# EV Meter
## User Manual

ENGLISH

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# EV Meter (formerly known as JuiceStation)

Welcome to EV Meter Manual!

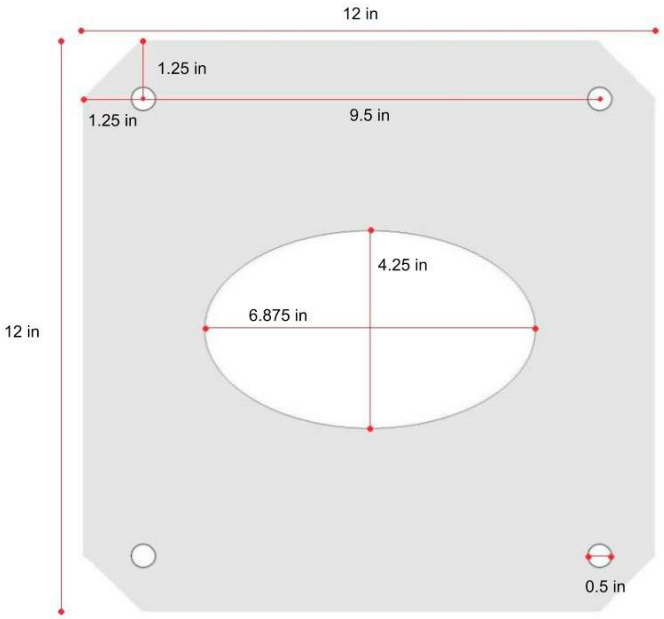
# EV Meter Installation Area

**NOTE:** EV Meter is formerly known as "JuiceStation".

The EV Meter requires 2 sets of THHN wires (per National Electrical Code (NEC) and/or local Authority Having Jurisdiction (AHJ) requirements and each set must have a dedicated ground conductor). Each set connects to a separate 50A breaker.

All wires must protrude at least 1 foot from the base of the installation area so that the connections can be housed inside the internal junction box. All wires must be bundled within an oval that is 6.875 in x 4.25 in.

The base of the EV Meter is secured to 4 0.5 in ground studs which are positioned 9.5 in apart.




**NOTE:** Image not to scale.

# EV Meter Installation (Without Junction Box)

**NOTE:** EV Meter is formerly known as “JuiceStation”.

1. Turn off the mains power to the hardwire connections.
2. Use a multimeter to ensure that there is no power at the hardwire connections.

**WARNING:** Do not continue with the installation until the multimeter shows that there is no power at the hardwire connections to mains.

3. Use a Torx 15H bit to release the fasteners (x10) that secure the rear cover. Set the fasteners and cover aside.

4. Ensure that the low voltage connector (black) from the payment terminal screen is plugged into the ethernet bundle (yellow).
5. Place a soft cover on the ground so that the EV Meter is not damaged in the next step.
6. Gently tilt the EV Meter so that it is lying on its front side.

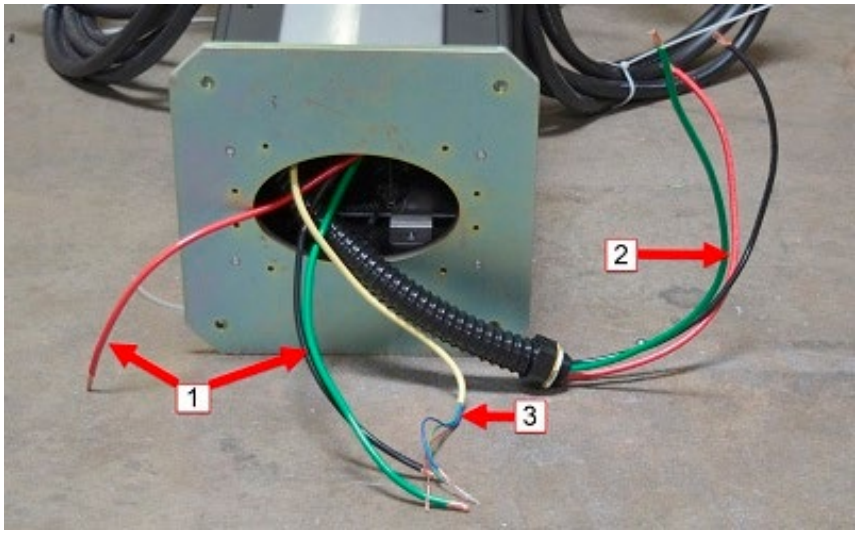
⚠ **CAUTION:** Ensure that the EV Meter, especially the payment terminal screen, is not scratched.

