INFORMATION TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Safety Tips

The POD does not provide any "low battery cutoff" features. Ensure that your batteries are disconnected from the POD when not in use to avoid damage to them.

Always pay attention to your vehicle. The power readings should be monitored by someone other than the flyer/driver. We recommend that you set the low battery alarm threshold prior to takeoff/driving and rely solely on the audible warning when operating alone.

Whether using RealAmp or not, always ensure good power connections between your battery and vehicle. Cold/weak solder joints can result in heat build-up and possible complete failure. Also pay close attention to the polarity of all connections: Red (+) and Black(–).

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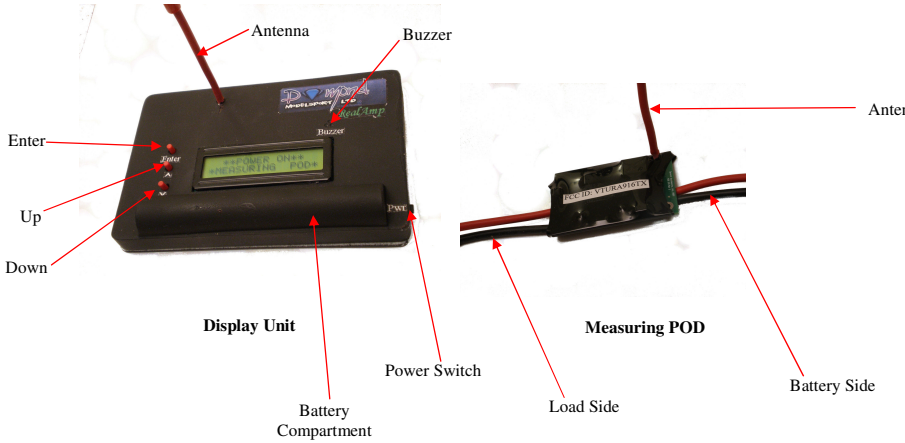
Dymond *RealAmp* Instruction Manual

Thank you for purchasing a Dymond RealAmp power meter system – a valuable trouble shooting tool for any serious modeler. RealAmp is designed to measure vitals of the vehicle such as battery voltage, current draw, peak current and capacity. This information is relayed via a radio link to a handheld display.

The System



Specifications:

Min. POD Battery Voltage	4.0V
Max POD Battery Voltage	50.0V
Min Current	500mA
Max Current (Continuous)	70A
Max Burst Current (5 seconds)	100A
Max mAh	65.5Ah
Low Bat Threshold	0V – 50V
Radio Link Frequency	916MHz
Range	800ft LOS*
POD Current Consumption	~20mA

*Line of sight

Rev. 3, 11/07

PRELIMINARY! NOT FOR PRODUCTION

First Things First

Solder two connectors to the end of the leads of the POD. Care must be taken to put the appropriate gender connector on each side as well as ensuring correct polarity. Use the steps below to connect your preferred connectors:

1. Ensure that the solder lugs of the connectors are clean and that the wires are not frayed.
2. Solder each wire to the appropriate position on the connector. Polarity (RED + and Black –) should be checked before applying power to the unit.
3. Ensure that each solder joint is clean and shiny. A bad solder joint may cause excessive heating, voltage drop and possible eventual failure of the connection.

Getting Started

1. Insert 2 X AA batteries into battery compartment.
2. Hold down the "ENTER" button while powering up the display.
3. Wait for display to read "PAIRING MODE POWER ON POD NOW".
4. Power up the measurement POD by applying power to the power source input.
5. Display should now show the normal operating mode and should show the current battery voltage.
6. Pairing is now complete.

Note: Pairing is not lost at power down and only needs to be performed when you have a new display or POD.

Setting Low Battery Threshold

The display unit can be programmed to issue an audible warning when the battery at the POD is below a user programmable threshold. The procedure for setting this threshold is:

1. Press "⇑" or "⇓" buttons until the display reads "Low Battery Setting".
2. Press "ENTER" button to enable modification of currently displayed level.
3. Press "⇑" or "⇓" buttons until desired level is displayed.
4. Press "ENTER" to save desired level. Note: If set button is not pressed, all changes are lost.

Note: This level is saved and is not lost at power down.

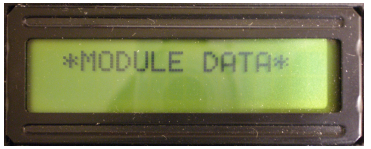
Normal Operation:

To use the RealAmp system anytime after they are paired, follow the steps below:

1. Power up display unit.
2. Wait for display to read "Power on Measuring Pod".
3. Power up POD.
4. Following all recommendations by its manufacturer, connect load (RC Vehicle) to POD.

You are ready to go!

Future Options



Module Display Mode

This port is for future expansions to connect sensors to add other measurements.

Installation Guidelines

Proper installation of the RealAmp measurement POD in the vehicle is critical to obtaining the maximum range. Avoiding any kind of metal, batteries etc. around the antenna ensures the maximum range. While this is preferred, RealAmp will nevertheless function even if the RF path to the display unit is obstructed but with decreased range.

Troubleshooting

Q: My display unit hangs on "Waiting for POD"
A: Two possibilities:

- Your POD is not on. Verify that your connections are not broken and that your battery has power.
- The POD you have powered on is not paired with this display unit. Follow pairing instructions as described under Getting Started.

Q: My display unit displays "batt!" between the voltage and current.
A: Change batteries on display unit

Q: I do not want to use the low battery alarm but it keeps going off! How do I stop it?
A: Set the low battery threshold to a very low level such as 0.1V. This should eliminate it.

Q: I get a valid voltage reading but I do not get a current reading even though the motor is running.
A: There is a chance that you have swapped the load and battery connections. Please verify that the battery and the load are on the right side and correct if necessary.

FAQ

Q: How often is my display updated?
A: Approximately four times a second

Q: Can multiple RealAmp users operate in close proximity to each other?
A: Yes. There may be an occasional collision of data resulting in the data on the display not being updated. This condition will pass in a second or two and normal operation will resume without user intervention. A beep may be heard when this happens.

Q:. In the above situation, does my peak current and mAh values become invalid?
A: No. The peak current and mAh values are stored in the POD and are not lost until you power it off.

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