USER GUIDE

Order No.: 82820



LRP electronic

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Dear valued customer,

with the LRP Quantum Competition World's Option Kit, you've chosen a great accessory for your LRP Quantum Competition speed control.

This LRP Quantum Competition World's Option Kit has already been used successfully by our raceteam at international top races and will allow your LRP Quantum Competition to work even more efficiently under rigorous conditions.

Please read these instructions carefully to ensure that your LRP Quantum Competition World's Option Kit works correctly and to your entire satisfaction, to give you the maximum advantage from your LRP Quantum Competition World's Option Kit.

CONTENTS

The LRP Quantum Competition World's Option Kit includes:

- 1x LRP power capacitor, large type
- 1x LRP power capacitor, small type
- 1x LRP heatsink
- 3x special heat transferring LRP double-sided tape
- 1x heatshrink red, 50mm
- 1x heatshrink black, 50mm
- 1x 4-color LRP decal sheet
- · 1x instruction manual
- 1x LRP product information flyer

LRP POWERCAPACITORS

EXPLANATION:

- A LRP Power-Capacitor stores battery energy and supplies this to the motor additionally when extra power is
 required. Furthermore the LRP Power-Capacitor lowers the internal resistance of the battery-speed control unit under
 high load, therefore the battery remains cooler and reaches a higher average voltage!
- Your car will accelerate faster and you'll have more direct feeling of throttle control.
- Two different sized LRP Power-Capacitors are included in the LRP Quantum Competition World's Option Kit.
 - The large LRP Power-Capacitor gives maximum power and best possible acceleration. Under some circumstances it may cost a few seconds of runtime and may increase the commutator wear at the motor.
- The smaller LRP Power-Capacitor is a great compromise, as it increases power/acceleration as well as runtime, but cannot produce as much power/acceleration as the large LRP Power-Capacitor.
- · We recommend that you start with the smaller LRP Power-Capacitor.
- Only use one of the two available LRP Power-Capacitors at one time, never both simultaneously.

Hint:

- An external LRP Power-Capacitor is not mandatory for use with the LRP Quantum Competition.
- The LRP Quantum Competition works perfectly without any external components.
- The LRP Power-Capacitor $\underline{\text{helps}}$ the batteries and not the Quantum Competition.







INSTALLATION:

- See the pictures for the LRP raceteam's recommended method of installation.
- Use the included heat-shrink (included) to isolate the pins of the LRP Power-Capacitor. This will also make it easier to indicate the polarity of the LRP Power-Capacitor. Place the red heat-shrink on the positive terminal (red dot on the bottom of the LRP Power-Capacitor) and the black heat-shrink on the negative terminal of the LRP Power-Capacitor.
- The LRP Power-Capacitor needs to be soldered to the speed-control between MB+ (MB+ = motor/battery positive = red wire) and B- (B- = battery negative = black wire).

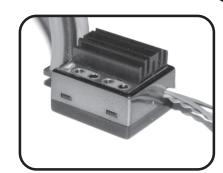
Caution:

- Be careful when soldering to the tags on the speed control; don't overheat the tags with your soldering iron.
- Take great care to avoid short-circuits between two of the three tags on the LRP Quantum Competition speed control.
- $\bullet \ \ \text{Such a short-circuit would destroy the LRP Quantum Competition speed control}.$
- Do not inhale the solder vapours and use solder containing rosin flux only. Never use solder containing acid flux. This might damage health.

HEATSINK

EXPLANATION:

- Due to the unique, heat-transferring technology inside the LRP Quantum Competition, which transfers the heat from the inside of the speed control via the aluminium top-plate (aluminium plate with Quantum Competition imprint) to the outside, the top-plate may get warm. This is no cause for concern, but a sign that the heat-transferring technology is working perfectly.
- In extreme circumstances in race classes with extremely powerful motors, enclosed car bodies and high ambient temperatures this aluminium top-plate may reach high temperatures. In these circumstances we suggest that you use the optional heatsink of the LRP Quantum Competition World's Option Kit which lowers the temperature of the Quantum Competition's aluminium top-plate.



INSTALLATION:

- See the pictures for the LRP raceteam's recommended method of installation.
- Clean the aluminium top-plate of the LRP Quantum Competition and the back of the heatsink properly with LRP Blue Factor Xtra Cleaner (#6512) or alcohol.

 <u>Caution:</u> Do not use any strong cleaning agents such as standart motor cleaner, thinners or brake-cleaner since this might damage the printing or the metalisation of the Quantum Competition!
- Put the special LRP heat transferring double sided-tape on the bottom side of the heatsink and carefully peel off the backing.
- Position the heatsink on the Quantum Competition's top-plate as shown in the picture.

We wish you lots of fun and success at races using your LRP Quantum Competition World's Option Kit. We hope that it helps you to achieve your racing goals or at least to get a little closer to them. Should you have more questions, don't hesitate to speak to our competent staff on our LRP technic hotline under phone: int+49-07181-252565 or send us a email to info@lrp-electronic.de. News and tips you find frequently updated on our webside under www.lrp-electronic.de . Or simply subscribe to the free newsletter on our webside.