7. Pull the high voltage and low voltage cable bundles out through the hole in the base of the EV Meter:

> **High voltage bundles (x2):** Bundle of green, black, and red wires with black corrugated tubing

> **Low voltage bundle (x1):** Bundle of blue, brown, and green wires with yellow shielding

**NOTE:** The corrugated tubing is not as long as the wires, and therefore might not protrude through the hole in the base.



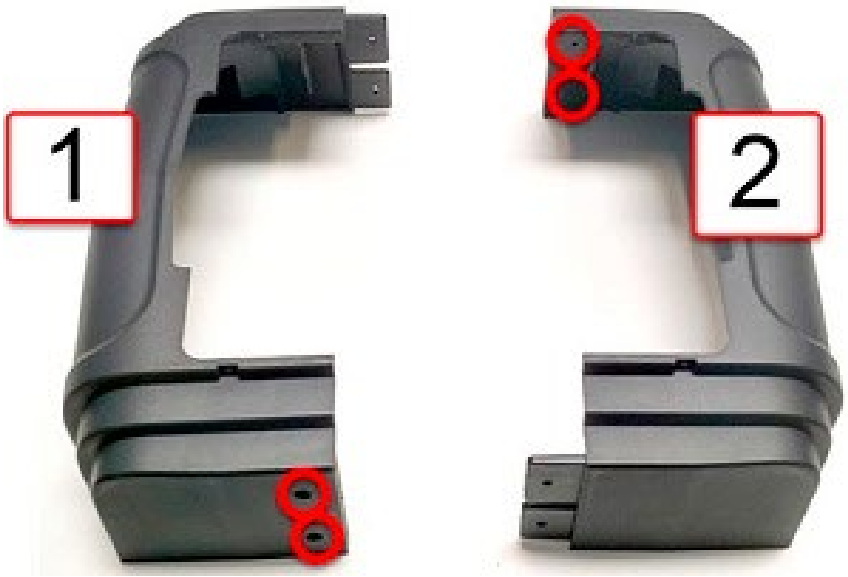

| | |
|---|---|
| **1** | High Voltage Bundle |
| **2** | High Voltage Bundle |
| **3** | Low Voltage Bundle |

8. Splice the low voltage bundle into one of the high voltage bundles:

| | POSITIVE (+) | NEGATIVE (–) | GROUND |
|---|---|---|---|
| High Voltage | Red | Black | Green |
| Low Voltage | Blue | Brown | Green |

**NOTE:** If necessary, cut the high voltage and low voltage wires and insulation to an appropriate length, depending on the installation.

9. Connect the 2 high voltage bundles to the hardwire connections to mains.
10. Carefully stand the EV Meter up so that it is resting on its base.
11. Reinstall the rear cover.
12. Install the EV Meter onto the ground studs.
13. Install the 2 sides of the base cover around the base of the EV Meter. Use a Torx 15H bit to install the fasteners (x4) that secure the 2 sides of the base cover.




| | |
|---|---|
| **1** | Front |
| **2** | Rear |

14. Use a Phillips bit to install the self-tapping fasteners (x4) that secure the base cover to the EV Meter.

15. Reconnect power to the hardwire connections. The EV Meter turns on automatically.

# EV Meter Installation (With Junction Box)

**NOTE:** EV Meter is formerly known as “JuiceStation”.

1. Turn off the mains power to the hardwire connections.
2. Use a multimeter to ensure that there is no power at the hardwire connections.

**WARNING:** Do not continue with the installation until the multimeter shows that there is no power at the hardwire connections to mains.

