

LAJF RACING PROUDLY PRESENTS

lajf P28

Electronics Installation Guide

This instruction will show you how to install the Kyosho Mini-z electronics into your P28.

Boards covered are the Mr03 and the Mr02 2.4GHz boards and the servo is the Futaba 3114/3154 servos.

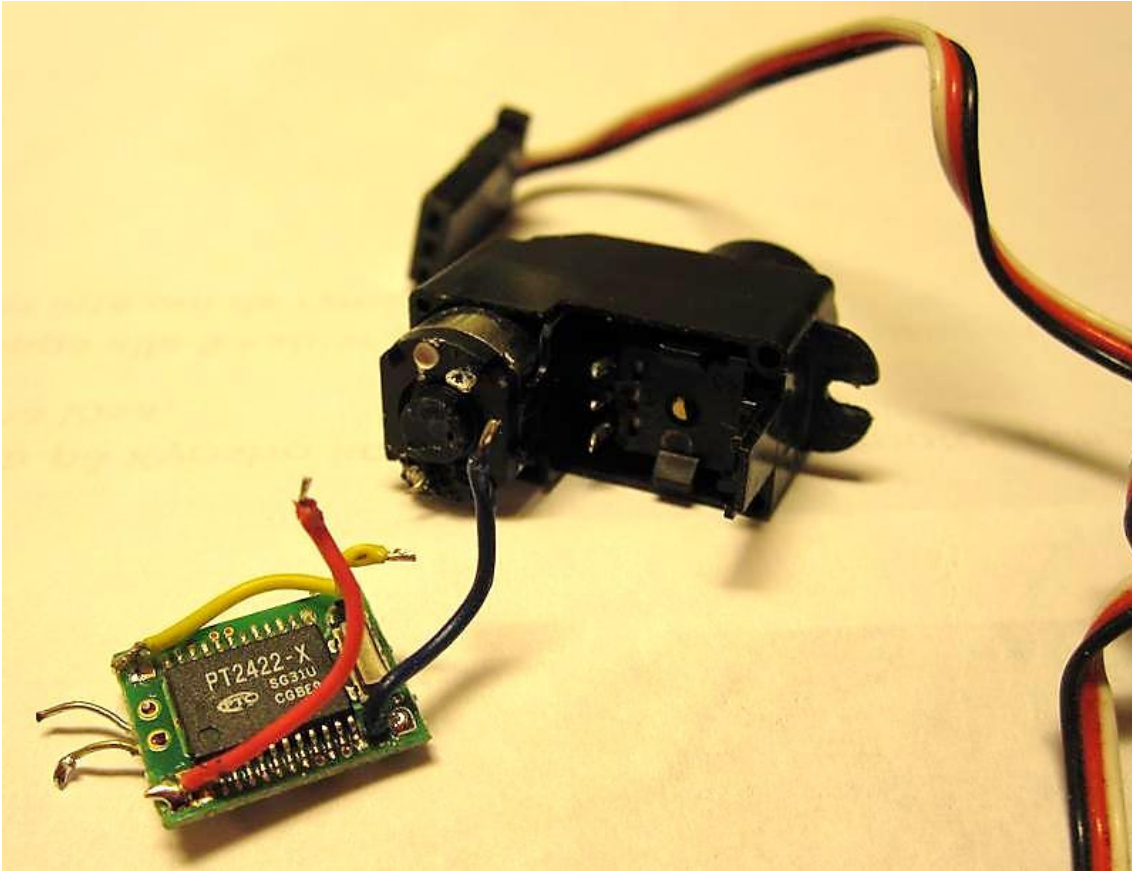
Other servos might work in the same way, but we have tested this servo, with both Kyosho boards.

Tools needed: Soldering iron, tweezers, wire cutter, very small Phillips screw driver, Phillips screw driver, Dremel cutting tool.

