

## Charging a pack

1. Determine the series configuration of the pack you will be charging. For reference:

If pack voltage is...	then series configuration is...	and pack can be charged by...
7.4V	2s	BalancePro HD 6s or Cellpro 4s
11.1V	3s	BalancePro HD 6s or Cellpro 4s
14.8V	4s	BalancePro HD 6s or Cellpro 4s
18.5V	5s	BalancePro HD 6s only
22.2V	6s	BalancePro HD 6s only

2. Plug the pack into the brand-specific adapter port corresponding to the pack's series configuration. Port connectors are polarized and locking.

**Warning:** Do not plug more than one pack at a time into the adapter.

3. Plug the adapter into the FMA cell-balancing charger.
4. Apply power to the charger. The charger should indicate normal charging is in progress.

**Note:** If the Error Indicator is on, you have plugged the pack into the wrong port. Turn off the charger, plug the pack into the correct port before continuing.

5. When charging is complete, disconnect the pack.

## Troubleshooting

Problem	Resolution
Error Indicator is on	You may have plugged the pack into the wrong port. Check the pack's series configuration, plug it into the correct port, and try again.  It is possible to plug a pack into a port intended for a lower series configuration (for example, a 5s pack plugged into a 4s port). If this happens, one or more cells will not be charged, and the pack will be severely unbalanced. Plug the pack into the correct port and charge again. <b>Caution:</b> If you use (discharge) a pack with uncharged cells, the pack could be damaged.
Charger displays error code	Consult charger's error code list, correct problem, and try again. You may need to cycle charger power.

## FMA limited warranty for charging adapters

FMA, Inc. warrants this product to be free of manufacturing defects for the term of 90 days from the date of purchase. Should any defects covered by this warranty occur, the product shall be repaired or replaced with a unit of equal performance by FMA or an authorized FMA service station.

### Limits and exclusions

This warranty may be enforced only by the original purchaser, who uses this product in its original condition as purchased, in strict accordance with the product's instructions. Units returned for warranty service to an FMA service center will be accepted for service when shipped postpaid, with a copy of the original sales receipt or warranty registration form, to the service station designated by FMA.

This warranty does not apply to:

- Consequential or incidental losses resulting from the use of this product.
- Damage resulting from accident, misuse, abuse, neglect, electrical surges, reversed polarity on connectors, lightning or other acts of God.
- Damage from failure to follow instructions supplied with the product.
- Damage occurring during shipment of the product either to the customer or from the customer for service (claims must be presented to the carrier).
- Damage resulting from repair, adjustment, or any alteration of the product by anyone other than an authorized FMA technician.
- Installation or removal charges, or damage caused by improper installation or removal.

Call (301) 668-7614 for more information about service and warranty repairs.



## LiPo Charger Adapters

For charging Apogee LiPo packs with FMA cell-balancing LiPo chargers

Model CP-AP for use with the Cellpro 4s Charger

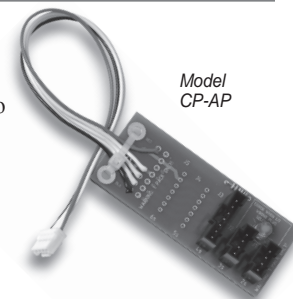
Model SV-AP for use with the BalancePro HD 6s Charger

## About the adapters

FMA's LiPo Charger Adapters attach node-connector-equipped Apogee LiPo packs to FMA's cell-balancing chargers. Via a wire attached to each cell in a pack, a node connector enables the charger to monitor cells individually to prevent overcharging and to perform cell balancing.

Use the adapter model corresponding to your charger:

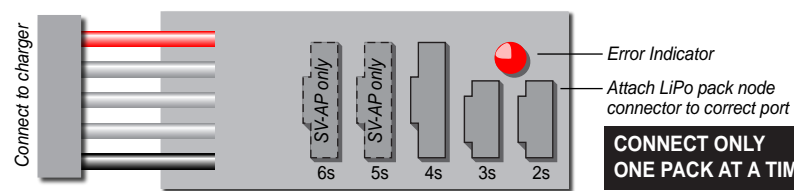
- Use Model CP-AP with the Cellpro 4s Charger to charge 2s to 4s packs.
- Use Model SV-AP with the BalancePro HD 6s Charger to charge 2s to 6s packs.



## Precautions

- FMA recommends using a 1C charging rate for all LiPo packs. Before charging at higher than 1C, consult the manufacturer's recommendations to assure that charging at a higher rate is permitted. Charging a pack at a rate for which it was not designed could severely shorten pack life. Safety features in FMA cell-balancing chargers support charging at rates up to 3C. However, charging at greater than 1C is possible *only when the pack is rated for the higher rate*. FMA, Inc. accepts no liability for damages resulting from charging a Lithium battery at a rate higher than that specified for the battery.
- Do not plug more than one pack at a time into the adapter. Connecting two or more packs at the same time will damage the packs and may result in fire.
- Follow all safety precautions provided with your packs and chargers.

## Adapter layout



**WARNING!** Maximum charge rate 1C, or as specified for battery being charged. Use this product only with... 1) the FMA Direct Cellpro 4s Charger or 2) the FMA Direct BalancePro HD 6s Charger. Use this product only to charge lithium polymer batteries manufactured by the companies named in this manual. FMA, Inc. will not be liable for damages that result from improper use of this product. **Lithium polymer batteries may ignite under certain conditions. Read all safety precautions completely before using lithium polymer batteries with this product!**

FMA, Inc. • 5716A Industry Lane • Frederick, MD 21704

Sales: (800) 343-2934 • Technical: (301) 668-7614 • [www.fmadirect.com](http://www.fmadirect.com)



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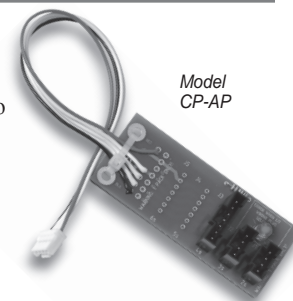
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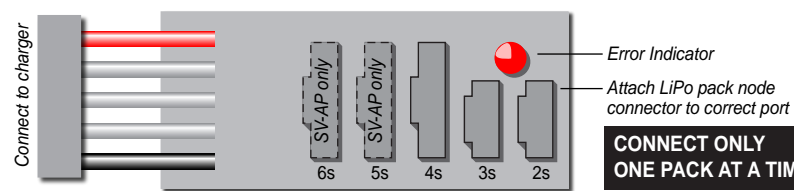
- Use Model CP-AP with the Cellpro 4s Charger to charge 2s to 4s packs.
- Use Model SV-AP with the BalancePro HD 6s Charger to charge 2s to 5s packs.



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