # **BATTERY-PNP** pcb is the correct way around.

The pin row J1 pins 1 - 12 uses the 12 pin socket row which is the same for both loco brands.

The J2 row has 11 sockets and is not used. The pcb is not user serviceable.

WIRING NOTES.

The wires are colour coded. The Red/Black Motor wires plug into the COBRA ESC's.

Connect the RCS ESC as per the basic wiring diagram overleaf. Other brands are similar.

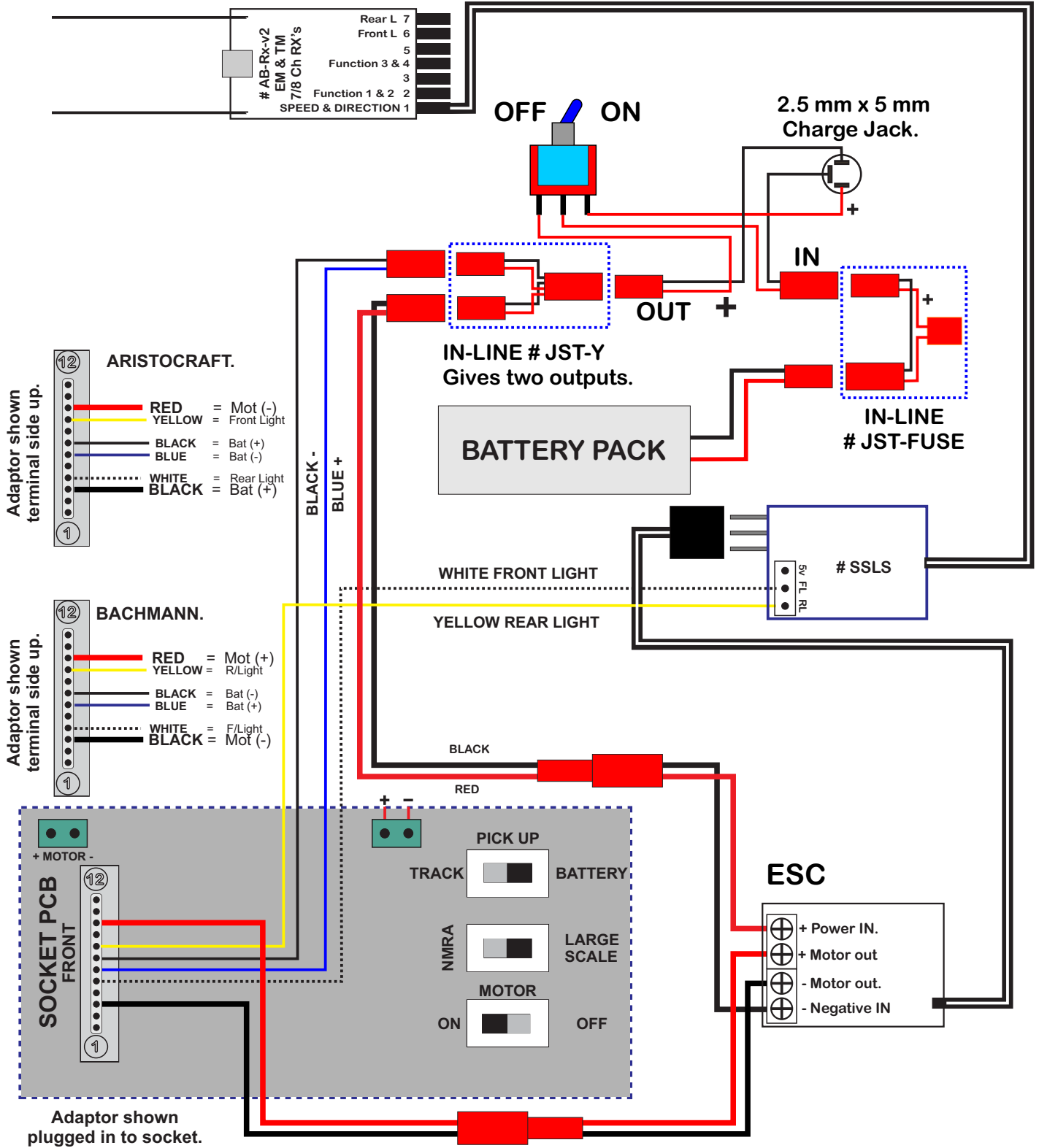
CAUTION!!! All 6 x connections are back to front on AristoCraft® sockets when compared to the Bachmann® socket the # **BATTERY-PNP** was designed for. See page # 2 for comparison.

To set up an AristoCraft® socket equipped loco correctly simply reverse the two **M M** motor wires or reverse the COBRA default direction. Reverse the **FL RL** lighting wires at the # **MRW-SSLS**.

WIRING THE RCS # BATTERY-PNP to BACHMANN & ARISTOCRAFT PnP sockets.

Using a programmable Rx & an ESC.

MRW-SSLS Directional lights. No sound fitted.



WIRING THE RCS # JST-SWITCH.

Non-programmable Rx, MyLOCOSOUND & an ESC.

See previous pages for wiring lighting.

Ideal for use with the # DU-TX7-PLUS handpiece.