Start of by cutting or sanding of one of the mounting tabs from the servo so it will fit in the P28. The mounting tab to cut off is the one longest away from the servo axle. You will end up with this:



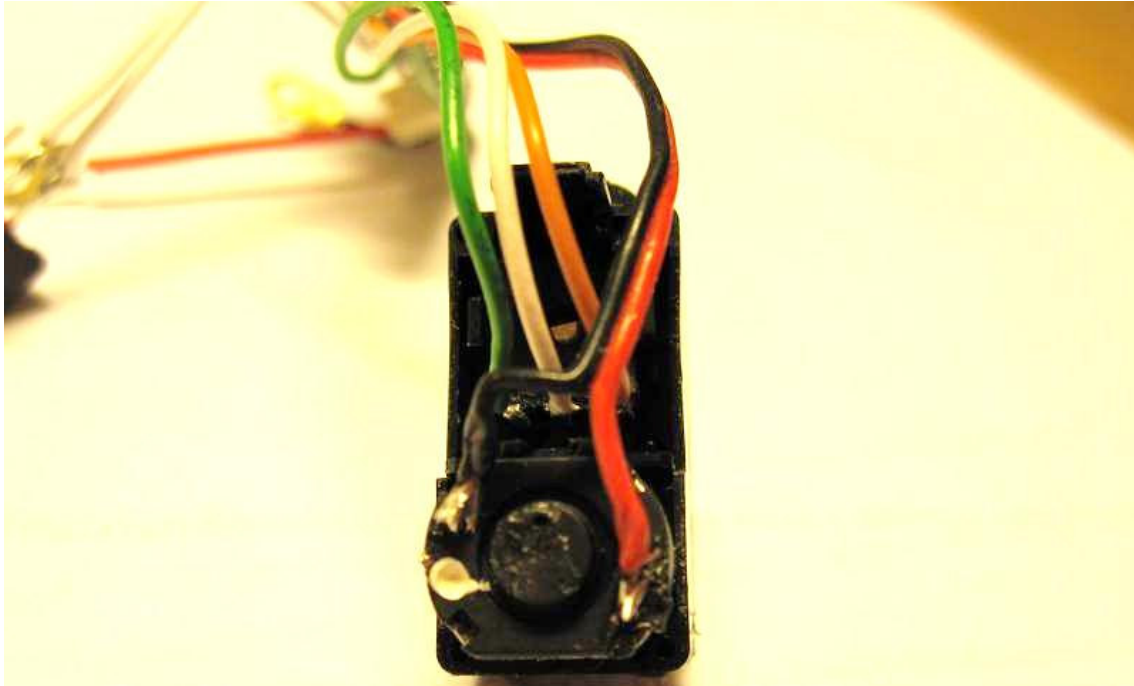
Carefully remove the bottom from the servo case. Unsolder the incoming cables and remove the internal circuit board from the servo. You will end up with the following:



Discard the servo circuit board as you will not need it.

Then turn your attention to the Kyosho Mini-z board. Unsolder the servo motor and the potentiometer from the cables. You will now have 5 loose cables hanging from your Mini-z board. It is possible that you need to replace cables so that they are long enough to reach the servo when placed in the chassis.

