The following instructions are the recommended method for activating a TED system to post to TED Commander.

**NOTE 1:** If you have, or could potentially have, multiple TED systems posting to a TED Commander account, see Account Settings, (page 17) BEFORE activating a device.

**NOTE 2:** If posting directly from a TED 5000 or posting from a TED Pro MTU (no ECC with system), see ACTIVATION, (page 20) and see ADDING/EDITING LOCATIONS, (page 2)

For TED Pro systems with an ECC: Before activating the TED Commander cloud server, the following 2 items MUST be done:

1. Access the Footprints Dashboard page. Be certain that the readings look correct:
   - Observe the System Overview to confirm all MTUs are showing a positive reading, a power factor > 75% and have a green indicator.
   - Spyder readings in the Spyder tab are as expected.

2. Under SETTINGS on the Footprints Dashboard, select “TED Commander.”

Next, select an email that will be only associated with the TED system(s) in this facility. It is important that each facility has a unique email so that TED Commander access-permissions can be set up per facility.

The password **must include at least 8 characters that include:** capital letter, lower case letter, number, non-alphanumeric character (but not a “?”). Once the ECC is Activated to post, the Commander account can be accessed using the email and password created in the Footprints.

Be certain these boxes are checked

Once the “Activate” button is selected, your TED system will begin posting energy data to the TED Commander cloud every one minute. You will receive the following message:

© COPYRIGHT NOTICE:
The display of energy-use data and energy-use gradient in Calendar format described/depicted below and used in TED Commander is © Copyright 2014-2018 Energy, Inc. All rights reserved

www.theenergymdetective.com
To log in to TED Commander from anywhere, go to:  
http://commander.theenergydetective.com

Enter your login email address and password to access your account.

This will open the Dashboard (Calendar) page. There won’t be much information initially, as the data is just beginning to post.

TED Commander is built around the concept of “Locations.” If you have multiple Locations, solar installations, franchises, offices, systems within a facility, - each ECC that you post is automatically defined as a ‘location.’

The TED Commander MENU is available at any time

LOCATIONS

When a new ECC is activated through TED Footprints, a new Location will automatically be added to the Account.

In some instances, the Location information may be imported automatically when activating TED Commander. Please confirm that all the data is present - and fill in any missing data for each location. The Weather-engine for TED Commander utilizes the location-data to pull weather-data closest to the address you input for each location.

After inputting the data, select the MENU icon (upper left) to store the data.

ADDING LOCATIONS

Before MANUALLY adding a Location, the TED device should already be activated to post to TED Commander. To add a new Location, select LOCATION from the Menu, then select the +
from the bottom right. In addition to creating a Location for a TED5000 or TED Pro MTU, new Locations may be created so that a particular Monitoring Point (MTU or Spyder Load) that is already posting to a Location can have the following features: Separate Calendar Dashboard, Real Time Dial on Mobile App, TED Advisor Alerts, Billing Export, and Comparison Graphing.

**COMPLETING SETUP AND EDITING LOCATIONS**

When Location changes are made in TED Footprints software, it does not automatically make the changes in TED Commander. To transfer the changes to TED Commander, you must rename the Location in TED Commander as “Location Backup” (or similar). Then go to TED Footprints, under SETTINGS, select Remote Energy Post Settings and “Deactivate the Remote Post;” once you have done this, the status will change to “Deactivated.” At this time you will want to Reactivate the posting, so from the SETTINGS tab, select TED Commander - input your credentials to log-in, check the appropriate boxes to transfer the details for the changes to be uploaded to a new Location in Commander. You will now have two (2) Locations in TED Commander. The original Location can be kept, or it can be deleted by selecting the Location and then selecting the “trash can” in the upper right.

To EDIT a Location, select from the list of Accounts and then select the Location you wish to edit.

In addition to address and time zone, you will select the appropriate Energy Rate Plan from the list of rate plans that were uploaded from an ECC or created in the “Energy Rate Plans” section.

Follow the prompts if you are monitoring Generation. Select the + to Add MTUs or Spyders to this Location. All MTUs and Spyder loads posting to your account will be available to add to the Location.

Once a monitoring point (MTU or Spyder) is added, be sure the Type is correct. ONLY monitoring points set to NET or LOAD will be added to totals on the Calendar Dashboard. A Location must have at least one Monitoring Point set to NET or LOAD. Monitoring points set to Stand Alone will be seen in the Pie Chart shown in Daily Details. All Monitoring Points can be individually Graphed or Exported.

