



## DTX UI Definition

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Version 4.0

Version History on last page

Note: This document includes all feature options that can be included in a DTX power supply. Some menus and parameters may not be visible for your particular power supply setup.



**Splash Screen**

Shown on power up

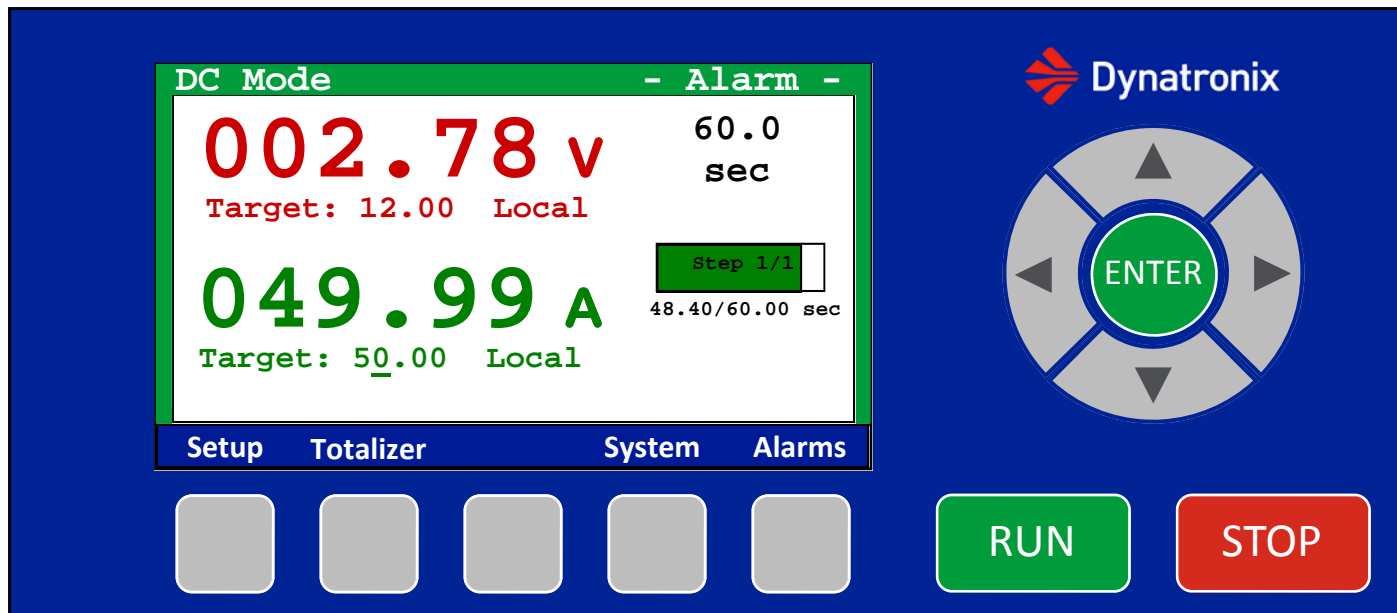
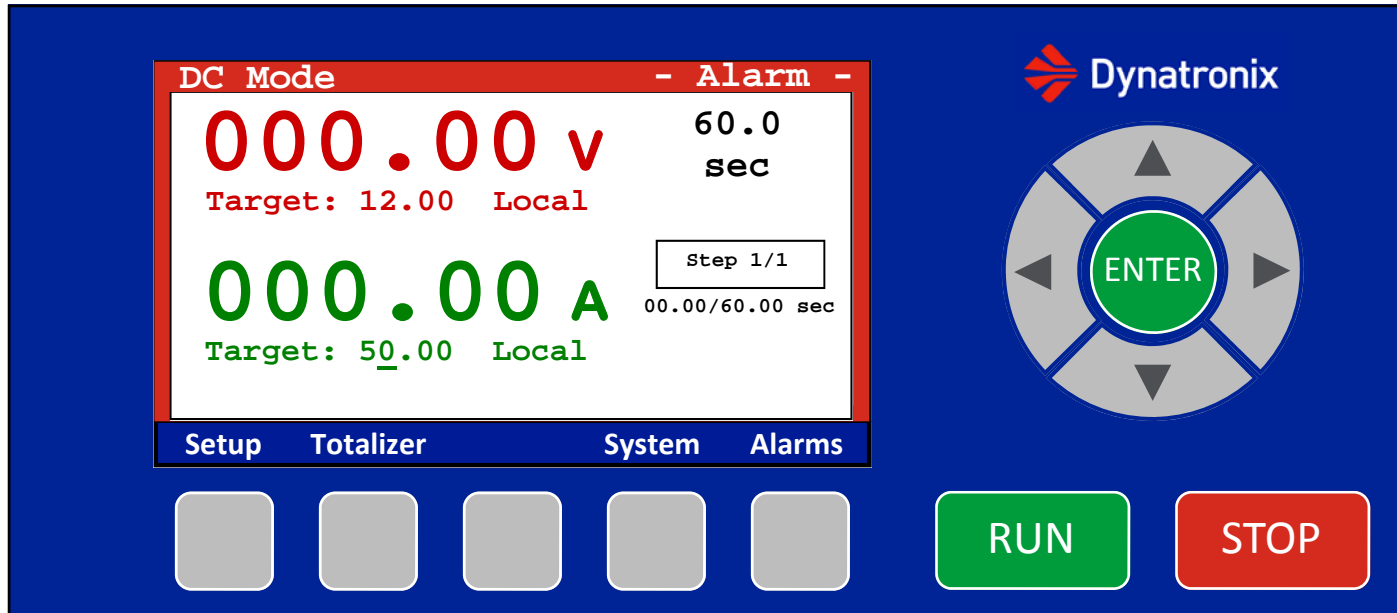
Screen:

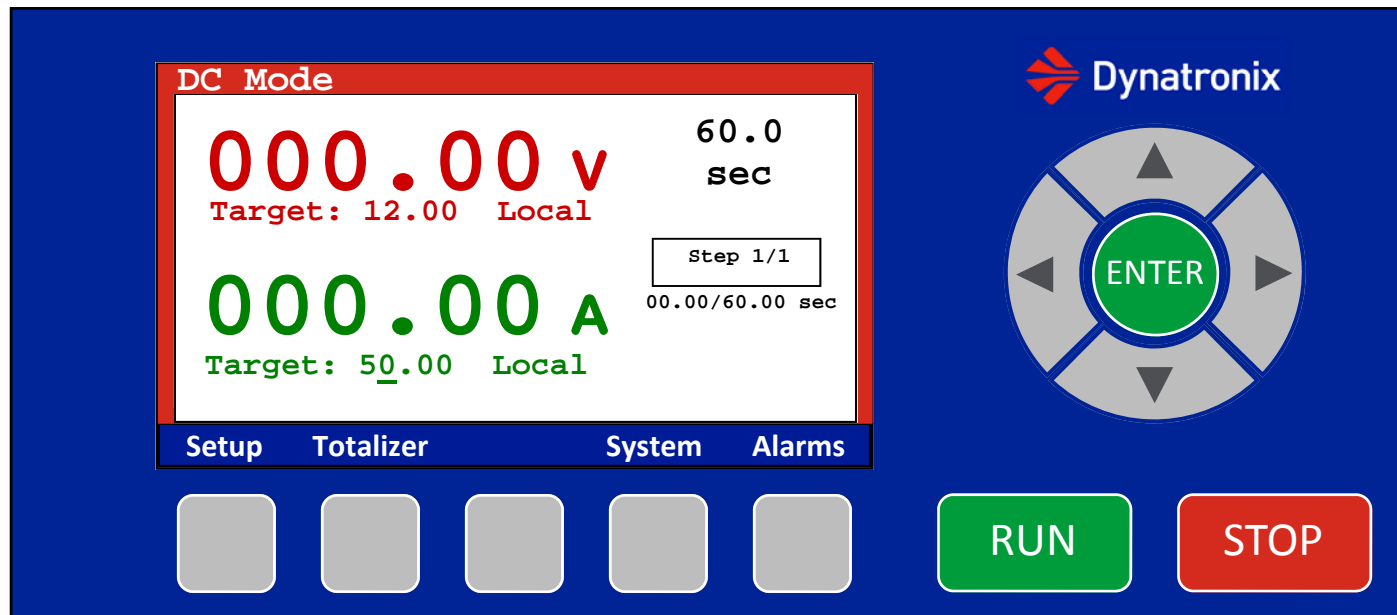
Buttons:

All inactive

**Alarm Indicator**

On ALL screens there is an Alarm indicator in the upper right hand corner that flashes every 500ms anytime there is an active alarm. When there is not an active alarm condition, the alarm indicator is not shown. See Examples:





### HOME Screen in Standby

Screen:

Red outline around outside to signal Standby, Readings at zero during standby, target current, target voltage and ATC/RTC target are editable.

When in Recipe Mode, the top line will say "Recipe:" and have the selected recipe name

Buttons:

Up and Down Arrow buttons adjust the target values, when control mode = Local, (current, voltage or RTC/ATC)

Left and Right Arrows move between digits within the current or voltage or RTC/ATC target values, when control mode = Local,

Enter—switches (underline) input location between parameters—Current Target, Voltage Target, RTC/ATC Target, when control mode = Local

Run—Initiates output, switches to Home Screen in Operate

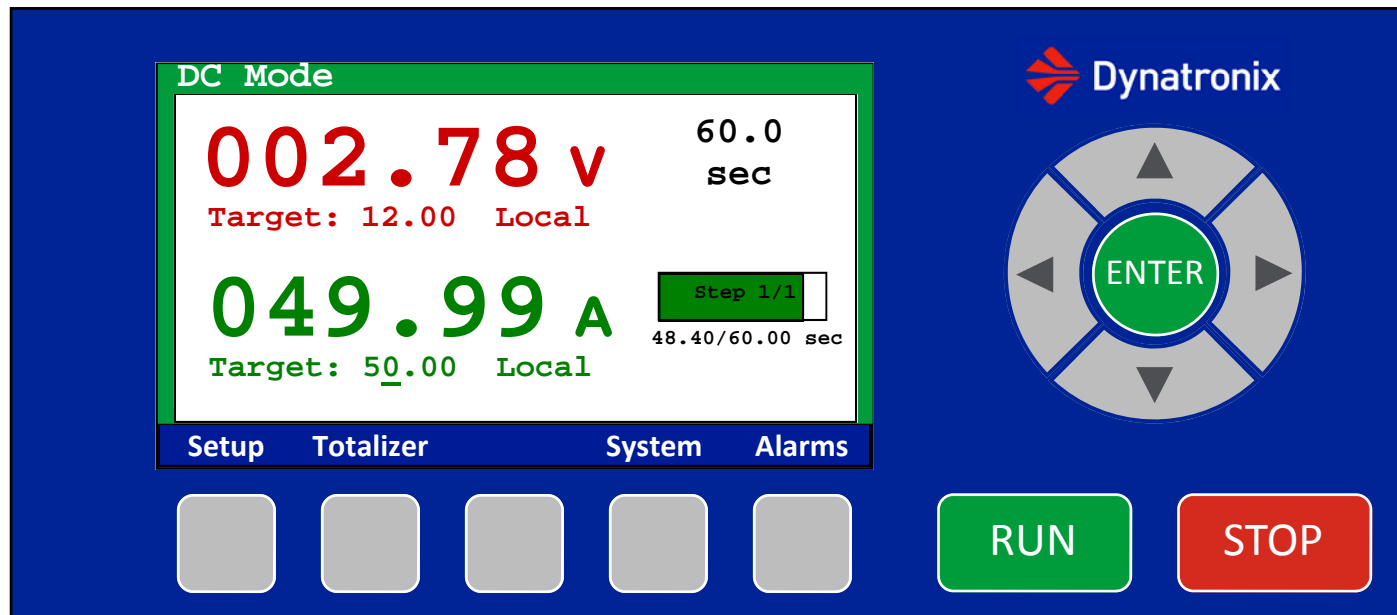
Stop—does nothing here

Setup—Goes to Setup menu

Totalizer—Goes to the Totalizer menu

System—Goes to System menu

Alarms—Goes to Alarms screen



### HOME Screen in OPERATE

Screen:

Green outline around outside to signal Operate

Readings are continually updated but not editable. Readings are a font type where each character takes the same number of pixels (ex: Courier New), so the decimal place doesn't move as the value or number of digits changes.

Target current and target voltage are editable, when control mode = Local. RTC/ATC target is not editable while in operate.

Timer (RTC/ATC control) progress bar fills from the bottom up as time passes.

