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Making a Difference for California

“Paso Panel” canopy shade meter construction photographs

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Two “Paso Panels” showing the differences in the sizes of solar panels. The version on the right uses the PowerFilm R15-1200 model solar panel, while the version on the left uses the PowerFilm R28 solar panel.

Each device is eight feet long.

The photos on the following pages were taken from a number of different “Paso Panels” that the author built between 2007 and 2010.

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Frame construction in a home garage. Main tools required are a flat surface, hacksaw, electric drill, clamps, a carpenter's square, and a bench vise.

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Completed bare frame. This is a later version, using less materials than the earlier prototypes.

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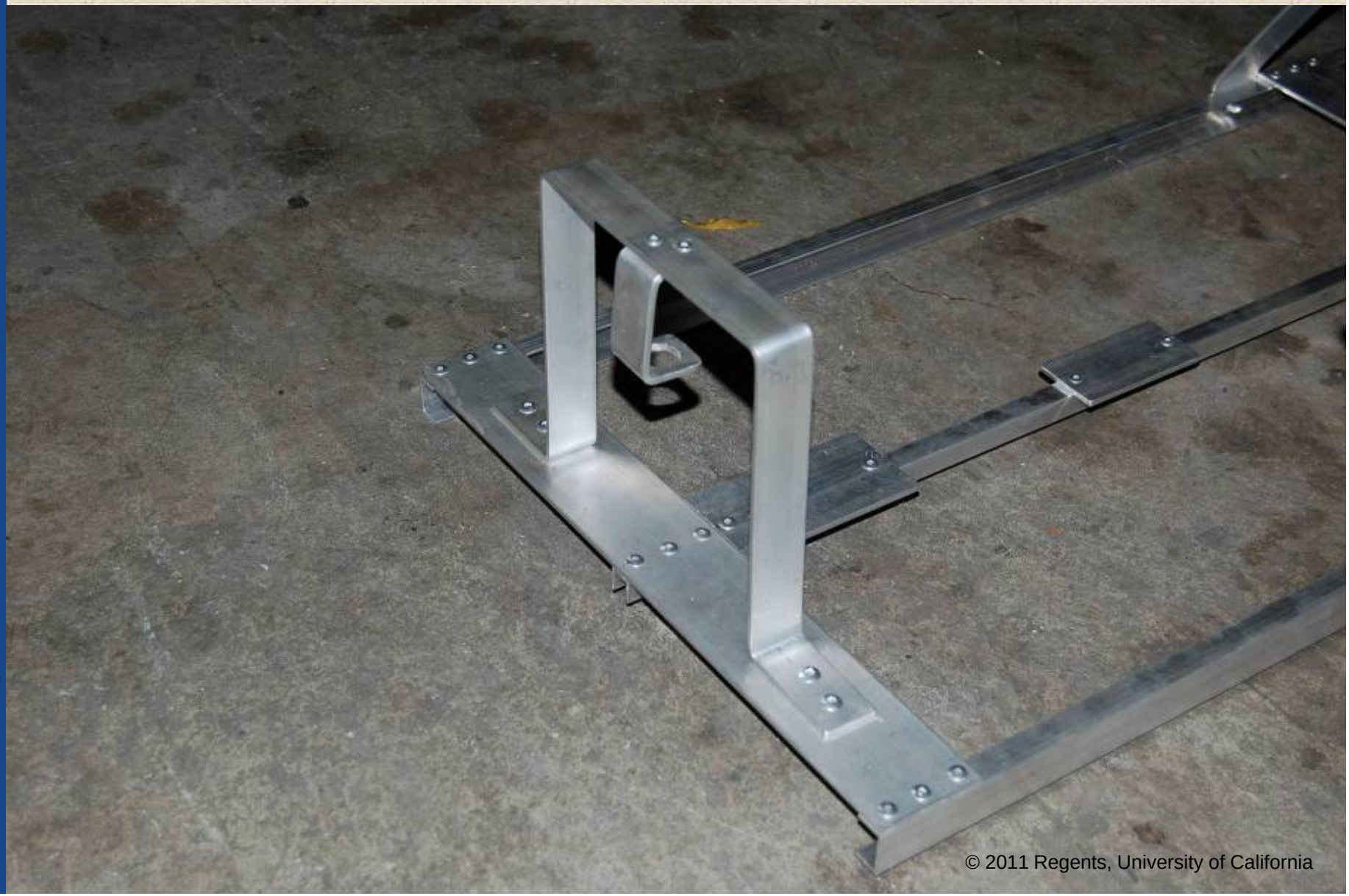
Detail of the rear handle area. I used aluminum pop-rivets for all construction; welding would be another good option if available.



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Detail of the front handle. Bending these pieces accurately requires a bench vise or similar equipment.