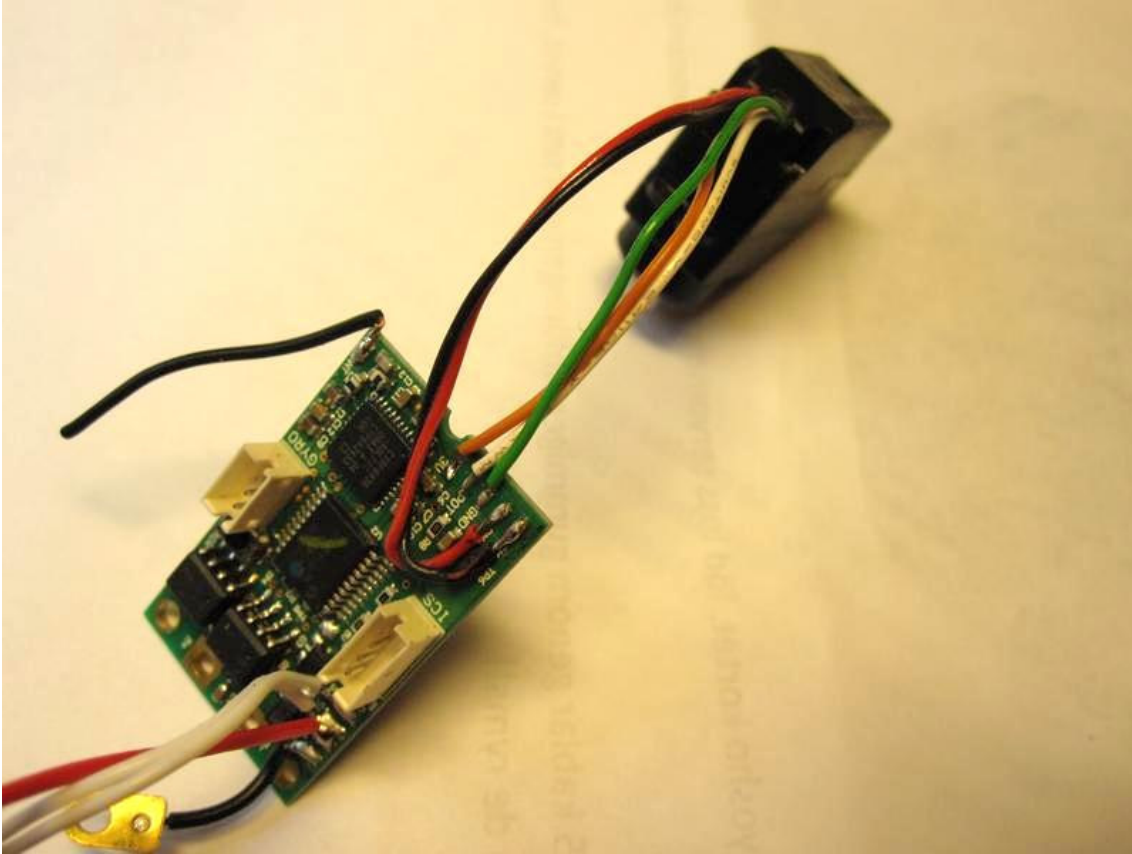
The cables for the servo using the Mr03 board should be approximately 61-65mm long. The two servo motor cables should be approximately 10mm longer to be able to connect them correctly. Solder the cables into the servo according to the picture below, make sure you have the color coding correct:



Put the black and red cables on the servo motor as close to the motor as possible, otherwise you might have problems when replacing the bottom on the servo case.

Put the servo back together again, it is possible that you need to rework the plastic around the cables to get it back together.

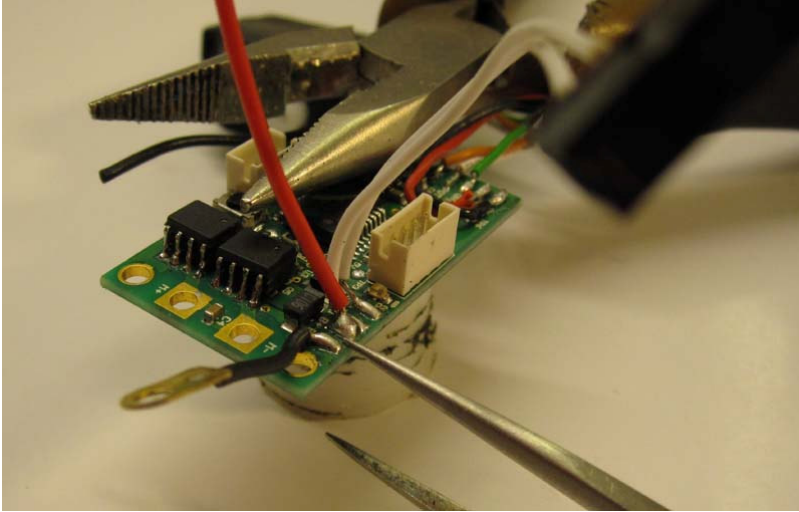
You should now have this (this picture is of an Mr03 board, Mr02 is similar):



The servo now connected to the board is more sensitive than the original mini-z servo so you will have to adjust the EPA on your radio for the steering to work properly. Note the cable routing for the servo motor cables, they must be routed like this to make it possible to mount the board in the P28.

Now that the cables are connected to the servo we can mount the board in the P28 using the Lajf Racing Board mount. The instruction shows how to mount the Mr03 2.4GHz board in the P28 using the Lajf Racing board mount, The Mr02 2.4GHz board is similar and in the end of this instruction there is a picture of a mounted Mr02 board.