Buttons:

Up and Down Arrow buttons adjust the target values (Current , Voltage), when control mode = Local

Left and Right Arrows move between digits within the current or voltage target values, when control mode = Local

Enter—switches (underline) input location between parameters—Current Target, Voltage Target, when control mode = Local

Run—does nothing here

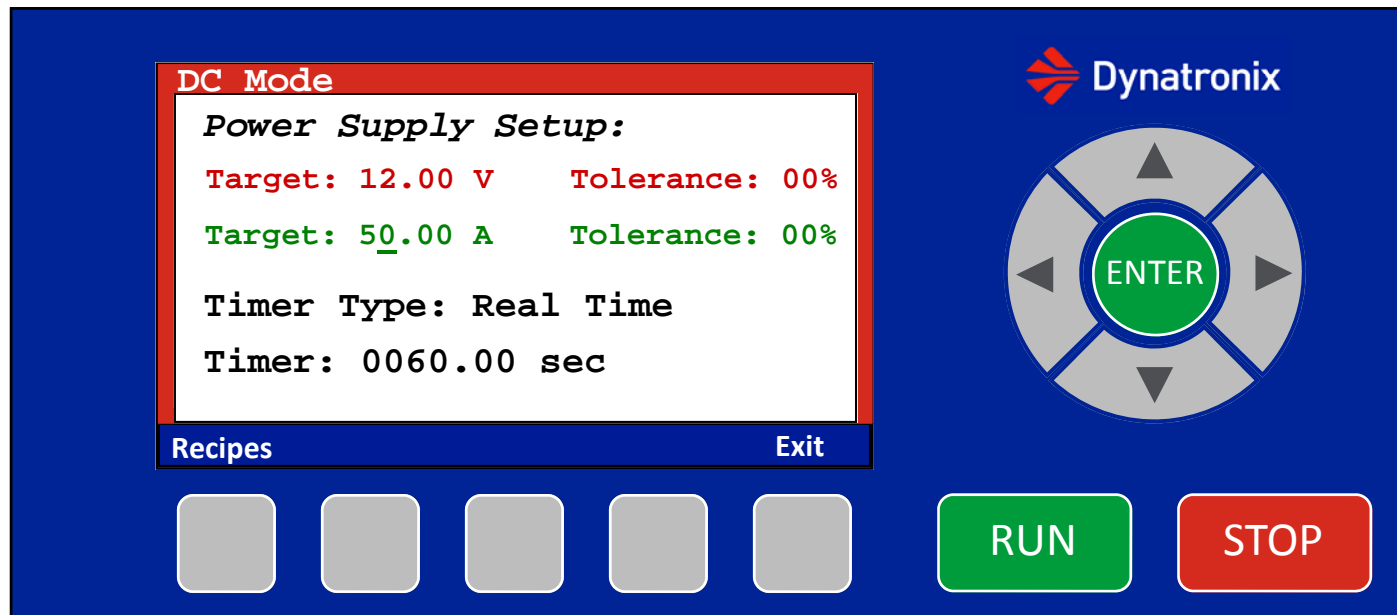
Stop—Initiates standby, switches to Home Screen in Standby

Setup—Goes to Setup menu when in DC Mode. When running a Recipe, the Setup key is disabled.

Totalizer—Goes to the Totalizer menu

System—Goes to System menu

Alarms—Goes to Alarms screen



### Home-Setup Screen in Standby

Screen:

Red outline around outside to signal Standby

Target current, target voltage, timer type (“Real Time”, “Amp Time”, “Manual”), timer target and the timer units are all editable, when control mode = Local.

If the Timer Type = Manual, the Timer Value and Timer Units are not shown since they are not applicable.

Timer type Real Time has units of: “ms”, “sec”, “min”, “hr”, “day”

Timer type Amp Time has units of: “amp sec”, “amp min”, “amp hr”

Buttons:

Up and Down Arrow buttons adjust the underlined value, when control mode = Local.

Left and Right Arrows move between digits within the current, voltage, or timer target values. When on the timer type or timer unit parameters the left and right arrows do nothing, when control mode = Local.

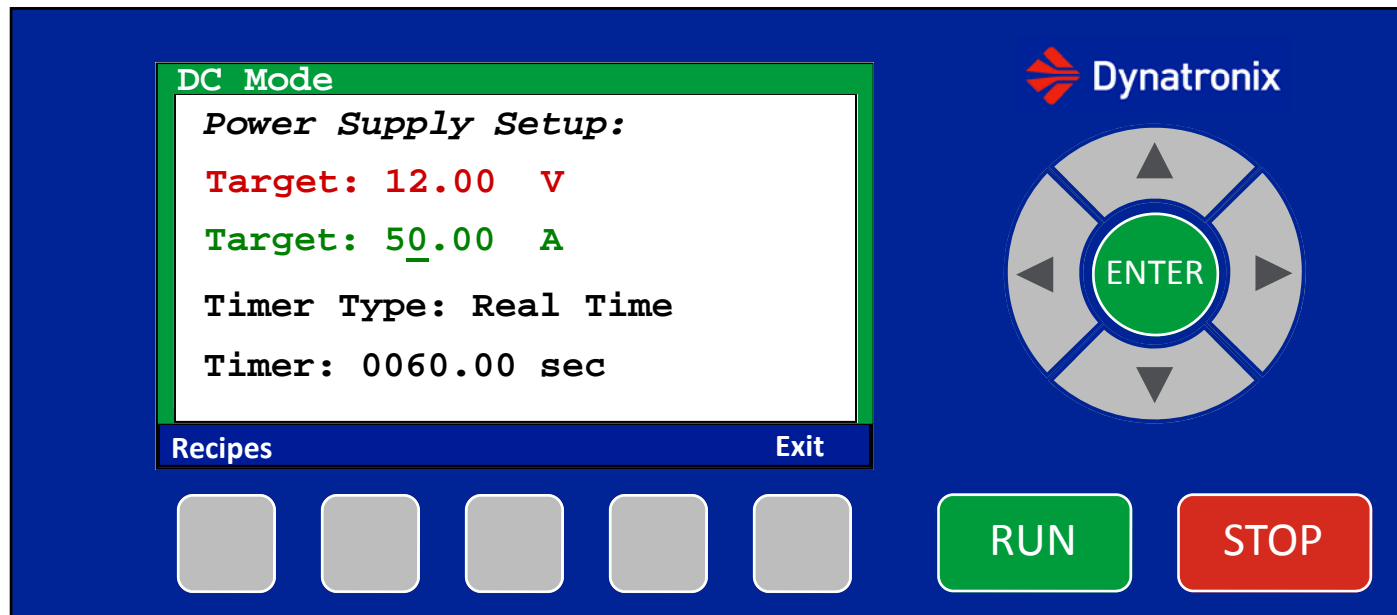
Enter—switches (underline) input location between parameters—Current Target, Voltage Target, Timer Type, Timer Target, Timer Units, when control mode = Local.

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

Recipes—Goes to the Recipe List screen (When Recipe feature is enabled)

Exit—Returns to the Home Screen in Standby



### Home-Setup Screen in OPERATE

Screen:

Green outline around outside to signal Operate

Target current and target voltage are editable, and changes immediately are applied to the power supply output, when control mode = Local.

Target type and Timer are not editable in operate.

Buttons:

Up and Down Arrow buttons adjust the target values (Current or Voltage), when control mode = Local.

Left and Right Arrows move between digits within the current or voltage values, when control mode = Local.

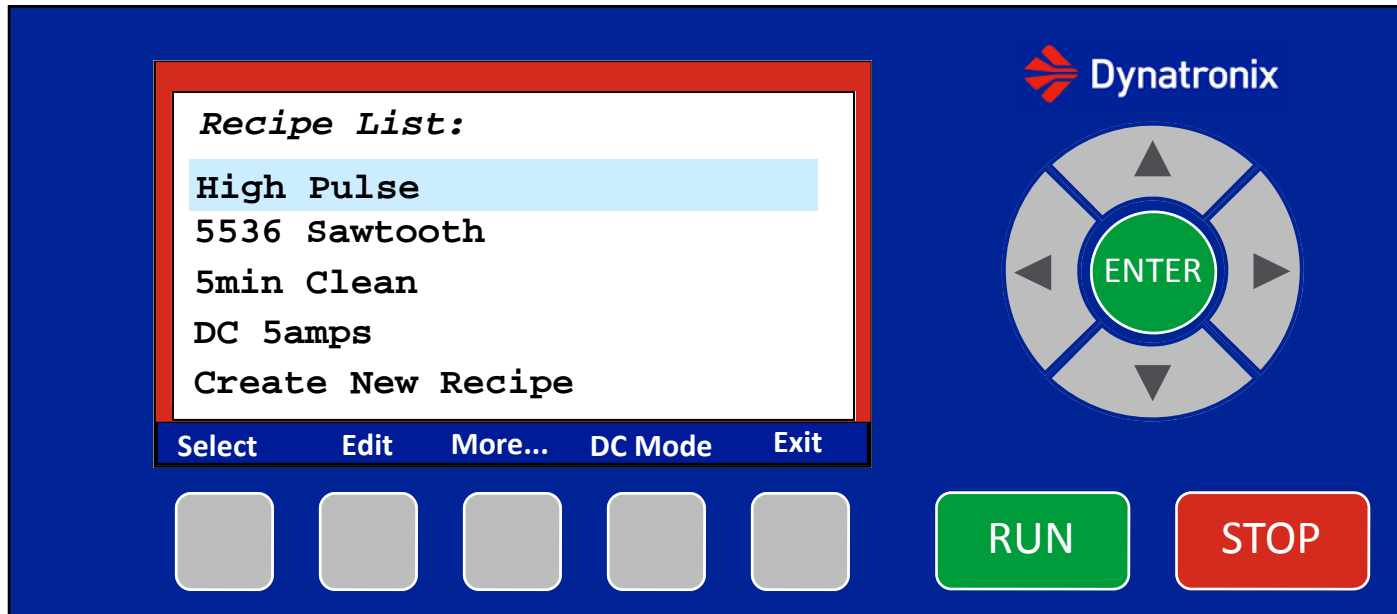
Enter—switches (underline) input location between parameters—Current Target, Voltage Target, when control mode = Local.

Run—does nothing here

Stop—Initiates standby, switches to Home Screen in Standby

Recipes—Goes to the Recipe List screen (When Recipe feature is enabled)

Exit—Returns to the Home Screen in Operate



**Recipe List Screen in Standby**

Screen:

Red outline around outside to signal Standby. Only accessible in Standby.

Buttons:

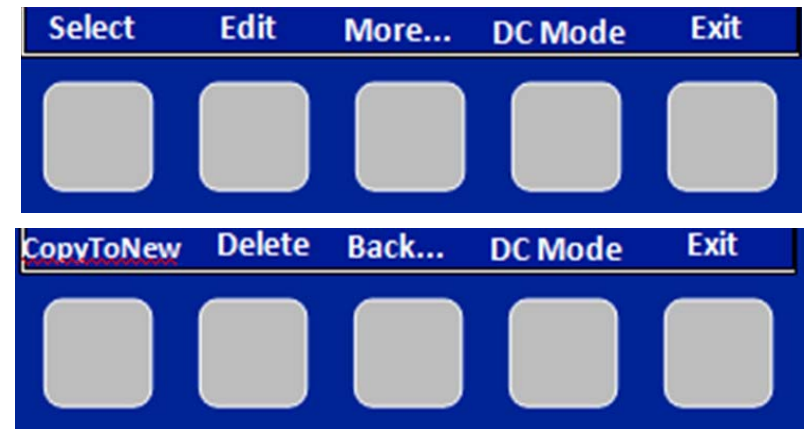
Up and Down Arrow buttons scroll through the stored recipe list

Left and Right Arrows buttons do nothing

Enter does nothing

Run—do nothing

Stop—do nothing



Select—Returns to the home screen and queues the selected recipe to run

Edit—Moves to the Recipe Edit screen to Edit the selected Recipe

More... -Switches to the second soft key menu

DC Mode—Changes to the DC Mode Setup screen, and puts the user into DC control instead of Recipe control.

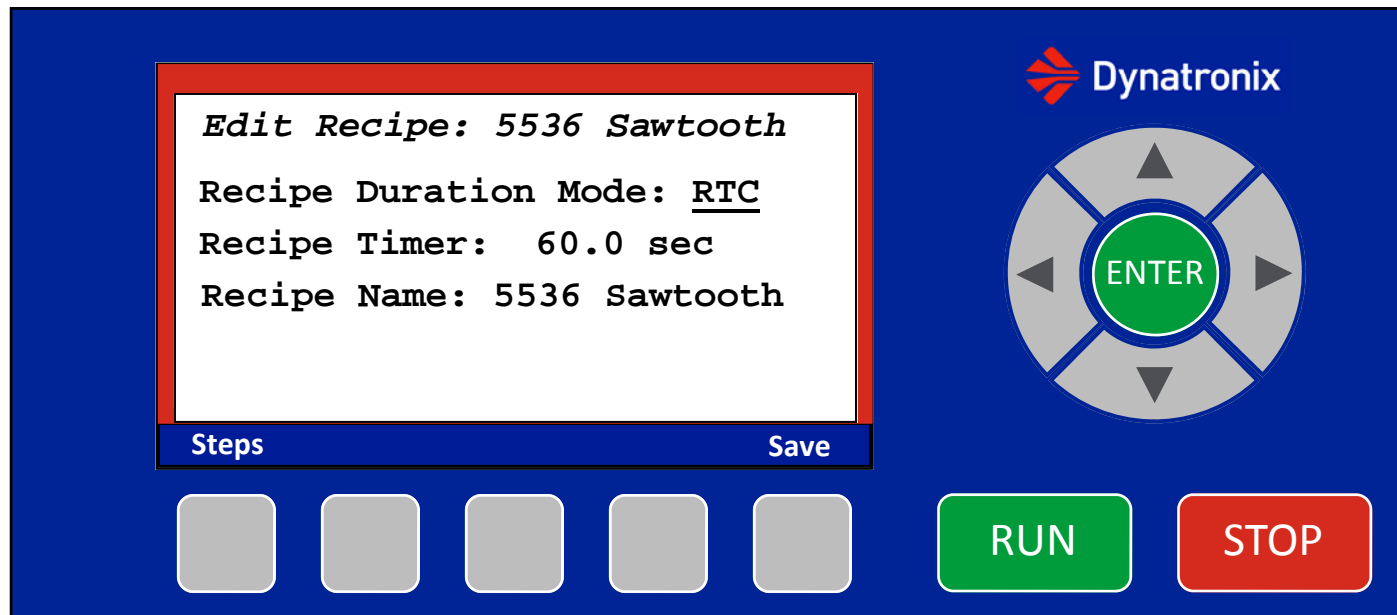
CopyToNew—Copies the highlighted recipe to a new recipe location. Goes to the Edit screen for the newly copied menu.

Delete— When pressed, a pop up message is shown, asking the user if they are sure they want to delete “Recipe 01 Pulse”, options are to delete, or return without deleting.