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Completed device with velcro, handles, bubble level, and digital multi-meter installed. The handles are each formed from sections of PVC tube cut lengthwise, and then wrapped to the frame with tape.

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Solar panel installed. The fuzzy half of the adhesive Velcro strip is attached to the underside of the solar panel.

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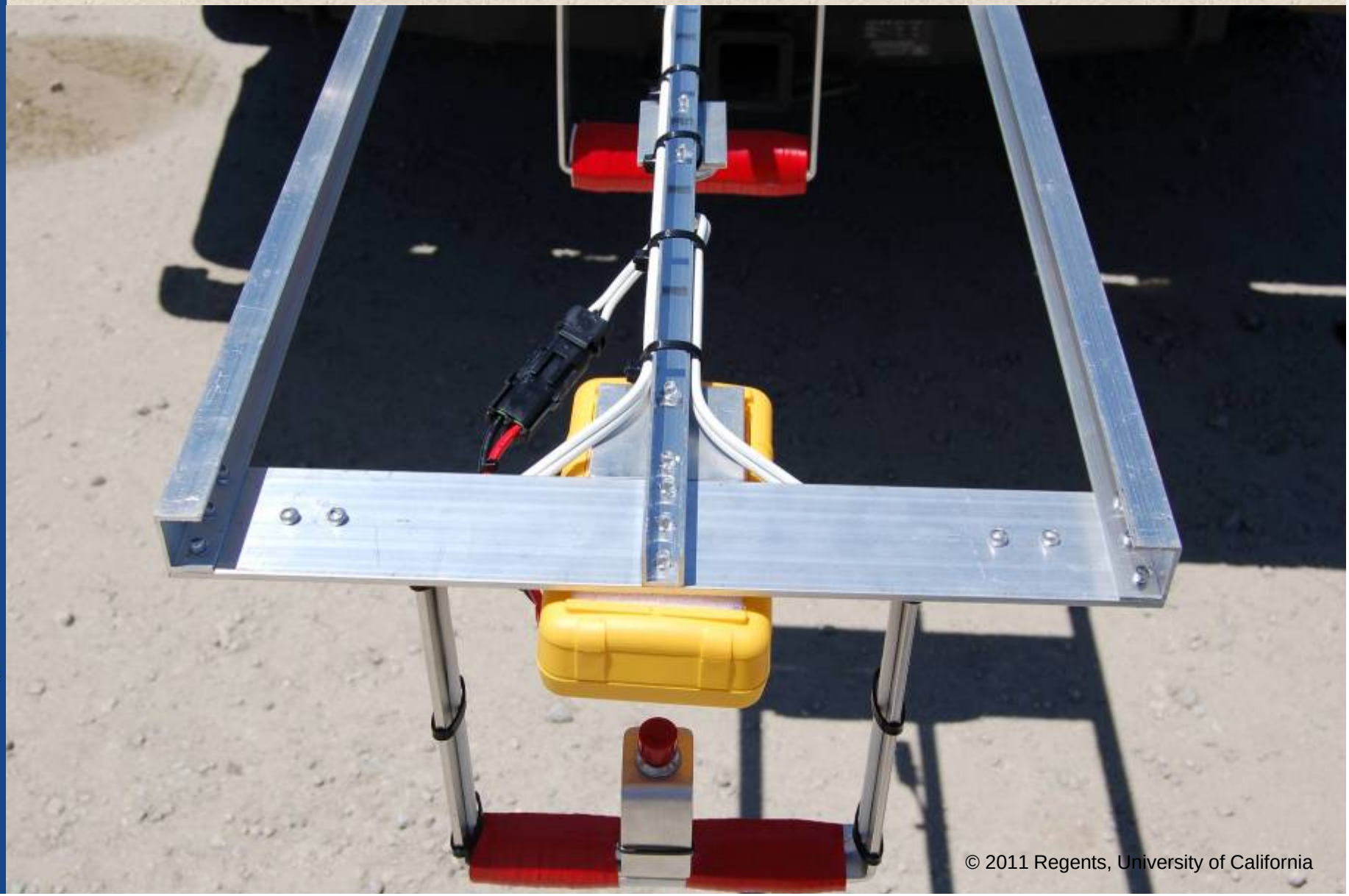
Underside view of the rear of the panel. The (-) wire from the solar panel goes directly to the multi-meter port, while the (+) wire passes through the push-button switch on the handle.



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Detail of the rear handle; only one half of the PVC pipe is used on the top. The push-button switch in this photo has since been updated.

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This shows the more durable push-button switch which is available from Napa Auto Parts, part number STB6301.

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The bubble level which is glued to the aluminum support. This is available at Home Depot and other hardware stores.

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Paso Panel wiring setup