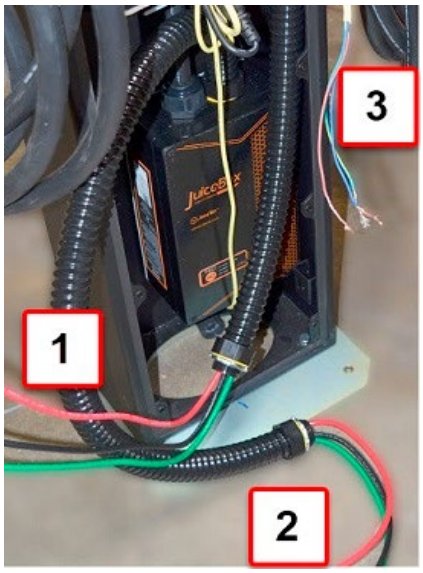
3. Use a Torx 15H bit to release the fasteners (x10) that secure the rear cover to the EV Meter. Set the fasteners and cover aside.

4. Ensure that the low voltage connector (black) from the payment terminal screen is plugged into the ethernet bundle (yellow).
5. Release the cap on the top of the junction box.
6. Use a Phillips bit to release the fasteners (x4) that secure the junction box cover. Set the fasteners and cover aside.

7. Route the high voltage and low voltage cable bundles into the junction box from the top.

**NOTE:** If necessary, cut the high voltage and low voltage wires and insulation to an appropriate length, depending on the installation.

| | |
|---|---|
| **1** | High Voltage Bundle: Green, black, and red wires with black corrugated covering |
| **2** | High Voltage Bundle: Green, black, and red wires with black corrugated covering |
| **3** | Low Voltage Bundle: Blue, brown, and green wires with yellow insulation |





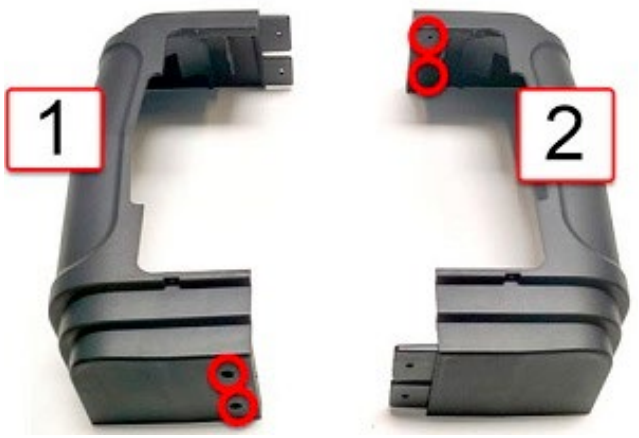
8. Splice the low voltage bundle into one of the high voltage bundles:

| | POSITIVE (+) | NEGATIVE (–) | GROUND |
|---|---|---|---|
| High Voltage | Red | Black | Green |
| Low Voltage | Blue | Brown | Green |

9. Route the mains hardwire connections through the hole in the base of the EV Meter, then route them into the junction box from the bottom.

⚠ **CAUTION:** Do not allow the EV Meter to tip over. If necessary, have an assistant lift the EV Meter while routing the mains through the hole in the base of the EV Meter.

10. Connect the 2 high voltage bundles to the hardwire connections to mains.
11. Reinstall the junction box cover.
12. Reinstall the rear cover.
13. Install the EV Meter onto the ground studs.
14. Install the 2 sides of the base cover around the base of the EV Meter. Use a Torx 15H bit to install the fasteners (x4) that secure the 2 sides of the base cover.




| | |
|---|---|
| **1** | Front |
| **2** | Rear |

15. Use a Phillips bit to install the self-tapping fasteners (x4) that secure the base cover to the EV Meter.

16. Reconnect power to the hardwire connections. The EV Meter turns on automatically.

# Pricing Configuration

Before configuring the pricing structure in the Nayax portal (including options for free charging), it is necessary to:

1. Contact joseph@nayax.com to set up the account.
2. Select a pricing structure.
3. Create a pricing code.

For information on available pricing structures, refer to Understanding Pricing Structures.

For information on creating a pricing code, refer to Understanding Pricing Codes.

Once the pricing code has been created, refer to Payment Setup to configure the EV Meter.

## Understanding Pricing Structures

EV Meter supports 2 types of payment structures: **product pricing** and **tier pricing**.

### PRODUCT PRICING

EV Meter supports up to 4 products. A **product** costs a set price and is either a duration of time or an amount of electricity. For example, a EV Meter could offer the following products:

| PRODUCT | PRICE |
|---|---|
| 1 hour of charging time | $1.00 |
| 2 hours of charging time | $2.00 |
| 4 hours of charging time | $3.50 |
| 5 kilowatts (kW) of electricity | $1.50 |

Once a product is purchased, the user is charged the full price regardless of whether the product is used completely. In the above example, if a user purchases 2 hours of charging time but leaves after 90 minutes, they are still charged $2.00.