Back...—Switches to the first soft key menu

Exit—Returns to the Home Screen in Standby, without changing selected recipe





### Edit Recipe Screen in Standby

Screen:

Red outline around outside to signal Standby. Only accessible in Standby.

Recipe Duration Mode options are RTC, ATC, Step, Manual

Recipe Timer is only active for Recipe Duration Modes = ATC or RTC.

Recipe Timer units for Recipe Duration Mode = ATC are amp/hr, amp/min, amp/sec

Recipe Timer units for Recipe Duration Mode = RTC are days, hr (hours), min (minutes), sec (seconds), ms (milliseconds) Minimum value is 4ms.

Recipe Name is an editable 20 character string. Up and down arrow key presses change the underlined letter. Left and right arrow key presses move which character is underlined. Alphabet (all capitals), Numeric (0-9), and a space are allowed characters.

Buttons:

Up and Down Arrow buttons adjust the underlined value.

Left and Right Arrows buttons move between the digits in the Recipe Timer, otherwise they do nothing.

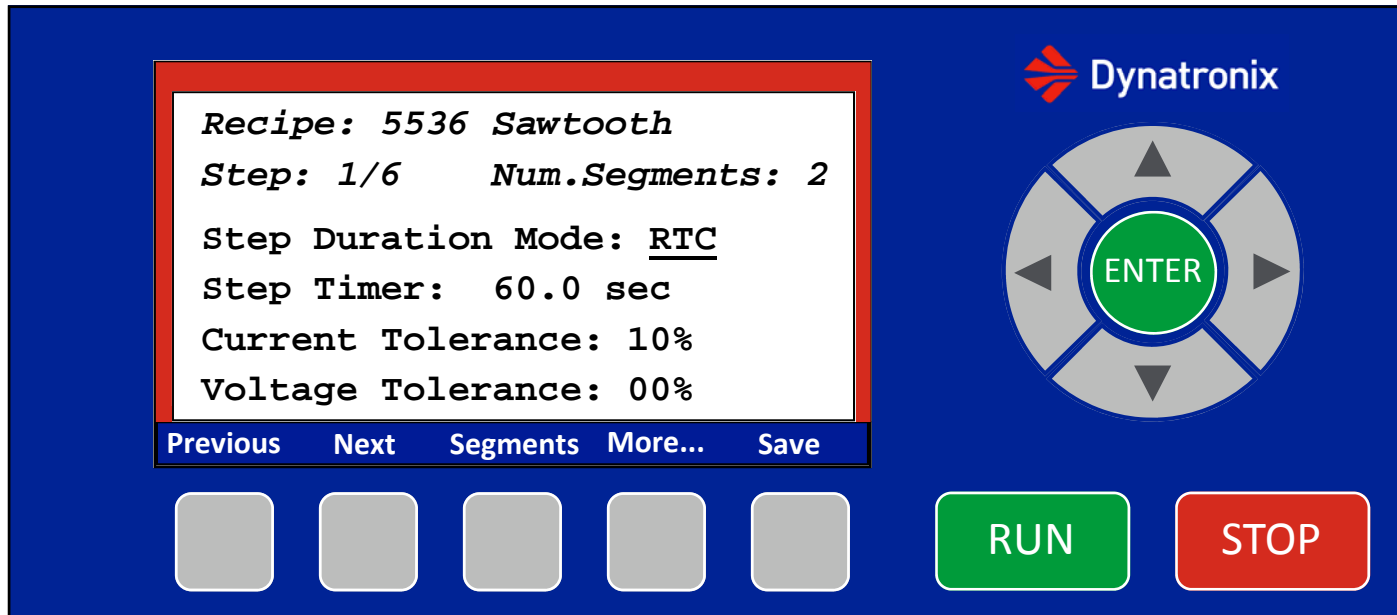
Enter— moves to the next editable value

Run—does nothing here

Stop—does nothing here

Save—Returns to the Recipes in Standby after saving the values

Steps—Saves any changes and goes to the Steps page for the Recipe that is being Edited.



**Edit Recipe-Step Screen in Standby**

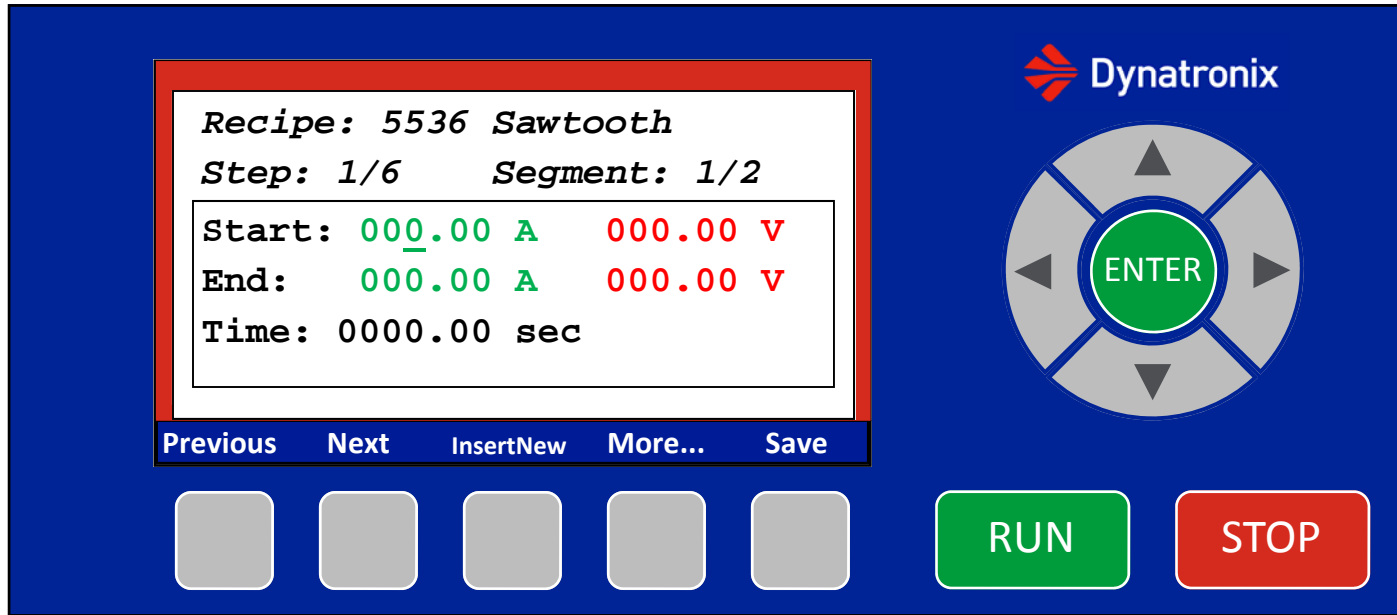
**Screen:**  
 Red outline around outside to signal Standby. Only accessible in Standby. The “Step: 1/6” means the user is looking at step one of the recipe, and there are currently 6 steps in the recipe. The Step number changes as the user moves between the steps within the recipe.

- Step Duration Mode options are RTC, ATC, Segments (runs each segment once)
- Step Timer is only active for Recipe Duration Modes = ATC or RTC.
- Step Timer units for Step Duration Mode = ATC are amp/hr, amp/min, amp/sec
- Step Timer units for Step Duration Mode = RTC are days, hr (hours), min (minutes), sec (seconds), ms (milliseconds) Minimum value is 4ms.
- Step Current Tolerance is a percentage value 0-99%
- Step Voltage Tolerance is a percentage value 0-99%

**Buttons:**  
 Up and Down Arrow buttons adjust the underlined value  
 Left and Right Arrows buttons move between the digits in the Timer and tolerance values.  
 Enter— Moves between the editable items on the screen  
 Run—does nothing here, Stop—does nothing here

- Previous-Moves to the previous step—gray out Previous option when on the first step
- Next-Moves to the next step—gray out Next option when on last step
- Segments—Displays the segments for the current step
- More... -Switches to the second soft key menu
- InsertNew—Inserts a new (blank) step in the recipe after the current recipe step
- CopyToNew—Inserts a copy of the current recipe step after the current recipe step
- Delete— When pressed, a pop up message is shown, asking the user if they are sure they want to delete “Step 1”, options are to delete, or return without deleting. When the recipe only has one step it cannot be deleted.
- Back...—Switches to the first soft key menu
- Save—Returns to the Recipes in Standby after saving the values





**Edit Recipe-Step-Segments Screen in Standby**

**Screen:**

Red outline around outside to signal Standby. Only accessible in Standby. The “Step: 1/6” means the user is looking at step one of the recipe, and there are currently 6 steps in the recipe. The “Segment: 1/2” means the user is looking at segment one and there are two segments in the current step. The Segment number changes as the user moves between the steps within the recipe.

The segment starting and ending current and voltage values are limited by the factory configuration output limits. The segment time units can be days, hr (hours), min (minutes), sec (seconds), ms (milliseconds)

**Buttons:**

Up and Down Arrow buttons adjust the underlined value

Left and Right Arrows buttons move between the digits in the parameters.

Enter— Moves between the editable items on the screen

Run—does nothing here

Stop—does nothing here

Previous-Moves to the previous segment—gray out Previous option when on the first segment

Next-Moves to the next segment-gray out Next option when on last segment

InsertNew—Inserts a new segment in the recipe after the current segment. The new segment will have its start I & V values set to the end values of the previous segment.

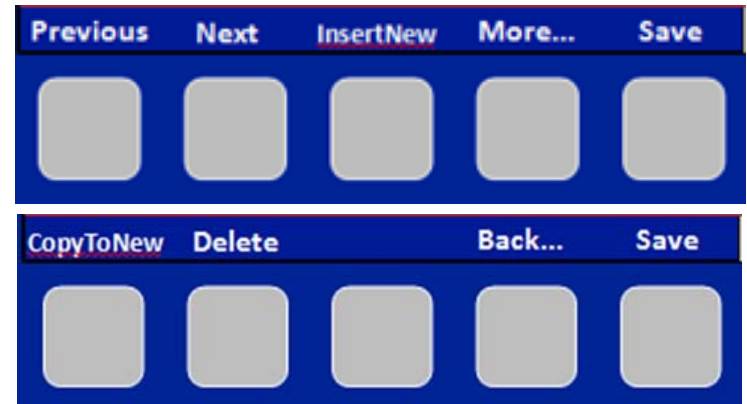
More... -Switches to the second soft key menu

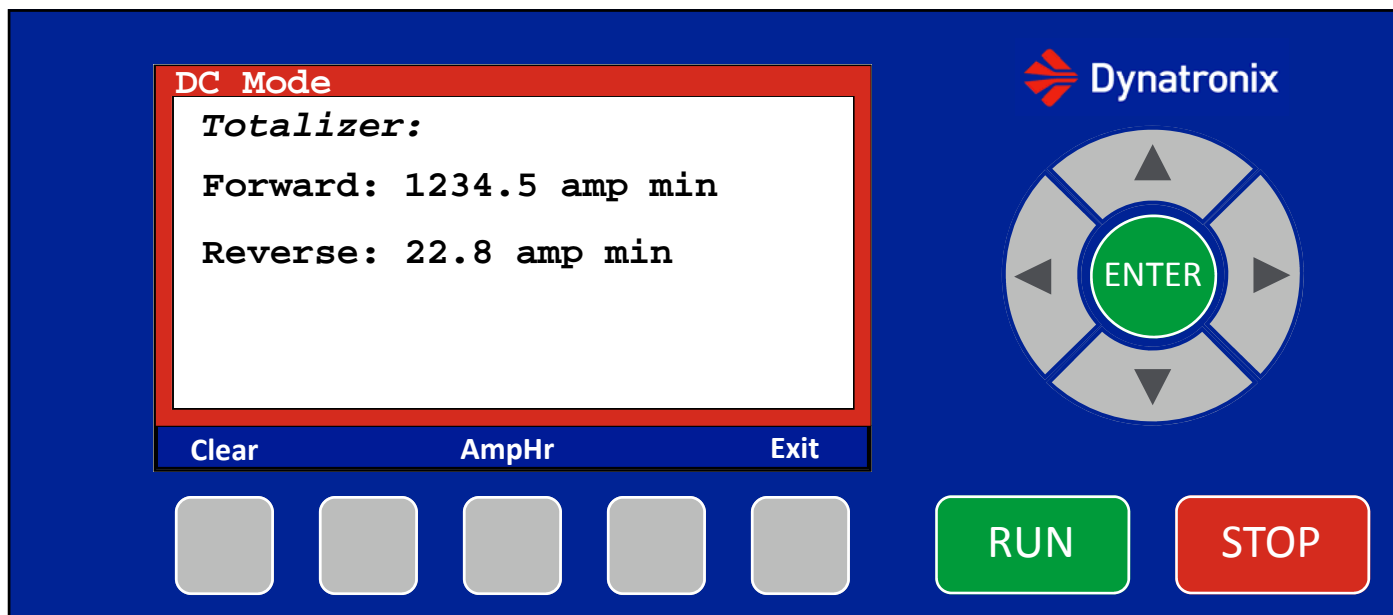
CopyToNew—Inserts a copy of the current segment after the current segment.

Delete— When pressed, a pop up message is shown, asking the user if they are sure they want to delete “Segment 1”, options are to delete, or return without deleting. When the recipe only has one segment it cannot be deleted.