To save changes, use the back arrow in the top left to back out of the settings to the Calendar Dashboard.
Navigating the Dashboard

From the Globe in the upper right, you can toggle between different Locations on the Dashboard. From the Display Options (Gear-looking icon), you can change the data on the Calendar (Dashboard) to kWh, Costs, Voltage, Demand as well as Weather parameters. If the system is measuring solar, you can also choose Solar Production, NET, and Load Consumed.

The optional Gradient shows as green, yellow, red based on the highest recorded parameter of the data you are displaying within the month. (Green is good, Yellow not-so-good, RED is high). With the Gradient ON, it is quite easy to get a quick glimpse of the month - or to readily see when things seem to be higher than normal.

Calendar with Gradient OFF

Calendar with Gradient ON
Daily Detail

Click on any day in the Calendar, and you will be presented with specific details of that particular day. Shown below is an image of the data-detail (from a solar-installed site). You can easily navigate to the Next/Previous day by pressing the navigation arrows in the upper right of the screen. Immediately above the data are Graphing options for a quick glimpse of a day.

To view Daily Detail in a Line Graph, click “Line”

Move the cursor along the timeline at the base of the graph to display detailed data of a particular time of the day.
To view Daily Detail in a Bar Graph, click “Bar”

Move the cursor along the timeline at the base of the graph to display detailed data of a particular time of the day.

To view Daily Detail in a Pie Chart, click “Pie”

Move the cursor over any segment of the Pie Chart to reveal Cost and kWh of that particular circuit.
Data shown in the Calendar can be changed any time the user desires. Only two fields may be displayed at any given time.

If the user has solar or wind, several other options to choose will appear (cloud coverage, kWh generated, net usage, and avg wind speed).

**GRAPHING**

Select Account and Location. Graph the Location NET (total of Monitoring Points set to NET or LOAD) or select individual MTUs and Spyder Loads. Weather parameters or the NET value can be shown as an area graph against which selected loads can be compared. Select the granularity of the data and then click the start and end date. Select Graph.
Note the load increases as the temperature increases...

Circuit-level graphing of Spyder-data via Pie Chart or Line Graph

A Line Graph will give a complete view of data across the entire date range selected. Use the slider at the bottom of the Bar Graph to view data at a particular point in the selected date range. The Pie Chart will show cumulative values of Energy and Cost for each monitoring point.
**GRAPHING SOLAR**

- Graph any period of time.
- See your CONSUMPTION compared with your GENERATION.
- Compare your GENERATION with the weather (cloud coverage).
- Confirm your NET USAGE - or the power you are sending back to the grid!
**Comparison**

The Comparison feature lets you compare different LOCATIONS with each other, for any period of time. Ideal for solar integrators to compare installations, franchise owners to compare stores, industrial facilities to compare systems, etc.

Choose locations to Compare simply by clicking the (+).
**DATA EXPORT**

Export data from any Location for any time period. Spyder sub-loads can be analyzed. Weather can be exported to compare with Solar or Wind Generation.

Please select the location and data points for export.
- Location
- Home-1

- Location NET

Would you like to export subloads?
- Yes
- No

- Home
- HWH
- HVAC-UP
- Fridge-Garage
- HVAC-Down
- Kitchen-Lights
- Fridge-Kitch

Export Spyder Data

Would you like to export weather?
- Yes
- No

Export Weather Data for Solar/Wind analysis

Please select the time frame you would like to export.
- Minute
- Hour
- Day
- Billing Cycle

Please select the time range

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<th>Mar 2015</th>
<th>Apr 2015</th>
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<td>29 30 31</td>
<td>29 30 31</td>
<td>26 27 28 29 30</td>
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Please select the file format to export
- CSV
- Excel
- XML
- JSON

Export
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<th>C</th>
<th>D</th>
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<td>Wind Speed</td>
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</table>
BILLING / TENANT DATA

TED makes the allocation of electricity usage simple for any sub-metering requirement. Choose one Tenant, multiple Tenants, or all Tenants. Billing data can be generated at any time for any particular day(s), or for a complete utility bill cycle. TED will allocate the total kWh usage for each Tenant, as well as the Peak Demand information for each Tenant. Note that only MTUs and Spyder loads that have been set as NET and defined as “Locations” will be listed in the Billing section. If the Tenant you wish to export in Billing is not listed, see the Locations section of this manual for instructions on creating a New Location.

(“Tenants” can be buildings, offices, departments, systems within a factory, or any other area.)
TED Advisor

TED Advisor is a powerful tool that will track what’s going on with your TED system 24 hours a day. TED Advisor will automatically send you alerts via text and/or email to help you meet your energy and cost saving goals. TED Advisor can also report if any TED devices are not reporting as expected.