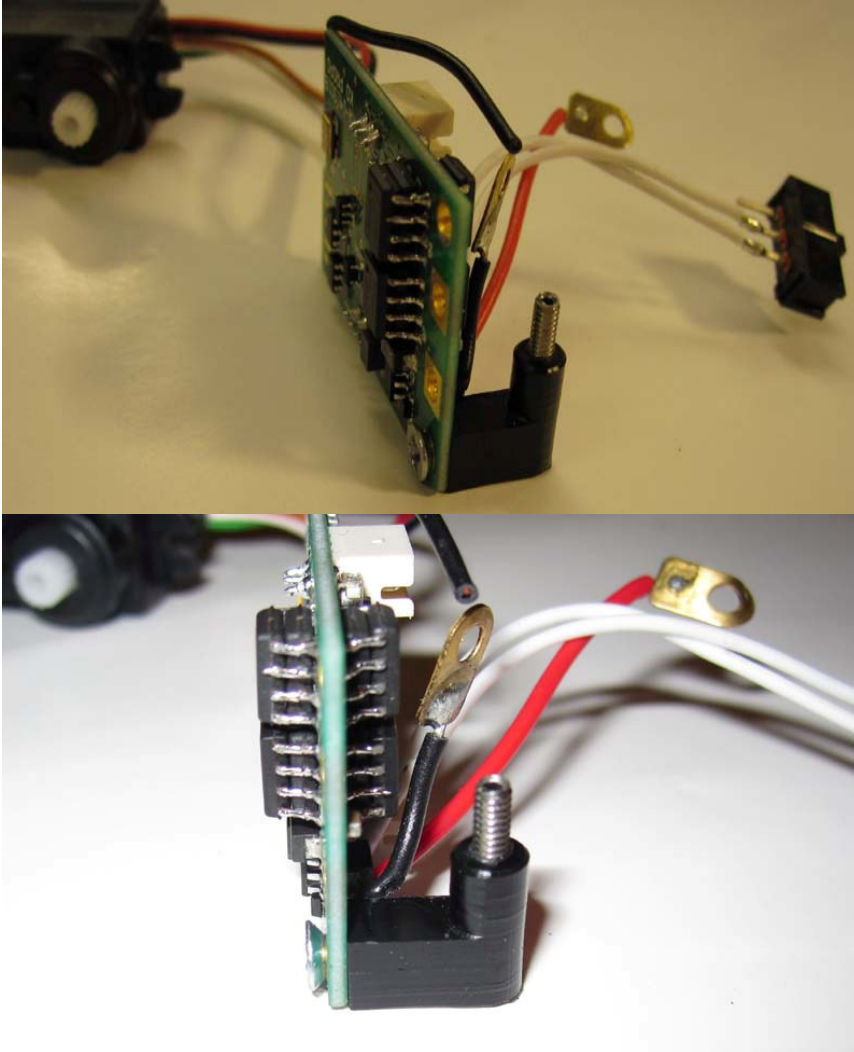
I must start off with a **WARNING** as the board is mounted very close to the carbon fiber chassis it is of outmost importance that the connected cables do NOT extend outside the lower edge of the board. Before performing this part it is advisable to put battery power cables and motor cables on the board. The cables in the pictures here are too short for both battery power and motor cables and are there only to show the installation of the board in the P28.



The tweezers is here pointing to the dangerous soldering points. Under no circumstances are these soldering points to extend past the edge of the board. It will create a short circuit if it happens with a possible fried board. Lajf Racing recommends using a small piece of electric insulation tape stuck to the chassis under the board as an extra precaution.