Back...—Switches to the first soft key menu

Save—Returns to the Steps menu, after saving the segments





### Home-Totalizer Screen in Standby

#### Screen:

Red boarder around outside to signal Standby.  
No editable items on this screen

#### Buttons:

Up and Down Arrow buttons do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

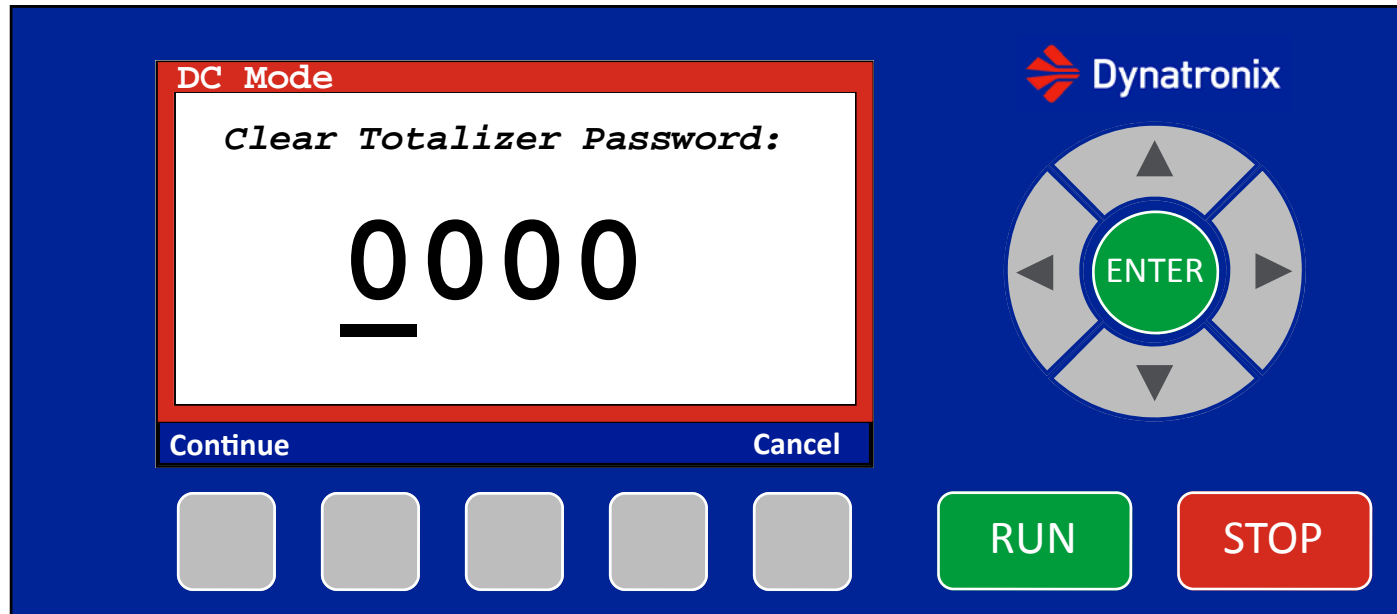
Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

Clear—Shows the User Password screen before clearing the totalizer

AmpHr / AmpMin—Changes the units of the displayed totalizer

Exit—Returns to the System screen



#### Home-Totalizer-Clear Totalizer Screen in Standby

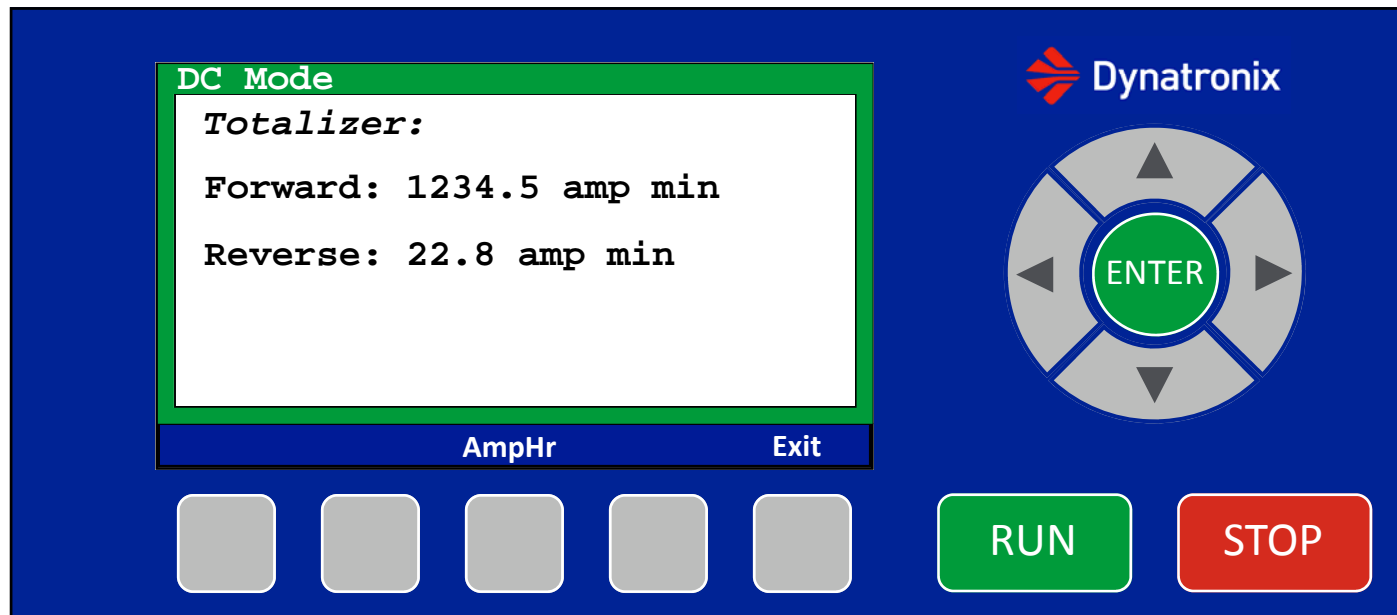
Screen:

Red boarder around outside to signal Standby.  
Password value is editable.

Buttons:

Up and Down Arrow buttons adjust the password value  
Left and Right Arrows move between digits within password value  
Enter—does nothing here  
Run—does nothing here  
Stop—does nothing here

Continue—Checks the password and if it is correct the totalizer is cleared and the menu returns to the Totalizer menu  
Cancel—Returns to the Totalizer menu without clearing the totalizer value.



### Home-Totalizer Screen in Operate

#### Screen:

Green boarder around outside to signal Operate.

No editable items on this screen

Totalizer value is continually updated since the power supply is in Operate

#### Buttons:

Up and Down Arrow buttons do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

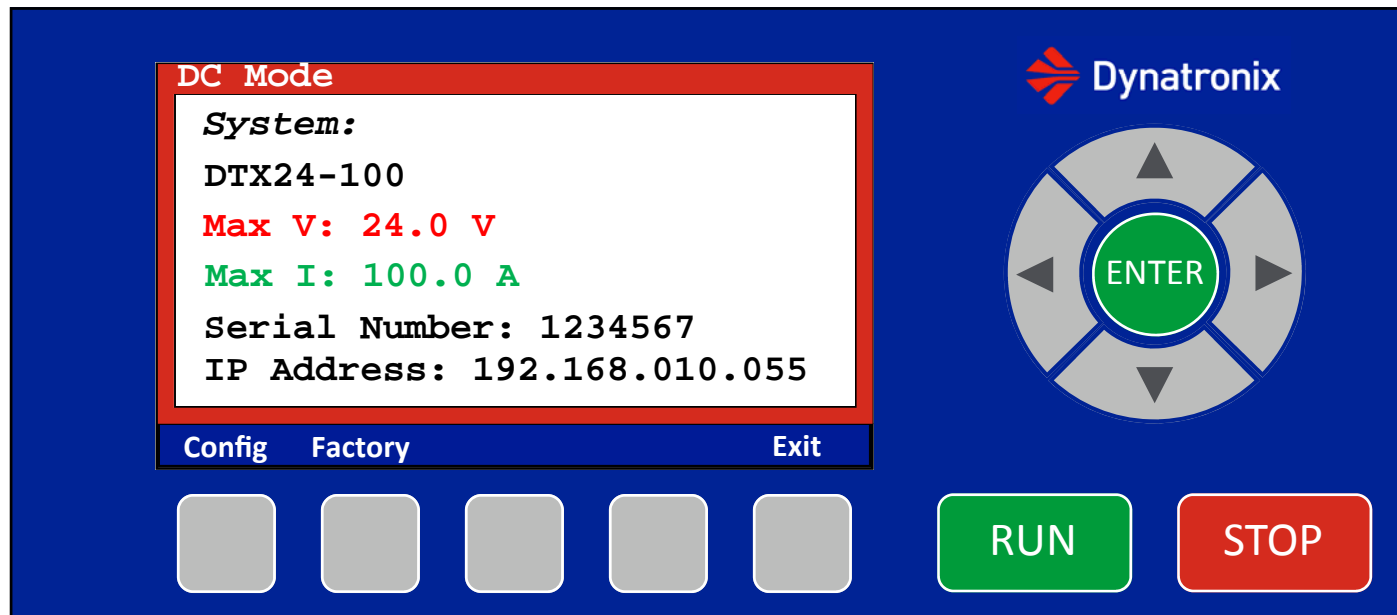
Run—does nothing here

Stop—Initiates Standby, switches to Home Screen in Standby

AmpHr / AmpMin—Changes the units of the displayed totalizer

Exit—Returns to the System screen

(Note: Clearing the totalizer is not allowed while in Operate.)



### Home-System Screen in Standby

#### Screen:

Red boarder around outside to signal Standby.  
No editable items on this screen

#### Buttons:

Up and Down Arrow buttons do nothing here  
Left and Right Arrows do nothing here  
Enter—does nothing here

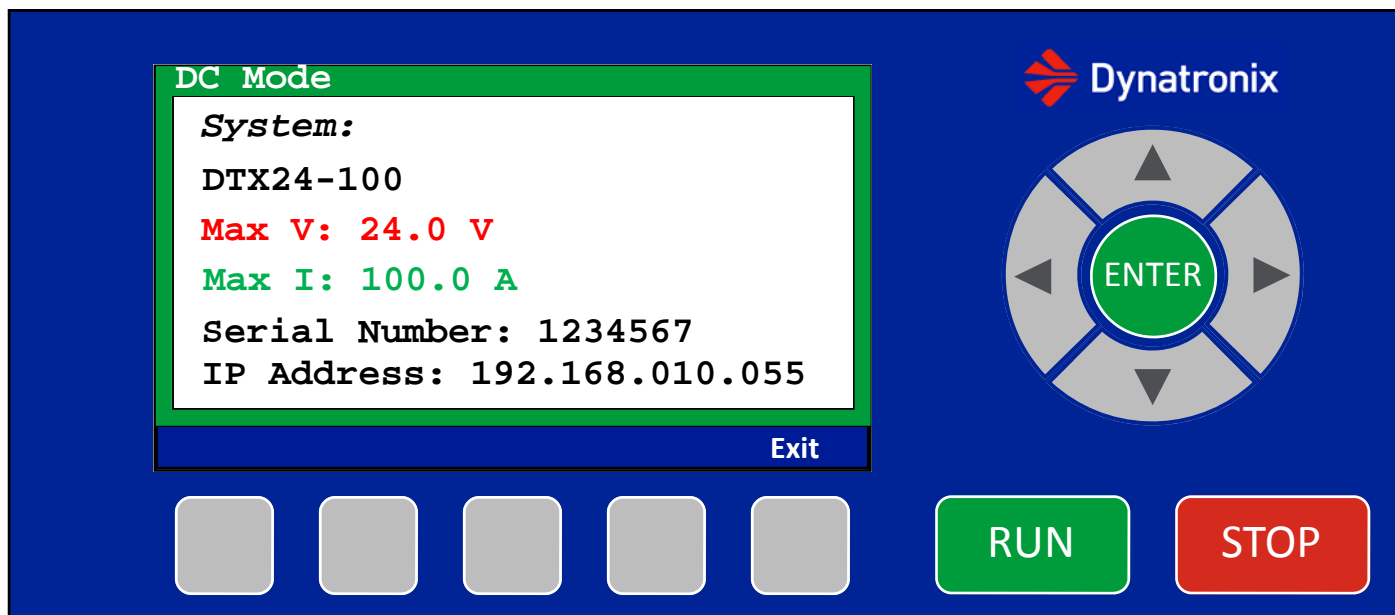
#### If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate  
Stop—does nothing here

Config—Goes to Configuration menu

Factory—Goes to Factory menu

Exit—Returns to the Home Screen in Standby



### Home-System Screen in Operate

#### Screen:

Green boarder around outside to signal Operate.  
No editable items on this screen

#### Buttons:

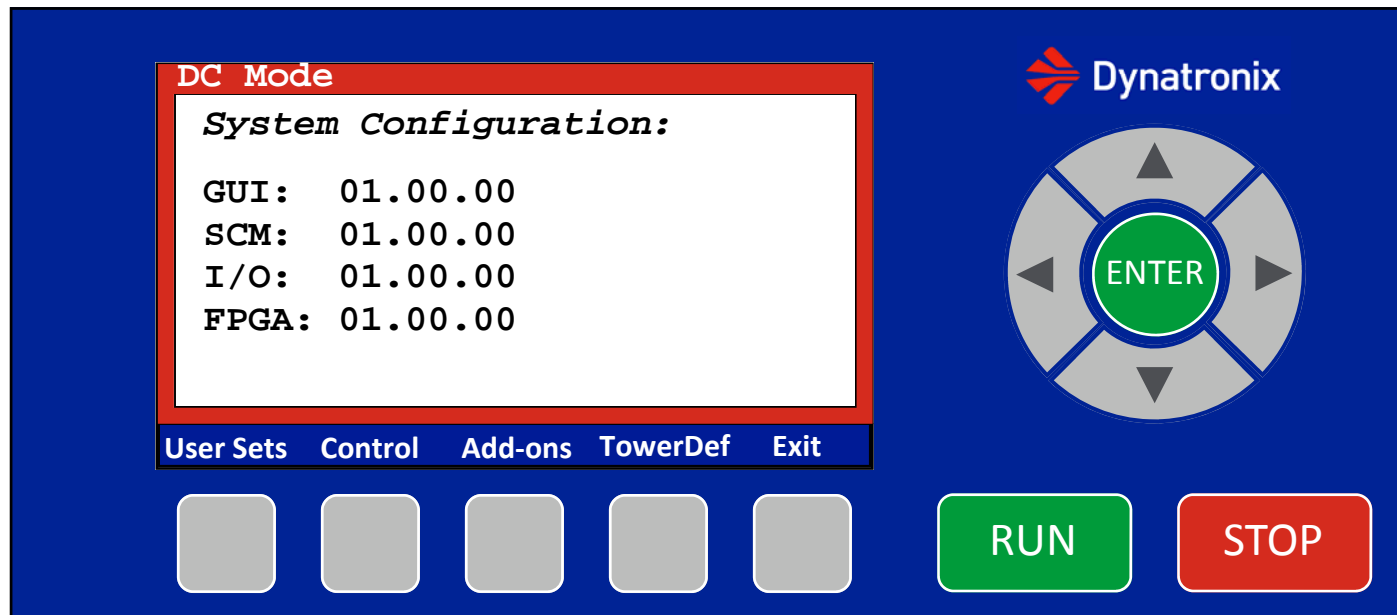
Up and Down Arrow buttons do nothing here  
Left and Right Arrows do nothing here  
Enter—does nothing here

Run—does nothing here  
Stop—Initiates Standby, switches to Home Screen in Standby

Exit—Returns to the Home Screen in Operate

(Note: The Config and Factory menus are only accessible from the System screen while the system is in Standby.)