It is recommended to download the free TED Commander mobile APP (iOS or Android) before setting TED Advisor alerts so that text alerts can be sent to your mobile device. If there are additional individuals to whom you would like to send alerts, simply add them under the Account menu selection so that they will be listed as recipients in Advisor.

Select Advisor and then select the + to create a notification.
Select the Account and Location.
Name the Advice – this is simply a way to group your alerts. For example, let’s say you have a TED system at home and another at work. You may want to create notifications with the names “TED HOME Health” and “TED OFFICE Health” to let you know if one of your TED Systems stops reporting due to internet or network problems. You would then select “send advice when TED Commander has not received a post”. Select the time frame for the alert and the frequency to be notified. Use the < Arrow to back out of Advisor EDIT and the alert is automatically saved.

Other groups of alerts could be based on Cost, Energy usage, or Demand. The advice triggers you create are going to be based on your typical usage, your goals, and your utility’s rate structure.

If you have Demand charges – you definitely want to set notifications for “10-minute kW average.” This will help you make decisions BEFORE you hit a new Peak Demand charge!

If you don’t know where to start, the best approach for using TED Advisor is to experiment with alerts as you learn more about your energy usage from your TED system. For example, after just a few days of data, your TED Commander Calendar Dashboard will show you your usage and cost for a typical day – for example, let’s say your typical cost is $5 per day. A great place to start using Advisor would be to get an alert “when money spent since Midnight” exceeds $3. When you reach the $3 threshold, you’ll receive an alert - letting you adjust your usage for the remainder of the day. Now you are tracking your progress!

Remember, you can also set the parameters of when you receive notifications, because even though reaching your energy saving goals is exciting, you may not want to be notified in the middle of the night.

You will need to allow Notifications to TED Commander on your mobile device to receive text alerts from TED Advisor.
Energy Rate Plans

The energy rate plan should auto-populate when you initially upload your data from TED Footprints. Please go through the fields below and make any corrections that you would like to make. Once the edits are made to the Energy Plan, give the Energy Plan a name that is unique to the facility - then simply click the back arrow (<) to save. The same Energy Plan can be used for all TED System Locations in the same facility.

For an explanation on different types of Energy Plans, see the following link:
http://www.theenergydetective.com/bills
Energy Rate Plans (continued)

Selecting Demand Charges will bring up the Demand Charge window shown here:

After an Energy Plan is edited, be SURE to go back into the Location Edit to make sure the name of the Energy Plan is the one selected from the drop down.
ACCOUNT SETTINGS

Account Information is the area where the OWNER of the account is designated. The Account Owner can give others permission to access the data by adding them as an ‘Account Member.’

The TED Commander portal can be set up to be viewed/accessed in a variety of ways. For example, TED Commander can be setup for:

• an individual User/Location
• a group of people to view an individual Location;
• a franchise owner/manager to view his 27 locations;
  • The individual 27 Locations can be setup for access to ONLY their Location, or set to access ALL 27 Locations

To give Users access to ALL Locations on a Commander Account:
1. Create a Commander Account either by going to http://commander.theenergydetective.com/ or simply Activating an ECC from the ‘TED Commander’ drop-down under SETTINGS in TED Footprints.
2. Log into Commander. Then, under Account Settings, add the email address of the new member on the Account. Set the appropriate privilege level: Administrator, Editing, or Read Only.
3. The new member will have access to all Locations on the Account.

To give Users access to ONLY their Location on a Commander Account:
To set up an account so that an individual/client/tenant can view and edit only his/her individual Commander Location, but you as a business/TED distributor/property owner can view and edit all of your similar clients’ Locations:
1. Create a Commander Account for your business
2. Have your client Activate their ECC from the TED Commander drop-down in TED Footprints (using their email and creating a password).
3. Have the customer log into Commander and then, under Account Settings, add the email address associated with your business. Set the appropriate privilege level: Administrator, Editing, or Read Only.
4. When you then log in under the business email, all of your clients’ Locations will be accessible from the each Commander page.

See ACCOUNT SETTINGS on the next page.
Select to add an additional Member to the Account

Members added can be given permissions with different accessibility to the information

**Add Member**

Please enter the email address of the member you would like to add below and specify their role.

**Email**: ____________________________

**Confirm Email**: _____________________

- Membership type
  - [ ] Administrator
  - [ ] Location Editor
  - [ ] Read Only

**CANCEL**  **ADD**
**User Profile**

The User Profile allows the Owner of the account to change his/her credentials to log in to TED Commander.