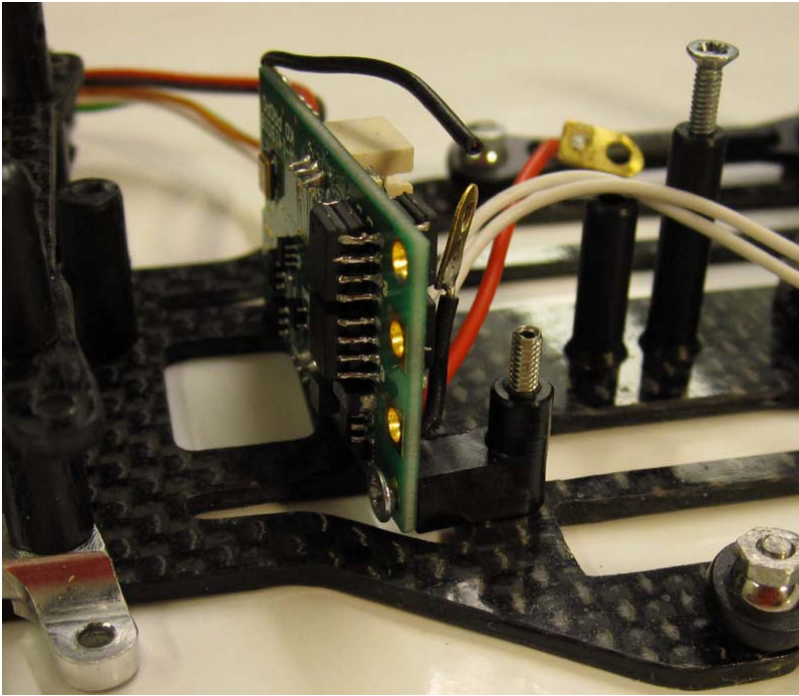
First of all we need to remove the existing battery posts from the P28. The new board holder doubles as battery posts. The board holder is mounted in the battery post holes in the P28 chassis. Then you screw in the M2 pin screws into the two board holders so that half of the screw is pointing out of the holders.

We continue by mounting the left hand side screw on holder to the board.

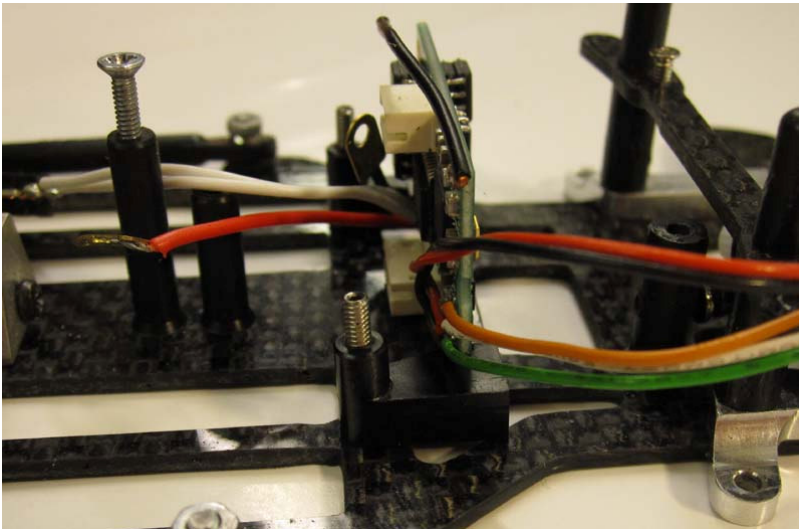


Note the inserted screw, a small amount of thread-lock or glue can be used on the threads of the screw to secure it in the holder.