### Home-System-Config Screen in Standby

Screen:

Red border around outside to signal Standby.

No editable items on this screen

Buttons:

Up and Down Arrows—does nothing here

Left and Right Arrows—does nothing here

Enter—does nothing here

If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

If in Operate:

Run—does nothing here

Stop—Initiates Standby, switches to Home Screen in Standby

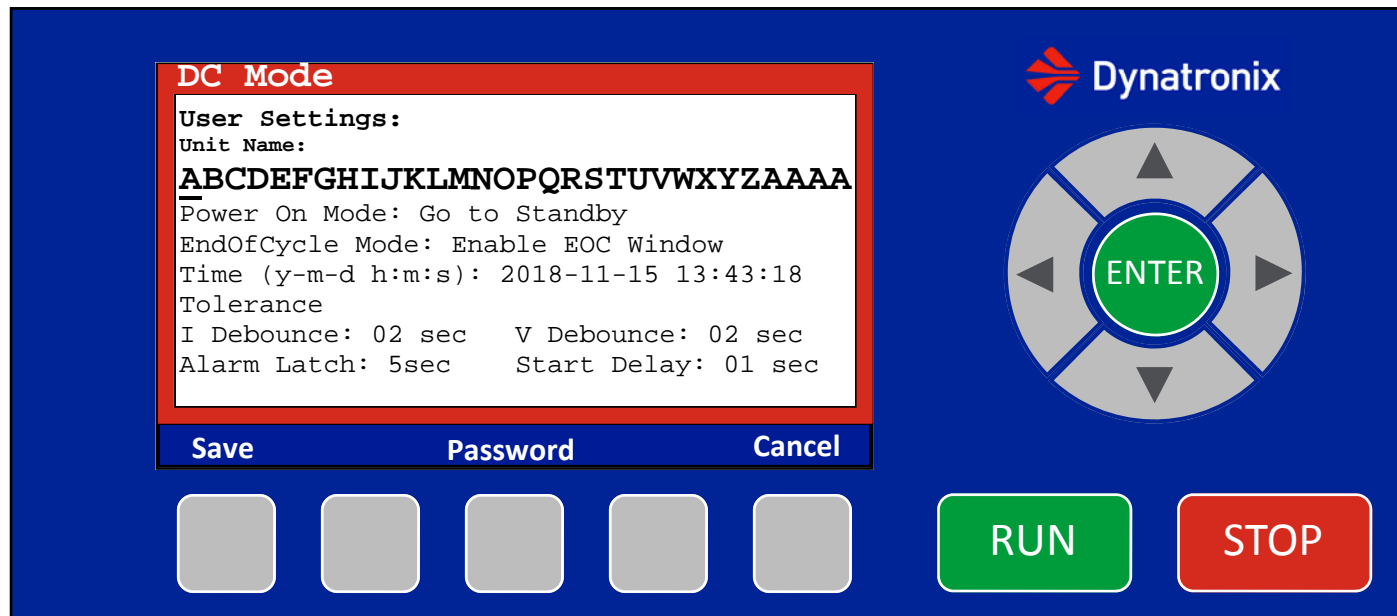
User Sets—Goes to User Settings menu

Control—Goes to Control menu

Add-ons—Goes to Add-ons menu

TowerDef—Goes to Tower Definition menu

Exit—Returns to the System screen



### Home-System-Config-User Sets Screen in Standby

(Note: Unit Name in Operate is the same except the colored boarder is green)

Screen:

Red boarder around outside to signal Standby. (If in Operate the boarder is green)

Buttons:

Up and Down Arrow buttons adjust the underlined value

Left and Right Arrows move between digits/characters within the values. The underline steps over the "."

Enter—switches (underline) input location between parameters—Unit Name, Power on Mode, End of cycle mode, Time, I Debounce, V Debounce, Alarm Latch, Start Delay

If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

If in Operate:

Run—does nothing here

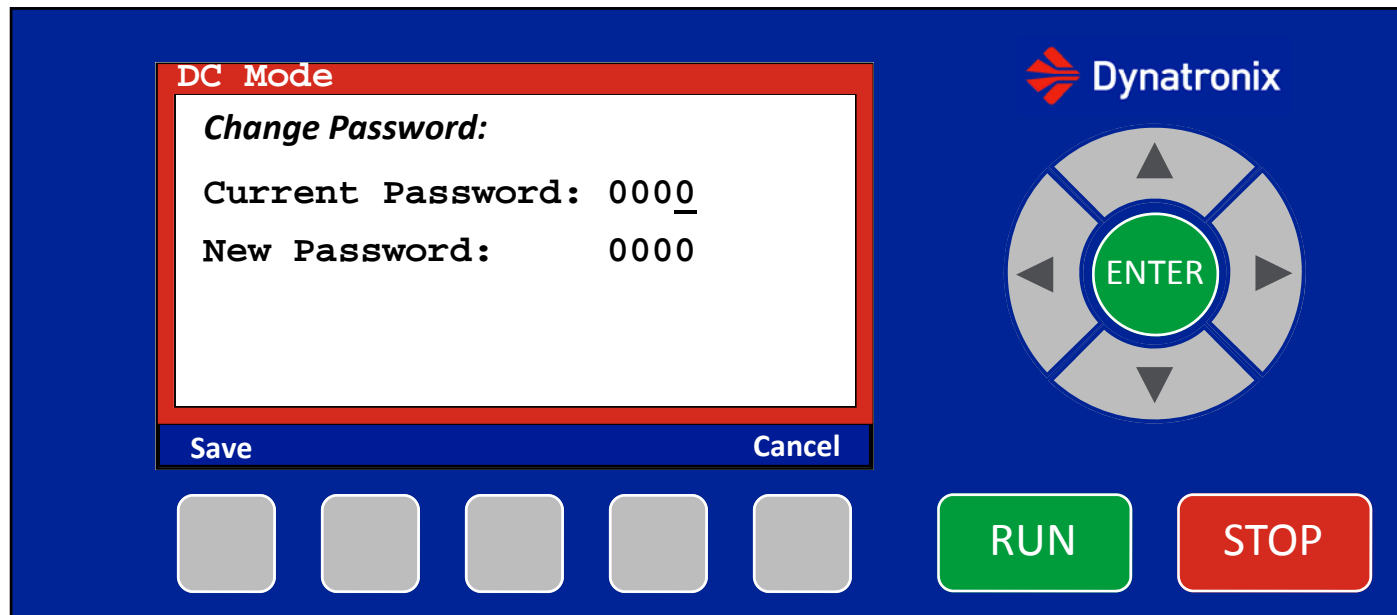
Stop—Initiates Standby, switches to Home Screen in Standby

Save—Save the new Unit Name value

Password—Goes to the user password menu

Cancel—Returns to the System Configuration screen without saving any changes to the Unit Name value.

\*Note: Time value changes are applied live, so they are always saved\*



#### Home-System-Config-User Sets-Password Screen in Standby

(Note: Customer Password is only accessible during Standby.)

Screen:

Red boarder around outside to signal Standby.

Current and New customer password parameters are editable.

Buttons:

Up and Down Arrow buttons adjust the password value

Left and Right Arrows move between digits within password value

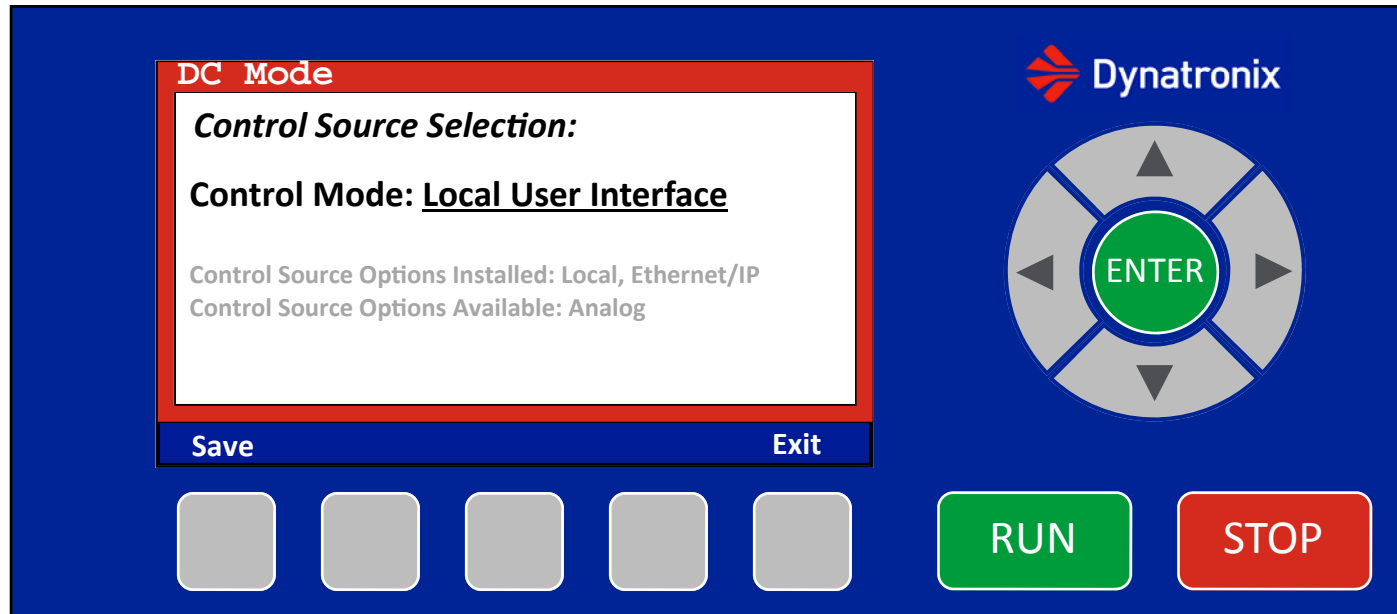
Enter—switches between the Current and New password parameters

Run—does nothing here

Stop—does nothing here

Save—Saves the New customer password as long as the current customer password entry is correct. A pop up message will appear telling the user if the new password was saved or if the current password was incorrect.

Cancel—Returns to the System Configuration screen without saving the customer password



#### Home-System-Config-Control Mode Selection Screen in Standby

(Note: Control Mode is only accessible during Standby.)

Screen:

Red boarder around outside to signal Standby.

Control Mode value is editable

Buttons:

Up and Down Arrow buttons adjust the Control Mode between the installed options.

Left and Right Arrows—does nothing here

Enter—does nothing here

Run—does nothing here

Stop—does nothing here

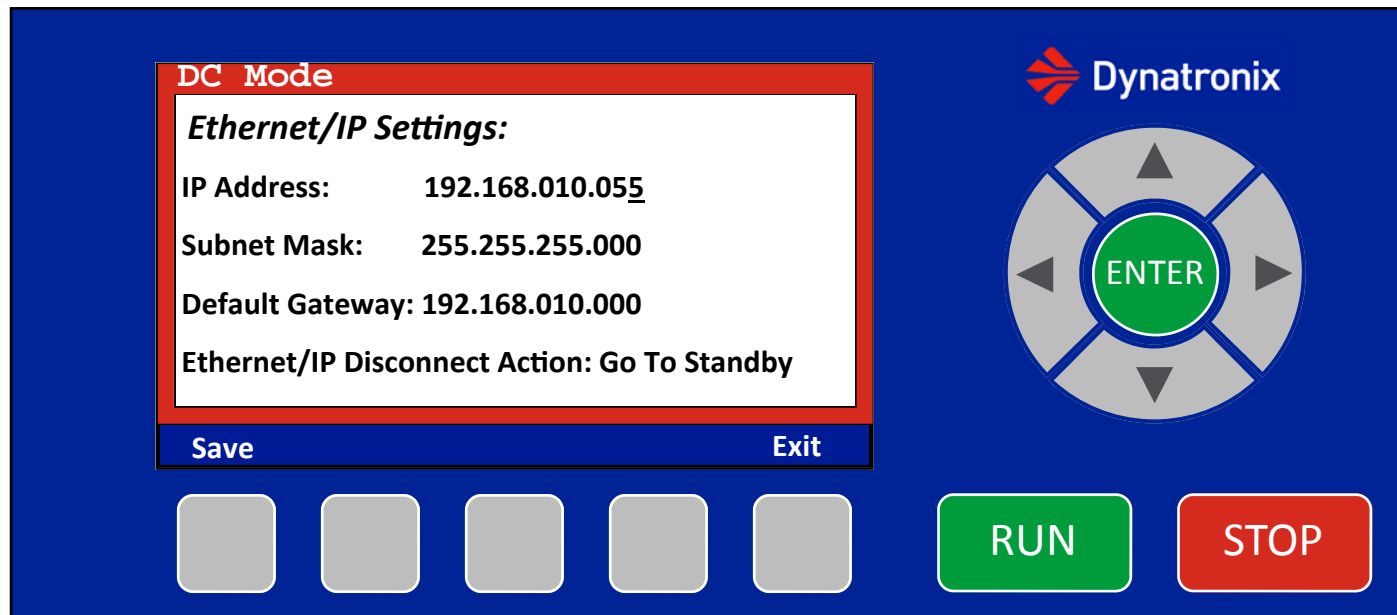
Save—Saves the Control Mode value, then:

If the Control Mode = Local, the screen returns to the System screen.