To implement a product pricing structure, refer to Product Pricing Codes.

### TIER PRICING

EV Meter can charge users based on different levels of charging duration or electricity used. EV Meter supports up to 3 tiers. For example:

| TIER | PRICE |
|---|---|
| Hour 1 | Free |
| Hours 2-4 | $1/hr |
| Hours 5-6 | $2/hr |

After the highest duration on the final tier, charging stops automatically. In the above example, a vehicle that is plugged in for 8 hours only charges for 6 hours. The user is charged a total of $7:

> **$0** for the 1st hour
> **$3** for the 2nd, 3rd, and 4th hours (3 hours at $1/hr)
> **$4** for the 5th and 6th hours (2 hours at $2/hr)

To implement a tier pricing structure, refer to Tier Pricing Codes.

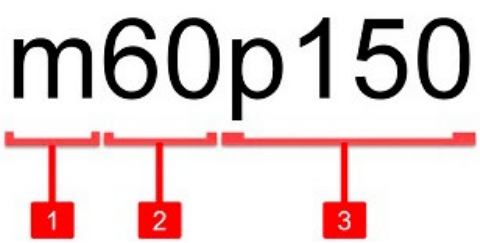
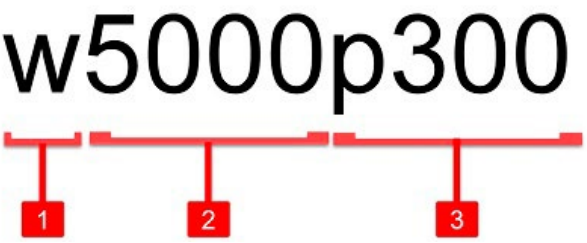
## Understanding Pricing Codes

### PRODUCT PRICING CODES

A **product pricing code** is a set of **product pricing sequences** separated by commas. Each **pricing sequence** contains 3 pieces of information:

| | |
|---|---|
| **1** | Whether the product is based on **time of use** or **amount of electricity**. Enter either **m** for minutes or **w** for watts. |
| **2** | The **amount** of time or electricity, depending on the previous entry. |
| **3** | The letter **p** followed by the **price** of the product, in cents. |

**Examples of product pricing sequences:**

| **Example 1: $1.50 for 1 hour of charging** | **Example 2: $3.00 for 5 kW of electricity** |
|---|---|
|  |  |





EV Meter supports up to 4 products. To create the pricing code, use commas to separate the pricing sequences.

**Example of Product Pricing Codes:**

| PRODUCT PRICING CODE | EXPLANATION |
|---|---|
| **m120p500** | This code contains 1 product:<br>> 2 hours of charging for $5.00 |
| **m30p0,m60p100** | This code contains 2 products:<br>> 1 half hour of charging for free<br>> 1 hour of charging for $1.00 |
| **m60p100,m120p200,m180p300,m240p400** | This code contains 4 products:<br>> 1 hour of charging for $1.00<br>> 2 hours of charging for $2.00<br>> 3 hours of charging for $3.00<br>> 4 hours of charging for $4.00 |

| | |
|---|---|
| **w1000p200,w2000p400,w3000p600, w5000p1000** | This code contains 4 products:<br>> 1 kW of electricity for $2.00<br>> 2 kW of electricity for $4.00<br>> 3 kW of electricity for $6.00<br>> 5 kW of electricity for $10.00 |
| **w1000p0,m60p0,w2500p500,m120p500** | This code contains 4 products:<br>> 1 kW of electricity for free<br>> 1 hour of charging for free<br>> 2.5 kW of electricity for $5.00<br>> 2 hours of charging for $5.00 |

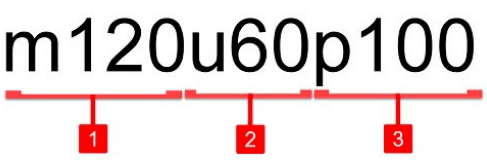
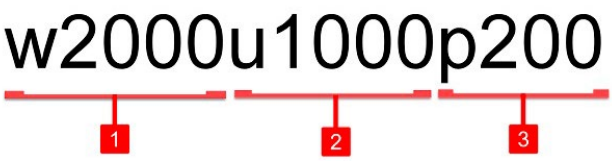
After creating the pricing code, refer to Set Up Payment to configure the EV Meter.

