

Q.C.M. Quad Current Meter

FROMECO

INSTRUCTIONS

Quad Current Meter:

The Quad Current Meter or QCM is a tool designed to make the installation of multiple servos or a single surface easier. The QCM can also be used in other applications where you have multiple servos that may bind due to mis-alignment.

The QCM has 4 inputs and 4 outputs, and will read the real time current of all channels separately.

Concept:

Plug in 1 to 4 servos, read the current draw of each individual servo. In the case of multiple servos binding servos will exhibit more current than non binding servos.

Anybody has flown Giant Scale for any length of time has also pulled his or her hair out trying to match Rudder, Aileron, and Elevator surfaces. This can be quite a time consuming and frustrating experience. Most modelers have some sort of voltmeter that they try to use to measure and get all their servos in tune. This is a mind numbing task that requires the voltmeter to move from servo to servo and then back again to match the surface.

QCM take all of this data and puts it up on one screen allowing you to see which servo is binding, with out moving a voltmeter from port to port. QCM really shines when used in conjunction with products like the Power Expander EQ10.

Operation:

The Operation of the QCM is very simple.

1. Plug Servos into TO SERVOS.
2. Take Fromeco provided jumpers or your own (male/male) and plug them into the channels that will be used for servo groups you want to test in RX. Plug those into FROM RECEIVER.

Example:

Take a Right wing pannel for a 35% aircraft. This right wing pannel has 2 servos for the Aileron. Plug the Aileron servos into the "TO SERVOS" port1 and port2 of the QCM. Take 2 Jumpers and plug them into the "FROM RECEIVER" port1 and

port2 of the QCM and the corresponding channels in your RX.

QCM can be plugged in while power is on, or can be hooked up pre power up.

Once power is applied the system QCM will start to operate. After about 1.5 seconds of power QCM splash screen will pop up Fromeco Scale Avionics. After which QCM will display the amperage in mA of each servo hooked to it. Make adjustments to servos accordingly.

What to expect:

Everyone who uses the QCM is going to have a little bit different experience. Not all servos are going to be the same, not all set ups are going to be the same. That being said once you plug the QCM in it will become evident on how it operates and how valuable of a tool it is. Field testers did not want to give their prototypes back.

PLEASE NOTE: QCM is NOT a scientific test grade instrument. Nor is it designed to be. Amperage readings between a QCM and a actual multimeter may be slightly different. This is okay and irrelevant to matching servos. Each QCM is tested and calibrated with a Scientific standard at our shop to ensure each of its channels is reading the same.

Helpful Hint.

- As you measure surfaces make sure they are Isolated tests. Unplug all other surfaces from your RX. Voltage bouncing on your RX's buss, will cause the QCM amperage readings to fluctuate wildly in some cases.
- When testing a surface plug your Servos in 1 at a time. This will help you to isolate a servo that is binding. 1 Servo in a gang of 4 will cause all other (3) servos amperage to go up.

What not to do!

- DO NOT try to use QCM to measure you whole planes amperage draw.

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