If the Control Mode = Ethernet/IP, the Ethernet/IP Setup screen will show.

If the Control Mode = Analog, the Analog Configuration screen will show.

Exit—Returns to the System screen without saving any changes to the Control Mode value.



#### Home-System-Config-Control-Ethernet/IP Setup Screen in Standby

(Note: Ethernet/IP Setup Screen is only accessible during Standby.)

Screen:

Red boarder around outside to signal Standby.

Buttons:

Up and Down Arrow buttons adjust the underlined value (IP Address, Subnet Mask, Default Gateway, Disconnect Action)

Left and Right Arrows move between digits within the values. The underline steps over the “.”

Enter—switches (underline) input location between parameters—IP Address, Subnet Mask, Default Gateway, Disconnect Action

Run—does nothing here

Stop—does nothing here

Save—Saves the values, returns to System Configuration Menu

Exit—Returns to the Control Mode screen

**Home->System->Config->Control->Analog Configuration:**

**Analog Configuration:**

Voltage Setting Source: Analog

Volt Ana. Set/Read Type: 4-20mA

Current Setting Source: Analog

Curr. Ana. Set/Read Type: 4-20mA

Press [Save] to save settings and Calibrate or Use

Analog Rating

Save Cancel



**Voltage Setting Source: settings**

UP and DOWN arrows select list items.

**Analog** - Voltage setting controlled by the external analog input.

**Rating** - Setting is set to unit rating and is not adjustable from the front panel. Typically used when “Current Control” of the output is desired.

**ENTER** - Moves to the next item, underlined item is active.

**[Save]**—Saves all settings on screen and start analog Calibration or to Use analog control.

**[Cancel]**—Exits to Control Menu without saving any settings.

**Analog Configuration:**

Voltage Setting Source: Analog

Volt Ana. Set/Read Type: 4-20mA

Current Setting Source: Analog

Curr. Ana. Set/Read Type: 4-20mA

Press [Save] to save settings and Calibrate or Use

4-20mA  
0-10V

Save Cancel



**Set Voltage Analog Setting/Reading Type:**

UP and DOWN arrows select list items.

**4-20mA** - a 4mA to 20mA input signal sets the Voltage output from 0 to 100% of rating.

**0-10V** - a 0V to 10V input signal sets the Voltage output from 0 to 100% of rating.

**ENTER** - Moves to the next item, underlined item is active.

**[Save]**—Saves all settings on screen and start analog Calibration or to Use analog control.

**[Cancel]**—Exits to Control Menu without saving any settings.

**Analog Configuration:**

Voltage Setting Source: Analog

Volt Ana. Set/Read Type: 4-20mA

Current Setting Source: Analog

Curr. Ana. Set/Read Type: 4-20mA

Press [Save] to save settings and Calibrate or Use

Analog Rating

Save Cancel



**Current Settings, Repeat above steps for Current control.**

UP and DOWN arrows select list items.

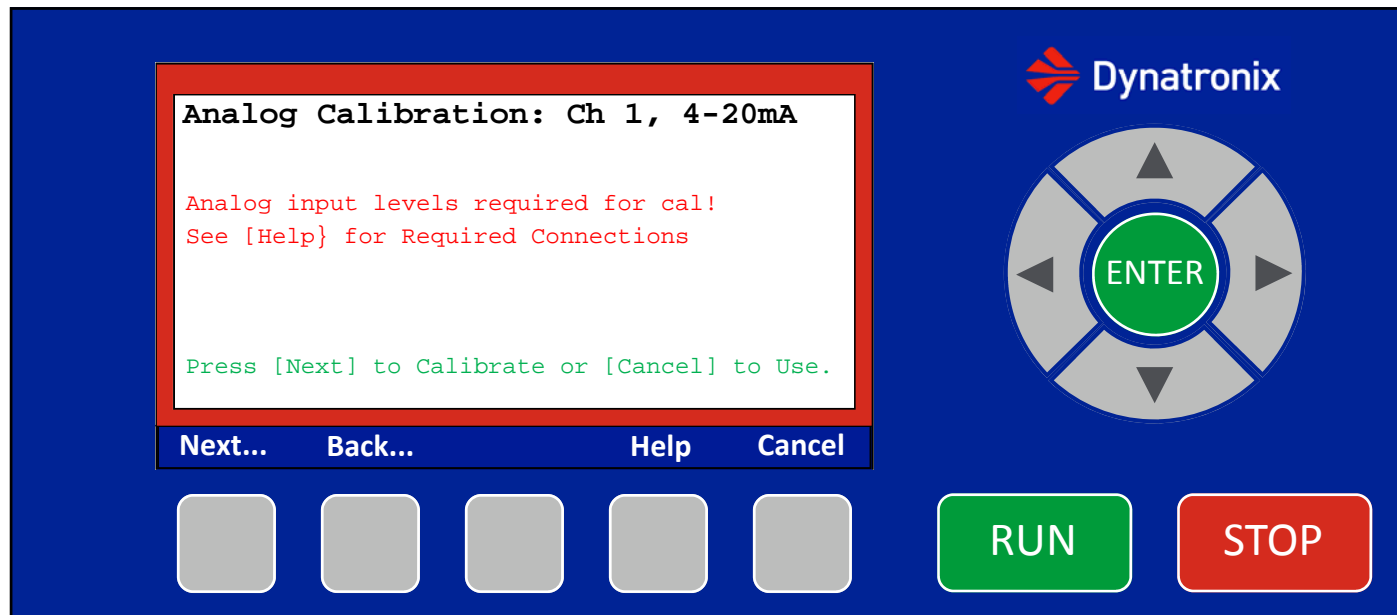
**Analog** - Current setting is controlled by the external analog input.

**Rating** - Setting is set to unit rating and is not adjustable from the front panel. Typically used when “Voltage Control” of the output is desired.

**ENTER** - Moves to the next item, underlined item is active.

**[Save]**—Saves all settings on screen and start analog Calibration or to Use analog control.

**[Cancel]**—Exits to Control Menu without saving any settings.



**Home->System->Config->Control->Analog Configuration->Analog Calibration: Screen in Standby**

Red outline around outside to signal Standby

**Buttons**

▲ ▼ Arrow buttons Adjust the underlined value.

◀ ▶ Arrow buttons do nothing here.

**ENTER** — Does nothing here.

**RUN** — Does nothing here.

**STOP** — Does nothing here.

**Next...**—Will say **Next** if there are more items to be adjusted or **Save** at the last item to be set and will save the settings to flash. Then it returns to the System screen.

**Back...** — Returns to the previous screen or calibration item. If on a settings screen it will return to the first setting on the screen and input values will have to be recalibrated by stepping through the calibration.

**Help** — Brings up a window showing the required connections from analog calibration and some basic procedure notes.

**Cancel** — Returns to the System screen without saving any calibration changes

**Home->System->Config->Control->Analog Configuration->Analog Calibration: - Output/Input Cal**

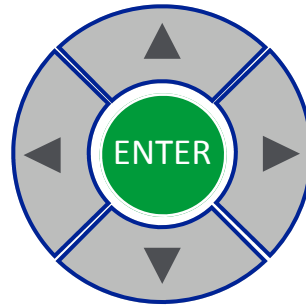
Menus are similar for Channel 2 and for 0-10V Calibration

Analog Calibration: Ch1 4-20mA

	Value	In Read
Adjust Ch1 value so output = 20.0mA:	3825	
AutoCalibrating Ch1 Input @ 20.00mA:	3746	

Press [Next] when 20mA output is calibrated

Next... Back... Help Cancel



**Adjust Analog Channel 1 Output High Calibration Point:**

**Left** and **Right** arrows select the digit to adjust.

**Up** and **Down** arrows adjust the calibration value. Adjust it until an external meter connected to the Channel 1 Analog output reads the value shown (i.e. = 20.00mA / = 10.00V).

NOTE: The calibration mode Auto-Calibrates the inputs so the output should be looped back to the input or an external calibration source should be connected to the input and set to the same value as the output is being adjusted to.

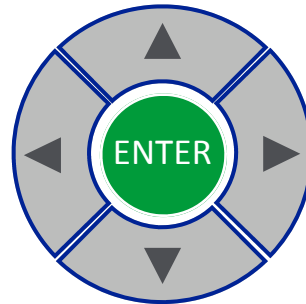
Press **[Next]** to go to the low calibration point adjustment:

Analog Calibration: Ch1 4-20mA

	Value	In Read
Ch1 20.0mA output calibrated	3825	
Adjust Ch1 value so output = 4.0mA:	871	
Ch1 20.0mA input calibrated	3746	
AutoCalibrating Ch1 Input @ 4.00mA:	943	

Press [Next] when 4mA output is calibrated

Next... Back... Help Cancel



**Adjust Analog Channel 1 Output Low Calibration Point:**

**Left** and **Right** arrows select the digit to adjust.

**Up** and **Down** arrows adjust the calibration value. Adjust it until an external meter connected to the Channel 1 Analog output reads the value shown (i.e. = 4.00mA / = 1.00V).

Press **[Next]** to go to the Input calibration check.

Press **[Back]** to go to the previous item or screen.

Press **[Help]** to view a connection diagram and calibration procedure.

Press **[Cancel]** to return to the System: screen and NOT SAVE any calibration values.



### Home->System->Config->Control->Analog Configuration->Analog Calibration: - Input Cal Review

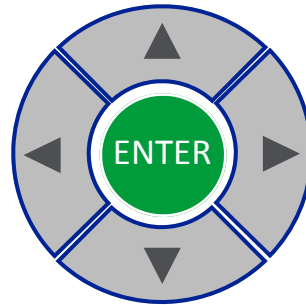
Menus are similar for Channel 2 and for 0-10V Calibration

**Analog Calibration: Ch1 4-20mA**

	Value	In Read
Ch1 20.0mA output calibrated	3825	
Ch1 4.0mA output calibrated	871	
Ch1 20.0mA input calibrated	3746	20.00
Ch1 4.0mA input calibrated	943	

Press [Next] after viewing calibrated reading

Next...
Back...
Help
Cancel



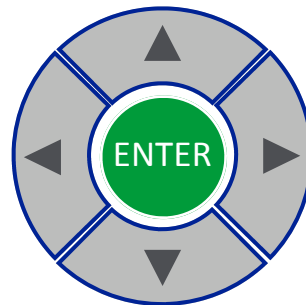
**Check Input High Calibration Point:**  
**Left** and **Right** arrows do nothing.  
**Left** and **Right, Up** and **Down** arrows do nothing.  
 NOTE: This step is used to review the actual input calibrated reading. It should show 20.00mA/10.00V +/- a few counts.  
 Press **[Next]** to go to the low calibration point check:  
 Press **[Back]** to return to the Check Input High Calibration Point step.  
 Press **[Cancel]** to return to the System: screen and NOT SAVE any calibration values.

**Analog Calibration: Ch1 4-20mA**

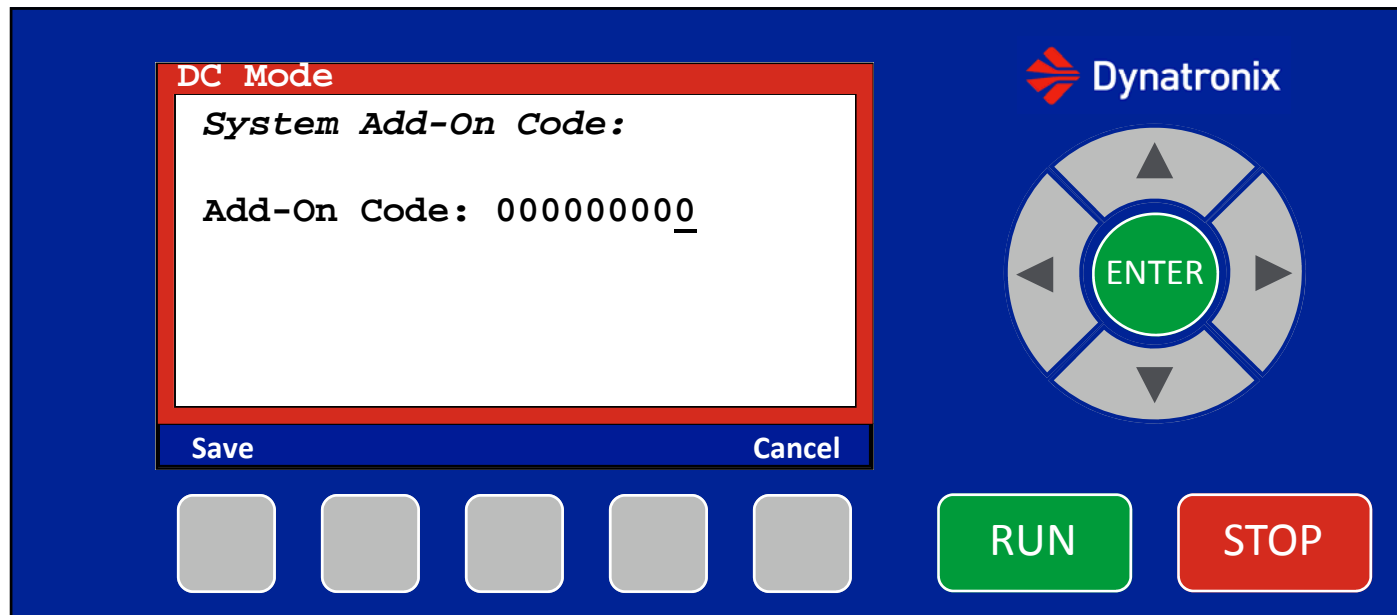
	Value	In Read
Ch1 20.0mA output calibrated	3825	
Ch1 4.0mA output calibrated	871	
Ch1 20.0mA input calibrated	3746	
Ch1 4.0mA input calibrated	943	4.00

Press [Next] for Ch2 Cal or [Save]/[Cancel] to exit

Next...
Back...
Save
Help
Cancel



**Check Input High Calibration Point:**  
**Left** and **Right** arrows do nothing.  
**Left** and **Right, Up** and **Down** arrows do nothing.  
 NOTE: This step is used to review the actual input calibrated reading. It should show 4.00mA/1.00V +/- a couple counts.  
 Press **[Next]** to go to Ch2 calibration screen:  
 Press **[Back]** to return to the Check Input High Calibration Point step.  
 Press **[Save]** to save Ch1 calibration values.  
 Press **[Cancel]** to return to the System: screen and NOT SAVE any calibration values.