To change your user settings, please modify the fields below.

- **First Name**
  - Type First Name

- **Middle Name**

- **Last Name**
  - Type Last Name

- **Email**
  - Type Email Address

- **Password**
  - ***********

  [CHANGE]
**Activation**

If you have a TED Pro system *that includes an ECC*, refer to page 1 of this manual.

The Activation URL and Activation Key shown in the Activation section of the TED Commander menu are used ONLY when posting from a TED Pro MTU or a TED 5000 Gateway. Note: if you are a TED 5000 customer, there is an annual subscription required. If you do wish to purchase a subscription, please send an email to orders@theenergydetective.com and let us know you wish to purchase a subscription.

Note: It is assumed that you have already located the TED Pro MTU User Interface page or TED 5000 Footprints page on your local network AND completed the setup for all MTUs and Spyders. If not, refer to the respective model installation manuals before proceeding.

**Manual Activation**

1. Go to commander.theenergydetective.com and create an account.

2. A link will be sent to the email provided. Select the link to activate the account.

3. Log in to TED Commander at the address shown in step 1. You will see “No Monitoring Points” until Commander is completely setup. This is OK for now, Click OK, then select Activation from the top left drop-down.

4. Copy and Paste the URL and Activation Key from your Commander account to the Energy Posting fields of the TED Pro MTU or TED 5000 Footprints page and Activate.

5. Back in TED Commander, select Energy Rate Plans from the menu drop-down to enter utility settings. Simply back out to save the plan you created. (See details in Energy Rate Plans section of this manual.)

6. Select “Locations” from the TED Commander menu. Select the + in the bottom right to create a Location. Select the Location to complete setup. Give your Location a name – i.e. Smith HOME, Joe’s restaurant, etc. and complete the address information.

Select the Energy Rate Plan you created.

Scroll to the bottom of the Location options and select the “+” to add your Monitoring Points (MTUs and Spyders). You should see the serial numbers of all MTUs posting to your account. For Spyders connected to a TED Pro MTU posting directly to Commander, each Spyder leg 1-16 is identified to correspond to the MTU serial number plus hexadecimal code from 00 to 0F:

**Spyder 1**

- Leg 1 = MTUSN plus 00
- Leg 2 = MTUSN plus 01
- Leg 3 = MTUSN plus 02
- Leg 4 = MTUSN plus 03
- Leg 5 = MTUSN plus 04
- Leg 6 = MTUSN plus 05
- Leg 7 = MTUSN plus 06
- Leg 8 = MTUSN plus 07
Spyder 2
Leg 1 = MTUSN plus 08
Leg 2 = MTUSN plus 09
Leg 3 = MTUSN plus 0A
Leg 4 = MTUSN plus 0B
Leg 5 = MTUSN plus 0C
Leg 6 = MTUSN plus 0D
Leg 7 = MTUSN plus 0E
Leg 8 = MTUSN plus 0F

If monitoring solar, follow the prompts for setup. If not monitoring solar, Monitoring Points on a main panel measuring the total for a particular utility bill are set to NET. Monitoring Points on sub-loads are set to Stand Alone. Select the Monitoring Point to change the Type if required. Simply back out to save the Location. (See more details in Locations section of this manual.)

TED COMMANDER MOBILE APP

The free TED Commander App is available for download from the Apple App Store, the Google Play for Android, and the App store for Amazon Fire. Use the same login credentials as were created for Footprints Activation or at the TED Commander desktop.

Select the Settings Sprocket to
• Set min and max positions on Real-Time Dial
• Change the summary information shown at the bottom of the Calendar page.
• Enter the local IP of the ECC to have one-second reporting on the Real Time Dial

You will need to allow Notifications to TED Commander on your mobile device to receive text alerts from TED Advisor.

AMAZON ALEXA

Currently, there can only be one Commander Location reporting to Alexa per Amazon Account. From your Amazon account, select Alexa Skills from the search options and enter TED Commander. When the Skill is enabled, login to the Commander Account and select the Location to be linked to Alexa.

Using your Alexa device:

“Alexa, ask TED…
• for an Energy Summary.”
• How much energy, (or electricity) have I used today?”
• How much energy, (or electricity) have I used this month (or period, or billing cycle)?”
• What is my bill (or electricity bill, or power bill) going to be?”
• How much have I spent today?”
• What loads are running?” (This reports Spyder Loads)

FOR THOSE WITH SOLAR / WIND
• …How much am I generating right now?”
• What is my generation (or how much have I generated) today?”
• What is my generation (or how much have I generated) this month (or billing cycle, or period)?”