

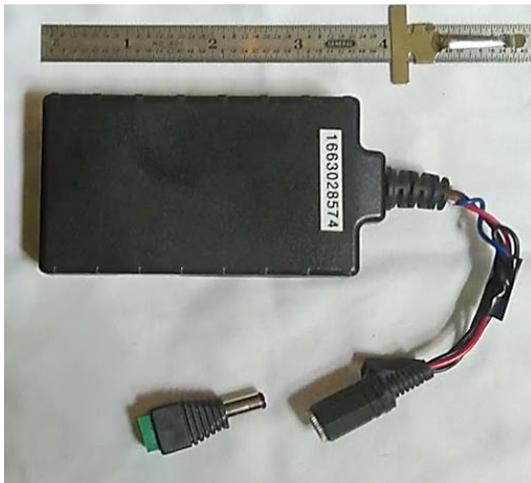
## Bulletin 2020-5

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### EZ Trak Cellular Tracker Installation

Both remaining 2020 ARA National and some Regional events are being timed with the EZTrak system as the official source for stage times.

Beginning with the Show-Me Rally the EZTrak cellular trackers will need to be hard wired to a 12 volt battery supply in the rally car. This allows removing the trackers from their case and mounting them in the front of the car where the gps antenna will have the best possible signal to improve stage timing accuracy. The cell tracker will be attached to the roll cage structure on the passenger side A-pillar with Velcro and a zip tie provided by ARA during tech, the same as is done with the satellite trackers.



Cell module and connector



Connector detail

Competitors will need to prepare their car with a 12 volt and ground wiring pigtail that is long enough to reach the A-pillar area of the car. The power source should be from the main battery and fused (5 amp is adequate). Current consumption is minimal: 20 milliamperes during active competition and 2 milliamperes when not in active competition. Note that the barrel of the male connector is the ground.



DO NOT PROVIDE AN IGNITION-SWITCHED POWER SOURCE AS THAT WOULD LEAD TO POSSIBLE LOSS OF STORED STAGE TIMES (a bad thing).

It is recommended that you check the voltage of your pigtail with the battery isolator switch both on and off and with the ignition off and also with the car running. The pigtail should have 12 volts in all these situations.

Teams are expected to prepare the pigtail before arriving at tech. A recommended source for a 10 ft pigtail with the connector is <https://www.digikey.com/short/z5mn71>

Teams can also purchase the male plug or a male pigtail form Amazon or other sources. The Amazon sources are connector: <https://www.amazon.com/Xenocam-2-1mm-5-5mm-Camera-Adapter/dp/B01AGQVYQQ/> (10 pack for \$5.77) and 20inch pigtail: <https://www.amazon.com/SIM-NAT-Pigtails-Security-Surveillance/dp/B01GPL8MVG/> (10 for \$7.99)

ARA will have a limited supply of the connectors at tech. The connector works best with 18-22 gage stranded wire.

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