### Home-System-Config-Add-On Code Screen in Standby

(Note: Add-On Code not accessible during operate)

#### Screen:

Red boarder around outside to signal Standby.

Add-on Code is editable. The Add-on code is a customized code based on the Serial Number of the unit and the add-ons purchased. An add-on code for one DTX will not work on a different DTX unit with a different serial number.

#### Buttons:

Up and Down Arrow buttons adjust the add-on code value

Left and Right Arrows move between digits within the add-on code.

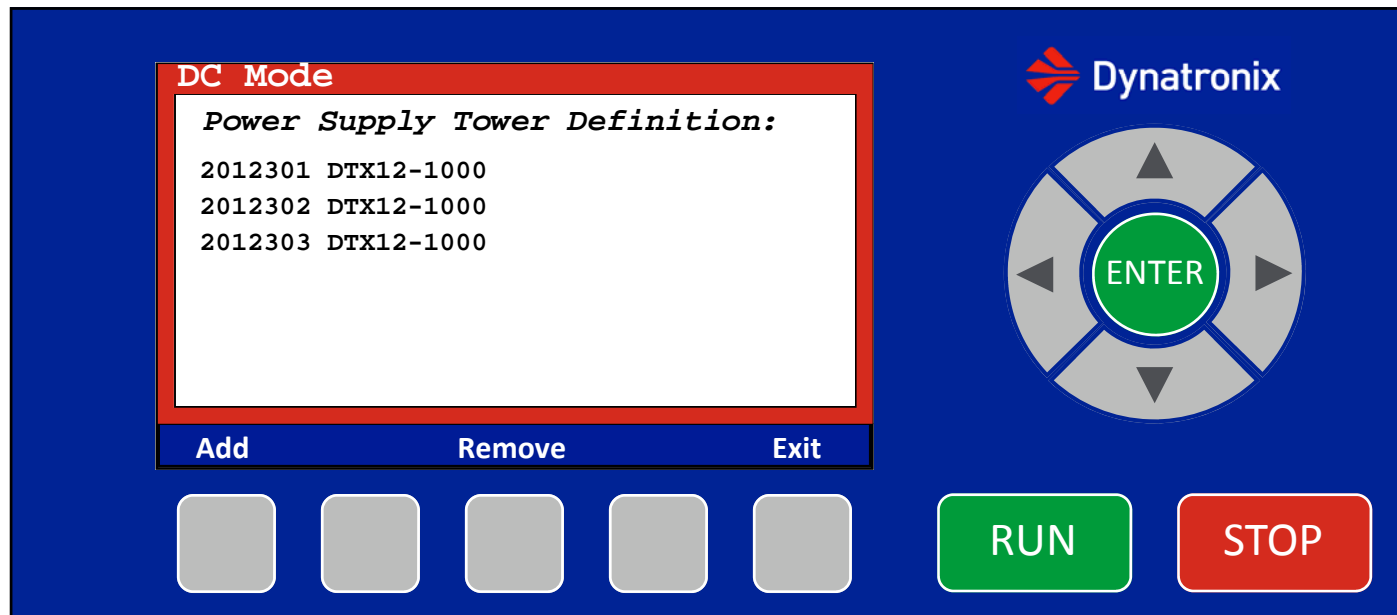
Enter—does nothing here

Run—does nothing here

Stop—does nothing here

Save—Verifies the code against the serial number of the unit, and if it is valid, the new add-on code is saved.

Cancel—Returns to the System Configuration screen without saving any changes



### Home-System-Config-Tower Definition Screen in Standby

(Note: Tower Definition not accessible during operate)

#### Screen:

Red boarder around outside to signal Standby.

The power module listing shows the current tower definition. Connected modules serial number and ratings are displayed. If a power module is disconnected (cannot connect via serial link), the line will show in red to identify that the module has a problem

#### Buttons:

Up and Down Arrow buttons —does nothing here

Left and Right Arrows —does nothing here

Enter—does nothing here

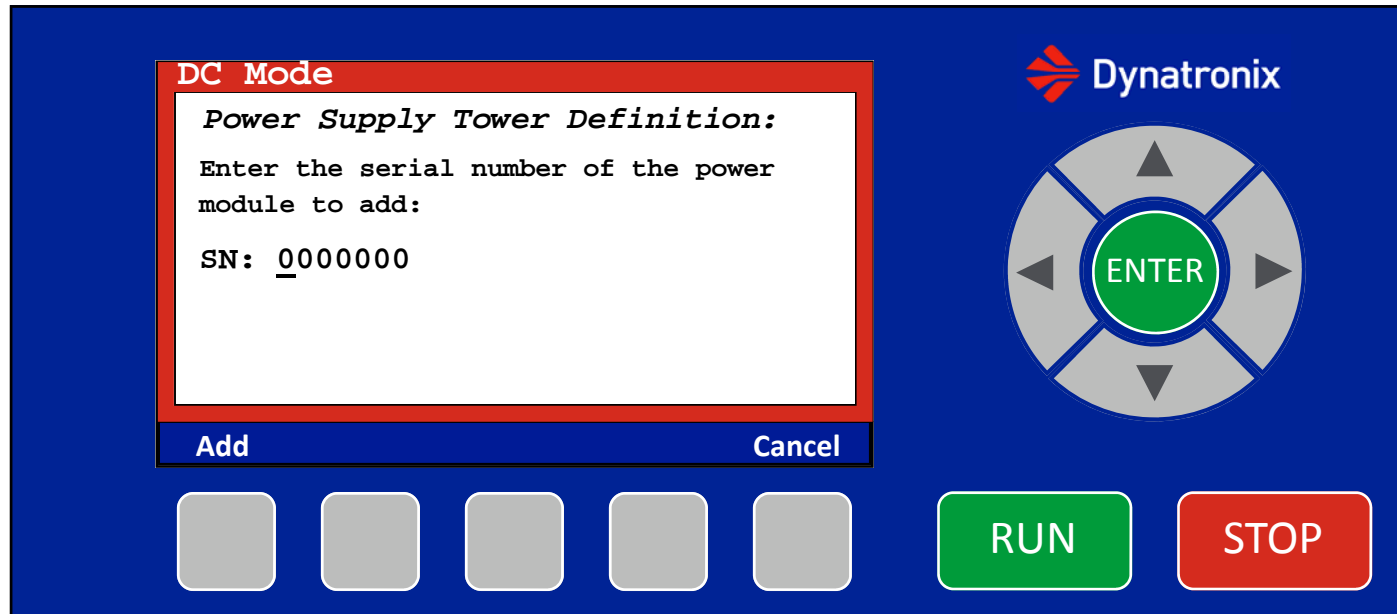
Run—does nothing here

Stop—does nothing here

Add—Goes to the Add module screen

Remove—Goes to the Remove module screen

Exit—Returns to the System Configuration screen



#### Home-System-Config-Tower Definition-Add Screen in Standby

(Note: Tower Definition not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

Buttons:

Up and Down Arrow buttons adjust the serial number value

Left and Right Arrows move between digits within the serial number.

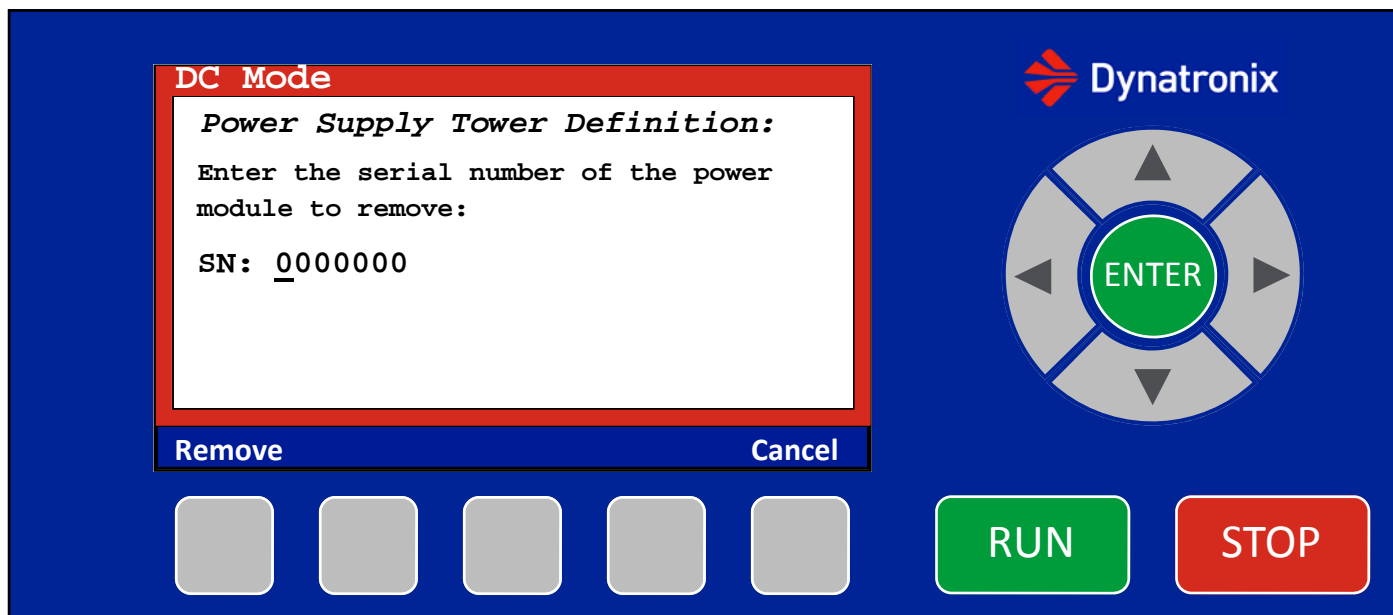
Enter—does nothing here

Run—does nothing here

Stop—does nothing here

Add—Attempts to add the module to the tower definition. If successful, the module will show up on the tower definition listing.

Cancel—Returns to the Tower Definition screen



#### Home-System-Config-Tower Definition-Remove Screen in Standby

(Note: Tower Definition not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

Buttons:

Up and Down Arrow buttons adjust the serial number value

Left and Right Arrows move between digits within the serial number.

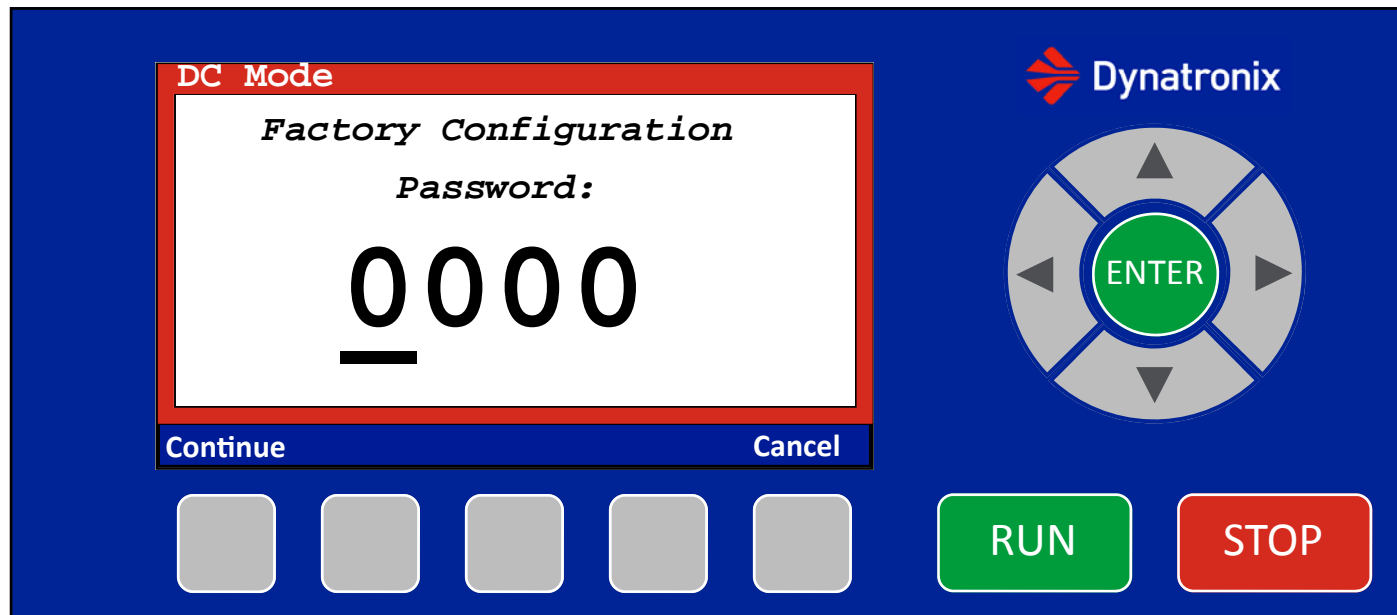
Enter—does nothing here

Run—does nothing here

Stop—does nothing here

Remove—Attempts to remove the module to the tower definition. Returns to the Tower Definition screen.

