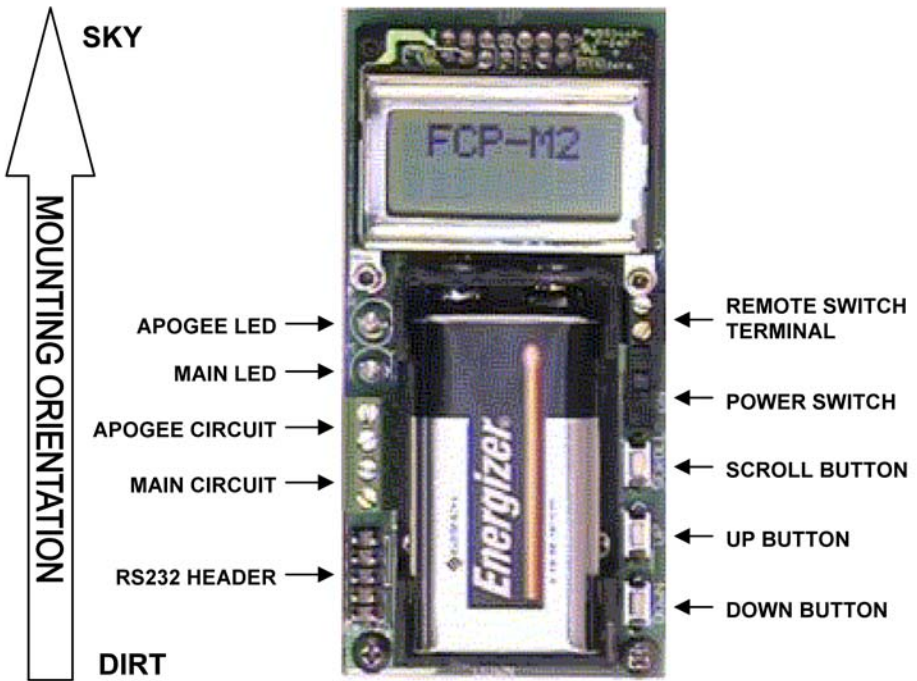


FCP-M2 Description



POWER SWITCH: Turns the altimeter **ON** and **OFF**. **WARNING** – Never turn this or any altimeter **ON** in a rocket with live charges until it is on the launch pad.

REMOTE SWITCH TERMINAL: Allows the altimeter to be turned **ON** and **OFF** remotely by connecting a switch to these terminals.

SCROLL BUTTON: Allows the altimeter to enter the **PROGRAM?** mode and scrolls through menu elements.

UP and DOWN BUTTONS: The **UP** button increases the value of, toggles or activates individual programmable elements and tests the **APOGEE CIRCUIT** continuity **LED/BEEP** function. The **DOWN** button decreases the value of, toggles or activates individual programmable elements and tests the **MAIN CIRCUIT** continuity **LED/BEEP** function.

APOGEE and MAIN LEDs: Either or both blink when the **APOGEE** and/or **MAIN CIRCUIT(s)** have continuity.

AUDIBLE: Beeps for continuity detection. High pitch = **APOGEE CIRCUIT** continuity. Low pitch = **MAIN CIRCUIT** continuity. Both tones mean both **MAIN** and **APOGEE**.

APOGEE CIRCUIT: Connect the two terminals to the **APOGEE** flashbulb or e-match. Fired at apogee.

MAIN CIRCUIT: Connect the two terminals to the **MAIN** flashbulb or e-match. Fired when the descending rocket reaches the **MAIN ALT** setting (see programming).

RS232 HEADER: Allows connection to a computer serial port using the supplied cable. Set computer **COM** port to 9600 baud, no parity, 1 stop bit.

FCP-M2 Instructions

ENTERING PROGRAM MODE: Turn the altimeter on. When the display shows **Program?**, push and hold the **SCROLL** button for about 1 second. The upper display will show **MAIN ALT**. The value shown in the lower display is the altitude at which the **MAIN CIRCUIT** will fire. Successive depressions of the **SCROLL** button will scroll through each menu element as indicated below:

MAIN ALT>MACH DLY>ACLD ON>RECD ON>ADLY ON>SEND>SHOW>MAIN ALT

PROGRAMMING THE FCP-M2: Use the **UP** and **DOWN** buttons to increase or decrease, toggle (**ON/OFF**), or activate (**SEND** or **STEP**) through recorded data.

MAIN ALT: The AGL altitude in feet where the **MAIN CIRCUIT** fires. Value can be changed in 50 foot increments. Resets below 100 ft. **RANGE: 100 – 20000 ft AGL**

MACH DLY: The time delay period following detection of launch before the **APOGEE** or **MAIN CIRCUIT**s will fire. Value can be changed in 0.25 second increments (4 = 1.0 seconds of delay). **RANGE: 0 – 62 seconds**

ACLD: Altitude Change Launch Detect arms the altimeter when the altimeter has reached 200 feet AGL. Set to **ON** for Hybrid Motors. **RANGE ON/OFF**

RECD: Record flight data. When **OFF**, the altimeter is fully functional, but will not record the flight. Automatically turns **OFF** after each flight. **RANGE: ON/OFF**

ADLY: Apogee Delay. When **ON** delays firing the **APOGEE CIRCUIT** by 1.75 seconds. Turn **ON** when altimeter is used as a backup altimeter. **RANGE ON/OFF**

LOW BATTERY: When the altimeter circuitry detects a low battery condition (~7.5 volts), the display will show **BATTERY!** and beeps during the power-up phase. Do not fly your rocket with a low battery.

