



EFS-CA1200

INSTALLATION MANUAL





# Thank you for purchasing the EchoMaster EFS-CA1200

With EFS-CA1200, your mobile assets are in good hands. This durable IP66 rated asset tracker will add GPS tracking and asset manager to fleet equipment, passenger vehicles, off-road vehicles and more. Please ensure you read and understand all aspects of the manual before installing or using the EchoMaster products.

## WHAT'S INCLUDED:

- EFS-CA1200 Module
- Manual



## FEATURES

- Weather-proof design 1P66 rated
- Internal rechargeable battery
- Driver behavior detection
- High voltage supported
- Configurable I/O In and outputs
- Built-in Accelerometer
- Movement notification
- OTAP-Wireless firmware updates

## REQUIRED TOOLS

- Screwdriver set
- Drill and drill bits
- Wire cutters
- Wire strippers
- Terminal crimper
- Digital Multimeter
- Electrical Tape
- Soldering iron

## PRIOR TO INSTALLATION



**IMPORTANT:** Prior to installation, please note the ESN electronic serial number located on the device, you will need this for connecting to your Asset Monitoring Application. Please refer to the activation card included to activate your device.



EFS-CA1200

## INSTALLATION GUIDE

### STEP 1:

#### INSTALLATION PREPARATION INSTRUCTION

It is important to note that the EFS-CA1200 battery in the device should be charged before the installation, you can connect the Red power wire and the Black ground wire to a 12-volt battery for 4 hours or make sure the Asset you are working on has a fully charged battery.

### STEP 2:

#### INSTALLATION

##### Main Power Installation

Connect the RED wire to (+) 12 Volt constant power or directly to the asset's battery.

##### Ignition Wire

Connect the White ignition wire to a power source that has power when the assets are turned on and running.

If the asset you are installing on does not have an ignition source available, you can connect the white ignition wire directly to the vehicle's battery.

\*NOTE: the asset will always report in the application as it is on with no ignition state updates.



##### Chassis Ground

Connect the BLACK (-) Input wire to a solid chassis ground uninhibited by paint or rust, you mustn't use any floating grounds from the vehicle's electrical system. Always connect the ground wire directly to the assets chassis and secure the connection with a factory bolt or aftermarket self-tapping screw..

## STEP 3: TESTING THE EFS-CA1200

After installation move the asset outside and leave it running for five minutes allowing time for the GPS receiver to receive a good signal from the GPS satellites.

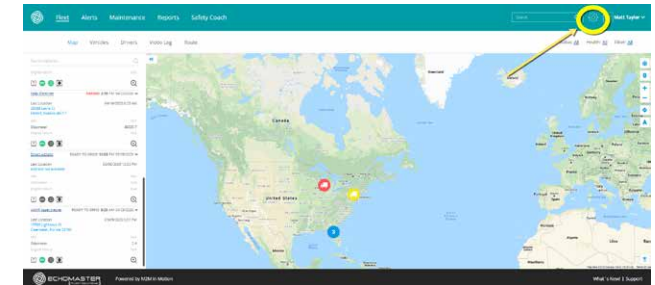
### CONFIRMING THE LED LIGHTS

Upon initial power-up of the EFS-CA1200, the LEDs on the top of the device will start flashing, Identifying the Mode status of the device.

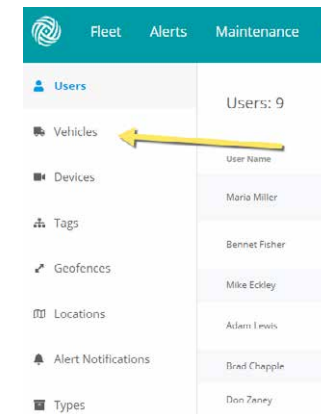
Note: The vehicle must be outside with a non-obstructed view of the sky for its first location to be set in the application.

Orange LED Status GSM/GPRS Cellular Communications	Green LED Status GPS Communications
Blinking: Tracker on, searching for wireless signal	
Solid - 2-way communication link with the communication server established	Solid- GPS lock established