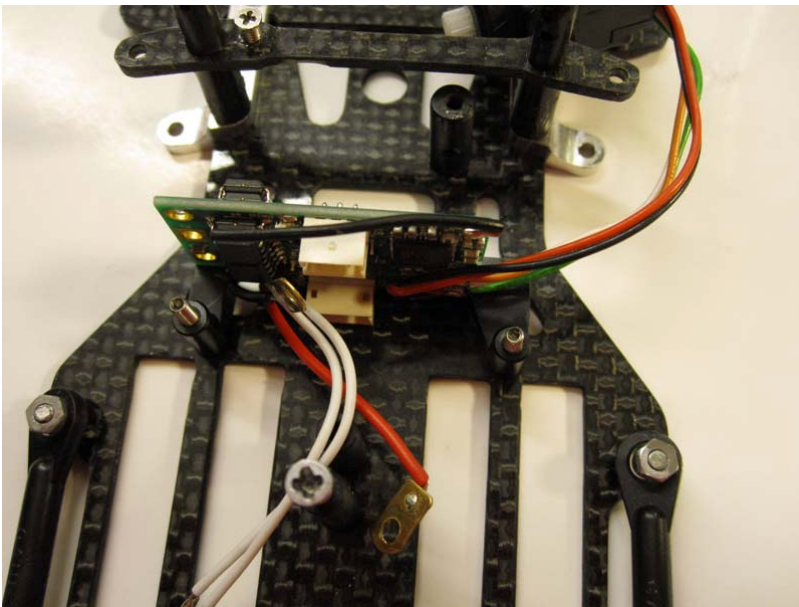
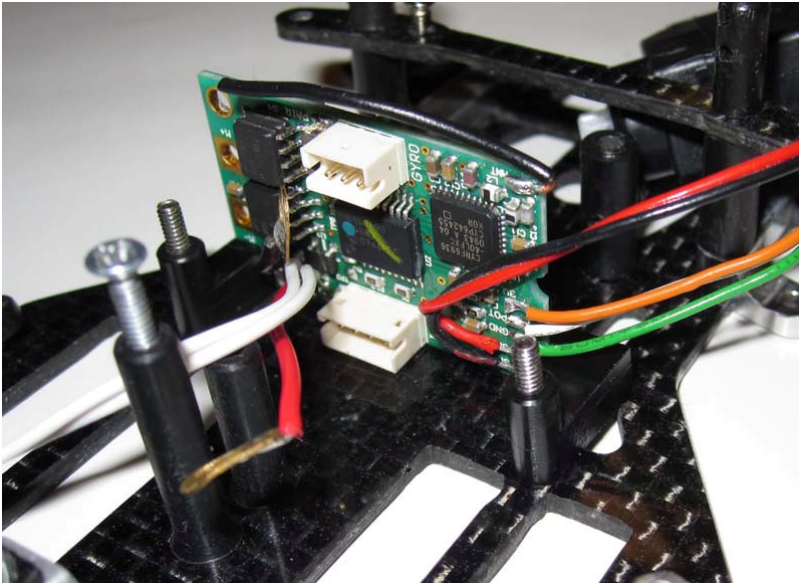
Screw the left hand side board holder in the P28.



Screw the right hand side of the board holder in the P28 and slip the board into the holder and tighten the screws of both the left hand side and the right hand side board holder.

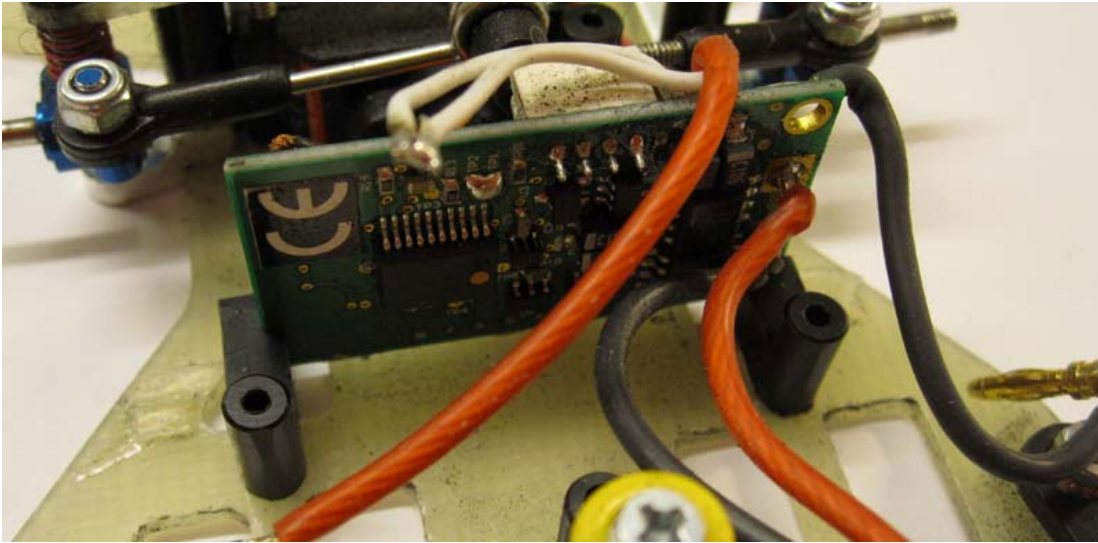


Board is mounted and the P28 electronics are ready for action.



Please note the battery hold down pins inserted into the board mounts. The battery clip is now retained with a M2 nut that goes onto the battery post/ board holder.

Mr02 Board installation is done in a similar way but the screw on mount is at the right hand side of the chassis.



The picture shows an installed Mr02 2.4GHz board installed in a P28.
Note: The screw holder is on the right hand side for the Mr02 board.