## TIER PRICING CODES

A **tier pricing code** is a set of **tier pricing sequences** separated by commas. Each **pricing sequence** contains 3 pieces of information:

| | |
|---|---|
| **1** | The total duration of the tier (in time or energy usage). Enter either **m** followed by the number of minutes or **w** followed by the number of watts. |
| **2** | Defines a base unit of measurement (in either time or electricity usage) to charge a set price (defined in the below row). |
| **3** | The price of the unit (defined in the above row), in cents. |

**Examples of tier pricing sequences:**

| **Example 1: Tier duration of 2 hours at $1/hr** | **Example 2: Tier duration of 2 kW at $2/kW** |
|---|---|
|  |  |

EV Meter supports up to 3 tiers. While it is possible to use only 1 tier, in these cases it is advisable to instead create a product pricing structure instead of a tier pricing structure.

To create the tier pricing code, use commas to separate the pricing sequences. It is not possible to combine time and energy-based pricing sequences into a single pricing code.

**Example of Tier Pricing Codes:**

| TIER PRICING CODE | EXPLANATION |
|---|---|
| **m240u60p100,m240u60p200** | This pricing code contains 2 tiers:<br>1. The 1st 4 hours cost $1/hr<br>2. The next 4 hours cost $2/hr<br>Maximum charging time and cost: $12 over 8 hours.<br>Example: If a vehicle is plugged in for 6 hours, the user is charged $8:<br>> Tier 1: 4 hours at $1/hr<br>> Tier 2: 2 hours at $2/hr |
| **w6000u1000p200,w10000u1000p250** | This pricing code contains 2 tiers:<br>1. The 1st 6 kilowatts cost $2/kW<br>2. The next 10 kilowatts cost $2.50/kW<br>Maximum electricity usage and cost: $37 over 16 kW.<br>Example: If a vehicle uses 11 kW, the user is charged $24.50:<br>> Tier 1: 6 kW at $2/kW<br>> Tier 2: 5 kW at $2.50/kW |

| | |
|---|---|
| **m30u30p0,m120u30p100,m120u30p200** | This pricing code contains 3 tiers:<br>1. The first half hour is free<br>2. After the free half hour, it costs $1/half hour for the next 2 hours<br>3. After the 2 previous tiers (which span 2 and half hours), it costs $2/half hour for the next 2 hours<br>Maximum charging time and cost: $12 over 4 and a half hours.<br><br>Example: If a vehicle is plugged in for 3 hours, the user is charged $6:<br>> Tier 1: 1 half hour at $0/hour<br>> Tier 2: 2 hours at $1/half hour<br>> Tier 3: 1 half hour at $2/half hour |
| **w3000u3000p0,w3000u1000p250,w3000u500p250** | This pricing code contains 3 tiers:<br>1. The first 3 kW are free<br>2. The next 3 kW cost $1/kW<br>3. The next 3 kW cost $2.50/half kW<br>Maximum electricity usage and cost: $18 over 9 kW.<br><br>Example: If a vehicle uses 7 kW, the user is charged $5.50:<br>> Tier 1: 3 kW at $0/kW<br>> Tier 2: 3 kW at $1/kW<br>> Tier 1: 1 kW at $2.50/kW |