NOTE: Editing can not be performed with the firing circuits wired.

DOWNLOADING FLIGHT DATA: Connect one end of the serial cable to the **RS232 HEADER** on the altimeter and the other end to your computers serial port (9 pin D). Turn the altimeter on and enter the **PROGRAM MODE**. Scroll to the **SEND** menu element (do this *before* proceeding to the next step). From the Read Altimeter dialog in FlightGraph, select **READ**, then push either the **UP** or **DOWN** button on the altimeter to send the data to the computer. The FlightGraph program will show the data once it is received.

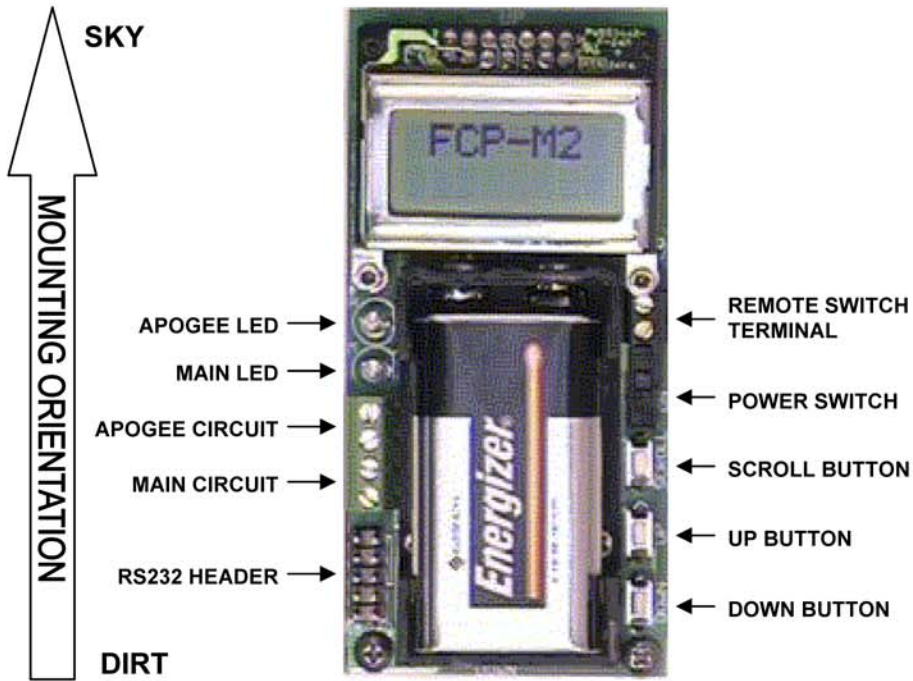
VIEWING FLIGHT DATA: Enter the **PROGRAM MODE**. Scroll to the **SHOW** menu element. The lower display will indicate the altitude (left 5 digits) and an index number (right two digits). Use the **UP** and **DOWN** buttons to step through the recorded data. Data is recorded every 0.5 seconds before apogee and every 4 seconds after apogee.

Visit www.OlsenAE.com for latest version information and downloads.

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For Sales and Support – contact Rocky Mountain Rocketry
801-273-0443
www.RockyMountainRocketry.com

FCP-M2 Description



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REMOTE SWITCH TERMINAL: Allows the altimeter to be turned **ON** and **OFF** remotely by connecting a switch to these terminals.

SCROLL BUTTON: Allows the altimeter to enter the **PROGRAM?** mode and scrolls through menu elements.

UP and DOWN BUTTONS: The **UP** button increases the value of, toggles or activates individual programmable elements and tests the **APOGEE CIRCUIT** continuity **LED/BEEP** function. The **DOWN** button decreases the value of, toggles or activates individual programmable elements and tests the **MAIN CIRCUIT** continuity **LED/BEEP** function.

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AUDIBLE: Beeps for continuity detection. High pitch = **APOGEE CIRCUIT** continuity. Low pitch = **MAIN CIRCUIT** continuity. Both tones mean both **MAIN** and **APOGEE**.

APOGEE CIRCUIT: Connect the two terminals to the **APOGEE** flashbulb or e-match. Fired at apogee.

MAIN CIRCUIT: Connect the two terminals to the **MAIN** flashbulb or e-match. Fired when the descending rocket reaches the **MAIN ALT** setting (see programming).

RS232 HEADER: Allows connection to a computer serial port using the supplied cable. Set computer **COM** port to 9600 baud, no parity, 1 stop bit.

FCP-M2 Instructions

ENTERING PROGRAM MODE: Turn the altimeter on. When the display shows **Program?**, push and hold the **SCROLL** button for about 1 second. The upper display will show **MAIN ALT**. The value shown in the lower display is the altitude at which the **MAIN CIRCUIT** will fire. Successive depressions of the **SCROLL** button will scroll through each menu element as indicated below:

MAIN ALT>MACH DLY>ACLD ON>RECD ON>ADLY ON>SEND>SHOW>MAIN ALT

PROGRAMMING THE FCP-M2: Use the **UP** and **DOWN** buttons to increase or decrease, toggle (**ON/OFF**), or activate (**SEND** or **STEP**) through recorded data.

MAIN ALT: The AGL altitude in feet where the **MAIN CIRCUIT** fires. Value can be changed in 50 foot increments. Resets below 100 ft. **RANGE: 100 – 20000 ft AGL**

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