2. Click the settings gear in the upper right corner



3. Select Vehicles from the left menu

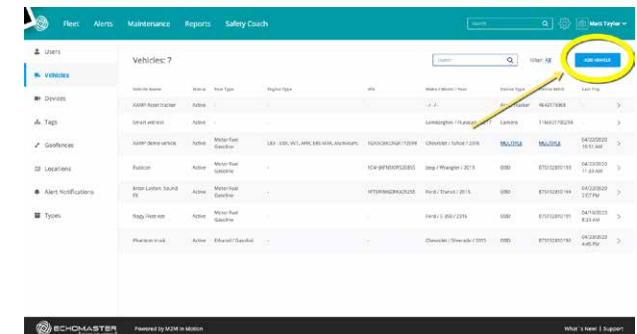


## STEP 4: ADD THE ASSET TO YOUR WEBSITE APPLICATION

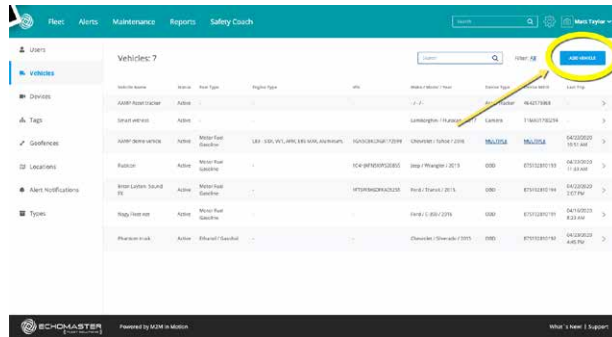
1. Login to emfleetmonitor.com



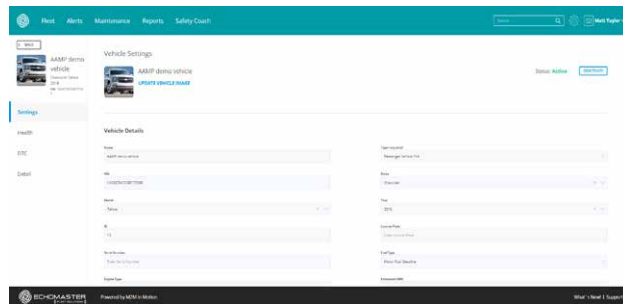
4. Select Add Vehicle from the upper right corner



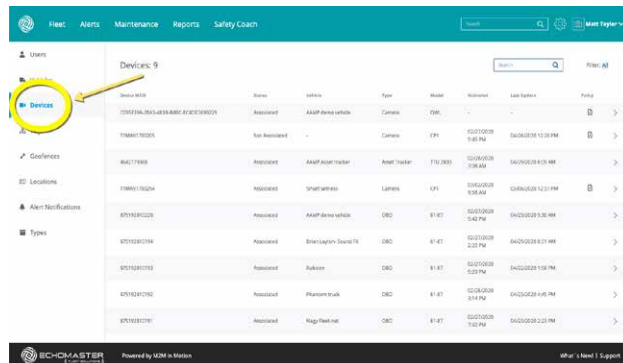
4. Select Add Vehicle from the upper right corner



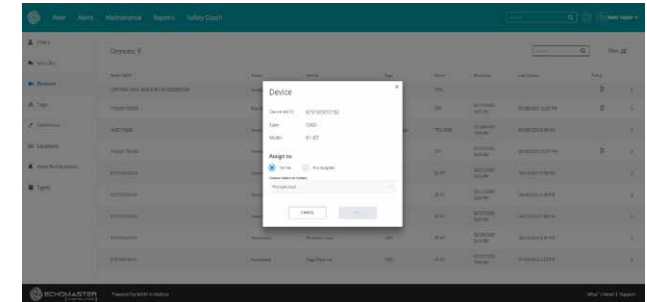
5. Fill out the vehicle's information and save



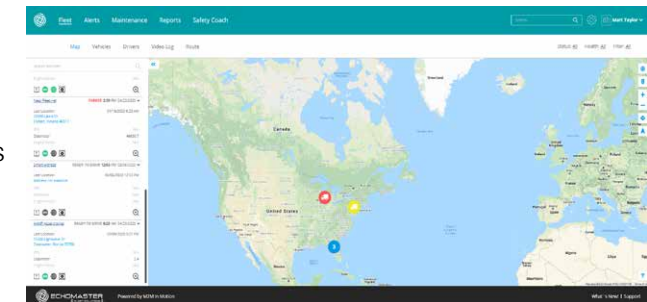
6. Select Devices from the left menu



7. In the list of devices, find the device you just installed. Click the ">" symbol on the right side to open that device, and assign it to the vehicle you just added.



8. Once the device has been assigned, click back to the map view to confirm that the location and status is correct for the vehicle that was just set up.



**SPECIFICATION CHART**

OPERATING VOLTAGE	12V to 24 v
BATTERY	5200mah Lithium-ion
CURRENT CAPACITY	1mA sleep mode, 75mA Active
SIZE	2.125 in x 4.33 in x 1.59 in
BAND OPERATION	SMS, UDP packet data
HOST PROTOCOL	AT commands, UDP, TCP
CERTIFICATIONS	FCC, CE, IC, PTCRB, ROHS

Issue	Cause
Unit Does Not Power-up	Power is not connected to the unit. With a Digital Volt-meter, measure the voltage at the input to the unit. A positive voltage should be measured on the + terminal of the unit when measuring between the + terminal and the - terminal or chassis ground. This voltage should also measure 12 VDC. Correct the wiring to assure the correct polarity and the correct voltage level. Check fuse. Bad Ground connection. Make sure the ground is connected directly to metal with no paint or residue. Use a Digital Multimeter to test continuity to ground to ensure a good connection.
Unit Does Not Find Cellular Service	The unit is not receiving the local cellular system. The main cause of this is poor signal strength due to shielding or coverage. Make sure the GSM (Orange) light is solid, move the unit outside the building and or outside of the vehicle if necessary and re-apply power to the unit. Move the vehicle to acquire a better signal if necessary. Contact tech support if the problem persists.
Unit Does Not Receive a GPS Signal	The GPS receiver is unable to lock into the satellites or receive a signal. Make sure GPS (Green) light is solid if not, make sure that the unit's label is facing skyward and that there is no metal between it and the sky including but not limited to the roof of the vehicle and any dash bracing. If it is, then move the vehicle outside of or away from any building/garage to allow the internal GPS antenna in the unit to have a clear view of the sky. You may need to power the unit outside of the vehicle as some vehicles may have metallic or leaded windshields. Contact tech support if the problem persists.



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