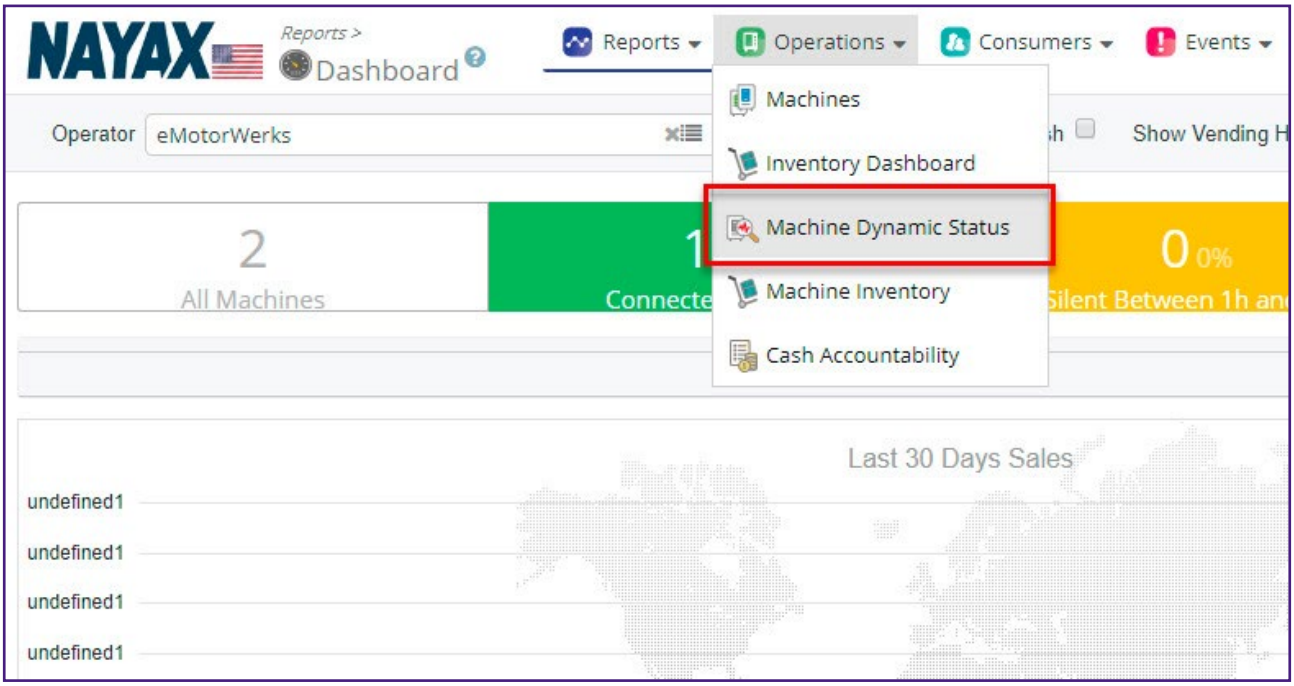
After the highest duration on the final tier, charging stops automatically.

After creating the pricing code, refer to Set Up Payment to configure the EV Meter.

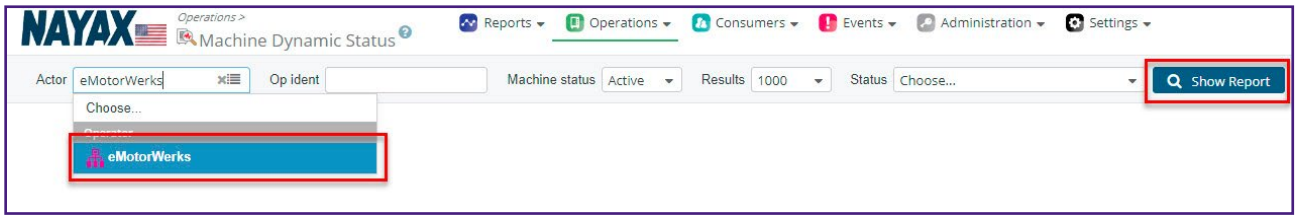
# Payment Setup

Before setting up payment, it is necessary to select a pricing structure and create a payment code. Refer to Pricing Configuration for more information.

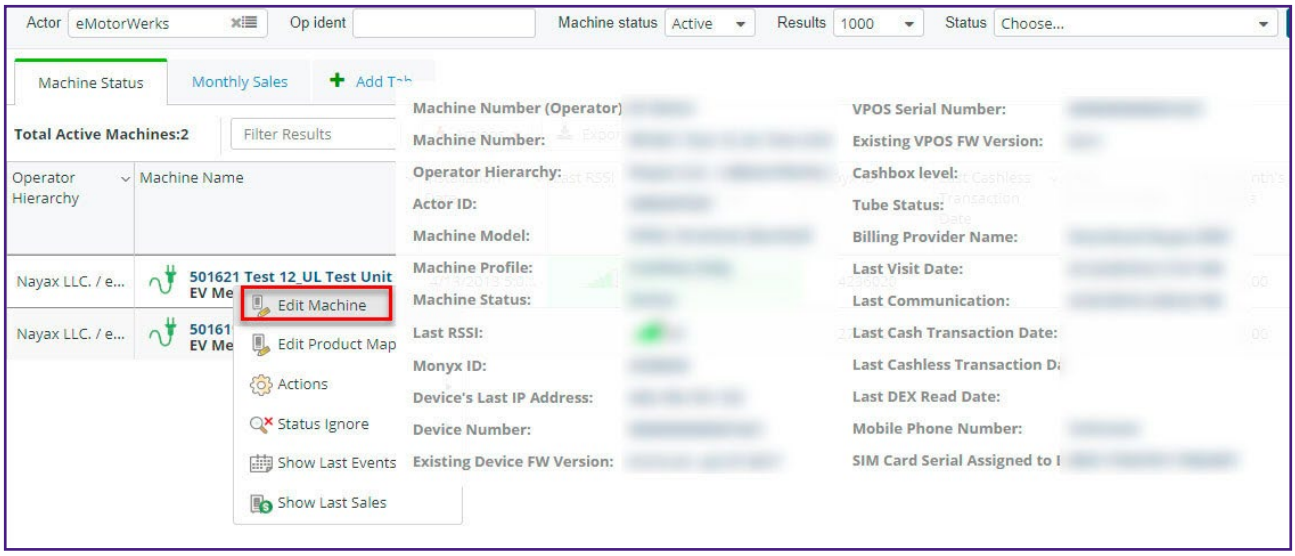
1. Log into the Nayax Portal.
2. In the top menu, select **Operations > Machine Dynamic Status**.



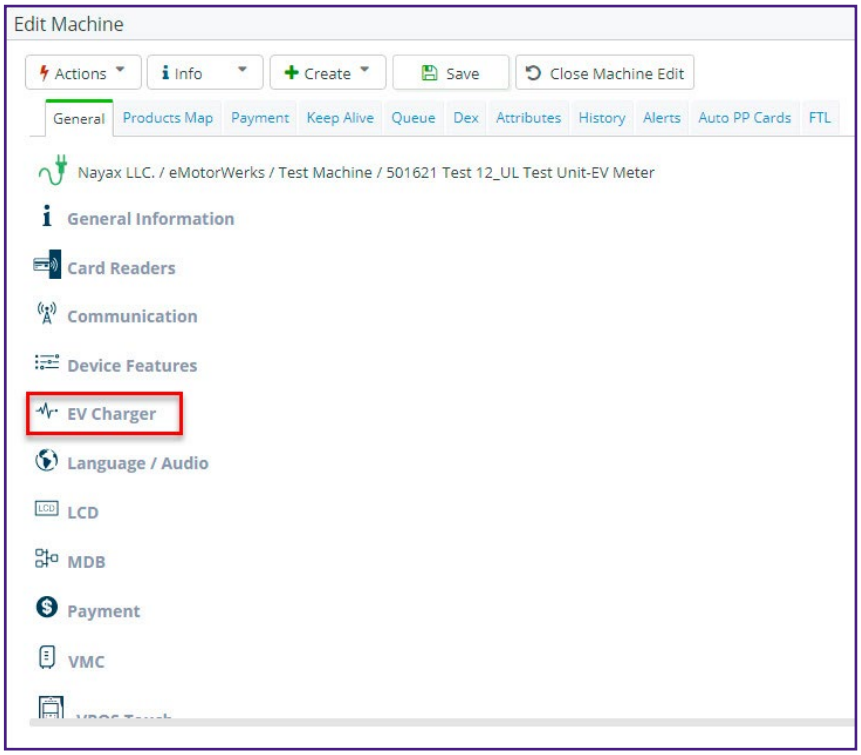

3. In the "Actor" field, enter the company name. Select the company name from the resulting dropdown menu, then select "Show Report".




4. Right-click on the appropriate machine, then select **Edit Machine**. A popup window appears.




5. In the "Edit Machine" popup window, select **EV Charger**.




6. Select the appropriate pricing structure, then enter the pricing code.

**NOTE:** For more information on pricing options and codes, refer to Pricing Configuration.


7. In the top menu of the popup window, select **Actions > Update Queue**. When the "Completed Successfully" message appears, close the popup window.

It can take up to 1 hour for the pricing to take effect on the EV Meter.