Cancel—Returns to the Tower Definition screen



#### **Home-System-Factory Configuration Password Screen in Standby**

Password pop-up is shown over the System screen.

(Note: Factory Configuration is only accessible during Standby.)

Screen:

Red boarder around outside to signal Standby.

Password value is editable.

Buttons:

Up and Down Arrow buttons adjust the password value

Left and Right Arrows move between digits within password value

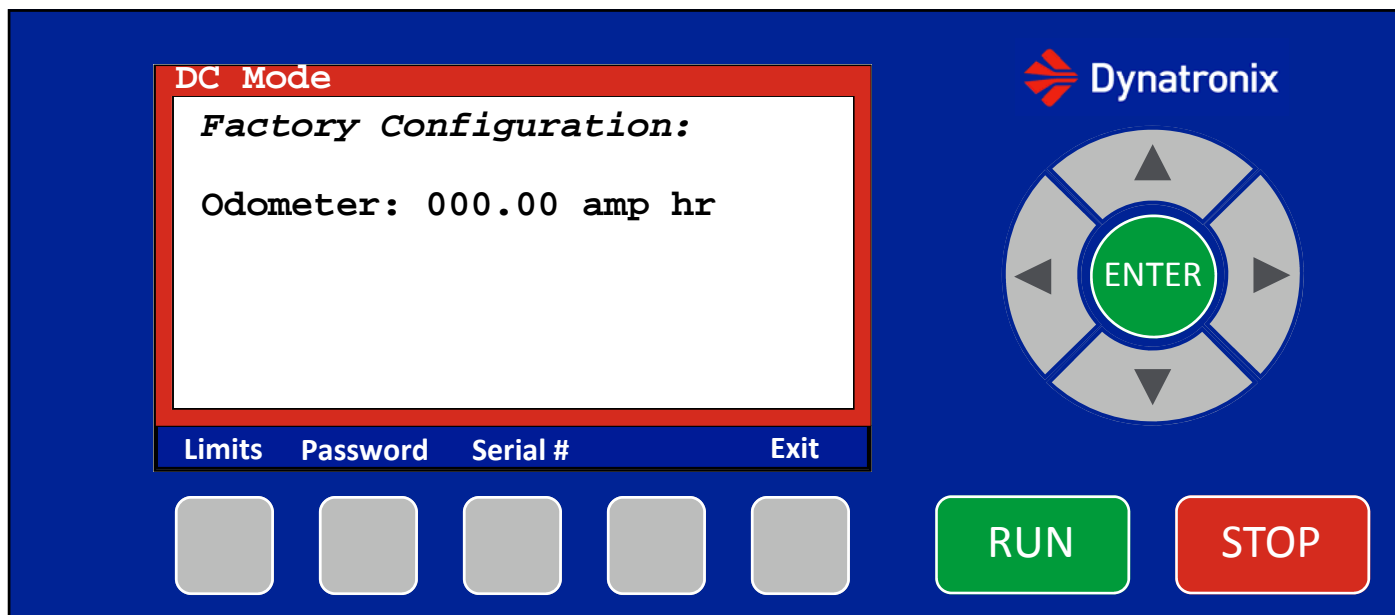
Enter—Submits the password for approval, password pop-up goes away. If the password was correct the Factory Configuration screen is shown. If the password was not correct the System screen is shown.

Run—does nothing here

Stop—Cancels the password pop-up and returns to the system screen in Standby.

Continue—The controller will verify the password and if correct will continue to the factory configuration menu.

Cancel— Returns to the System menu



### Home-System-Factory Configuration Screen in Standby

(Note: Factory Configuration not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

No editable items on this screen

Buttons:

Up and Down Arrow buttons do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

Run—does nothing here

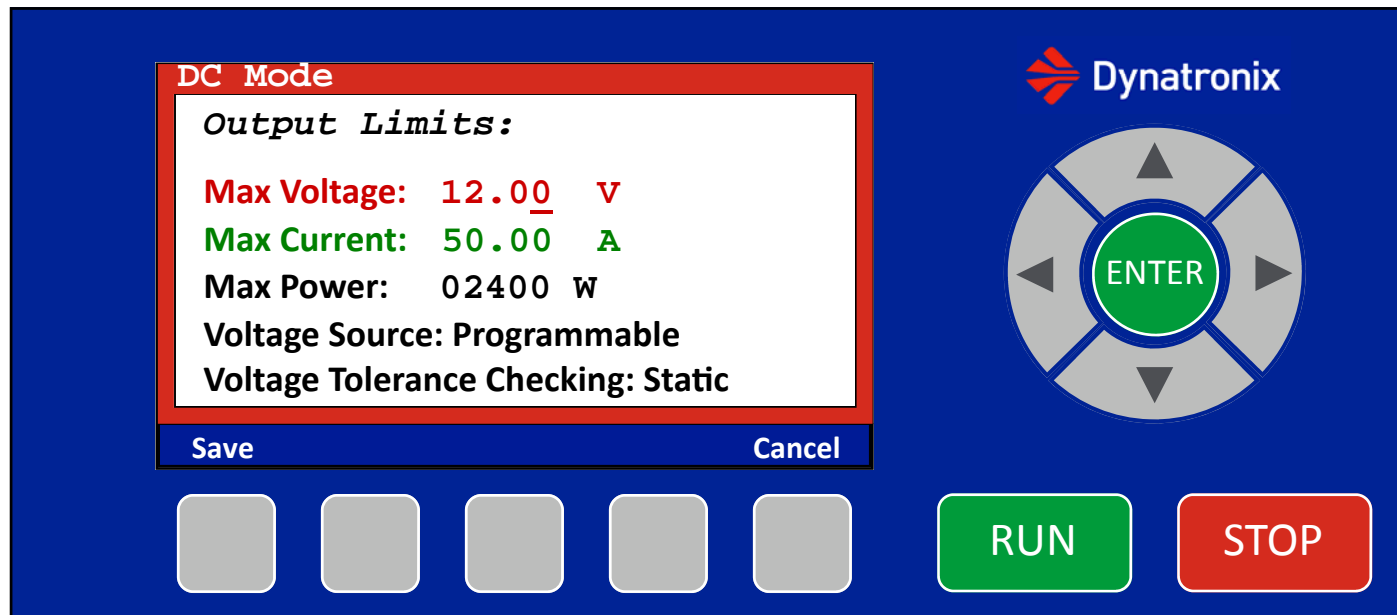
Stop—does nothing here

Limits — Goes to Limits menu

Password – Goes to Password menu

Serial # – Goes to Serial Number menu

Exit—Returns to the System screen



### Home-System-Factory-Output Limits Screen in Standby

(Note: Output Limits not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

Max Voltage, Max Current and Max Power values are editable.

Buttons:

Up and Down Arrow buttons adjust the underlined value

Left and Right Arrows move between digits within the max voltage, max current, and max power values

Enter—switches (underline) input location between parameters—Max Voltage, Max Current, and Max Power, Voltage Source, Voltage Tolerance Checking

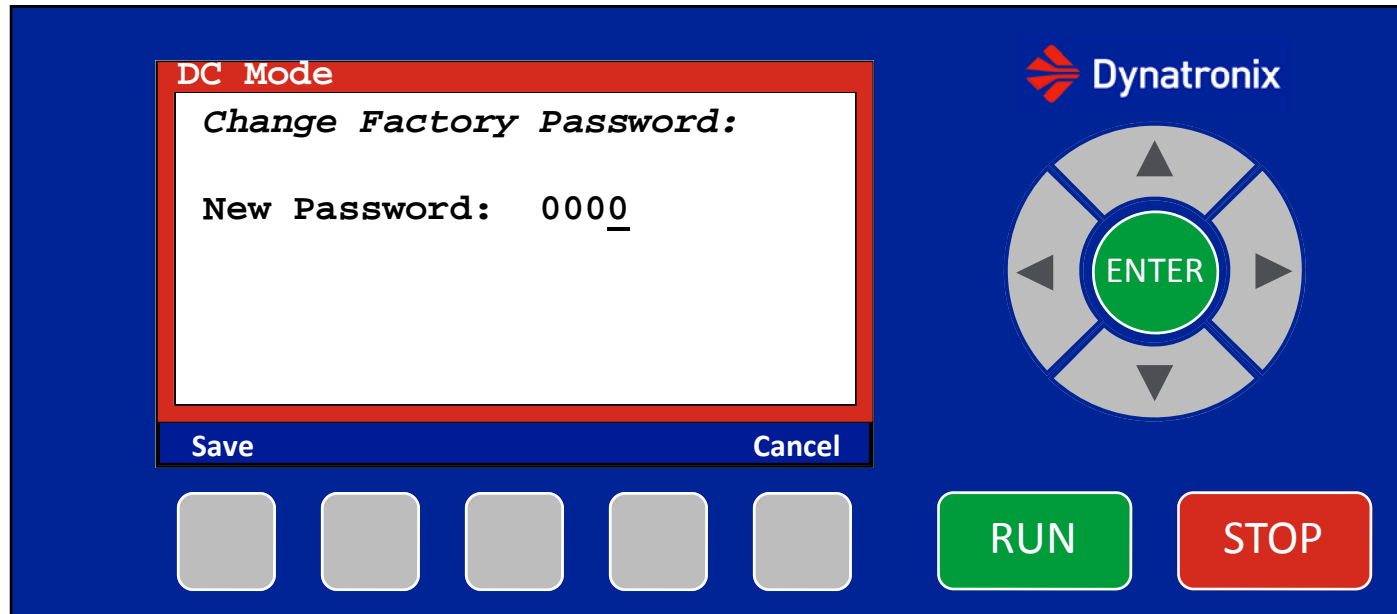
Run—does nothing here

Stop—does nothing here

Save—Returns to the Factory Configuration screen after saving changes

Cancel—Returns to the Factory Configuration screen without saving any changes





#### **Home-System-Factory-Change Password Screen in Standby**

(Note: Change Factory Password not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

Password is editable.

(Note: The current Factory Password was already entered in order to reach this screen.)

Buttons:

Up and Down Arrow buttons adjust the underlined value

Left and Right Arrows move between digits within the new password

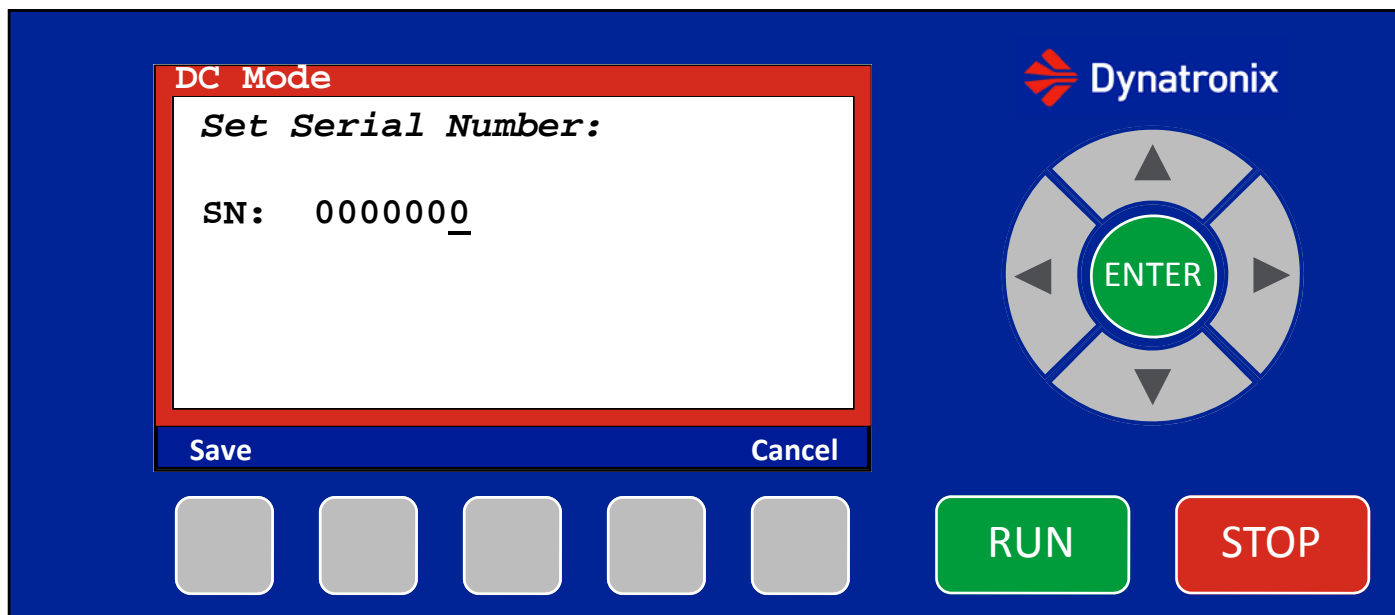
Enter—does nothing here

Run—does nothing here

Stop—does nothing here

Save—Returns to the Factory Configuration screen after saving changes

Cancel—Returns to the Factory Configuration screen without saving any changes



### Home-System-Factory-Serial Number Screen in Standby

(Note: Serial Number not accessible during operate)

Screen:

Red boarder around outside to signal Standby.

Serial Number is editable.

Buttons:

Up and Down Arrow buttons adjust the underlined value

Left and Right Arrows move between digits within the serial number

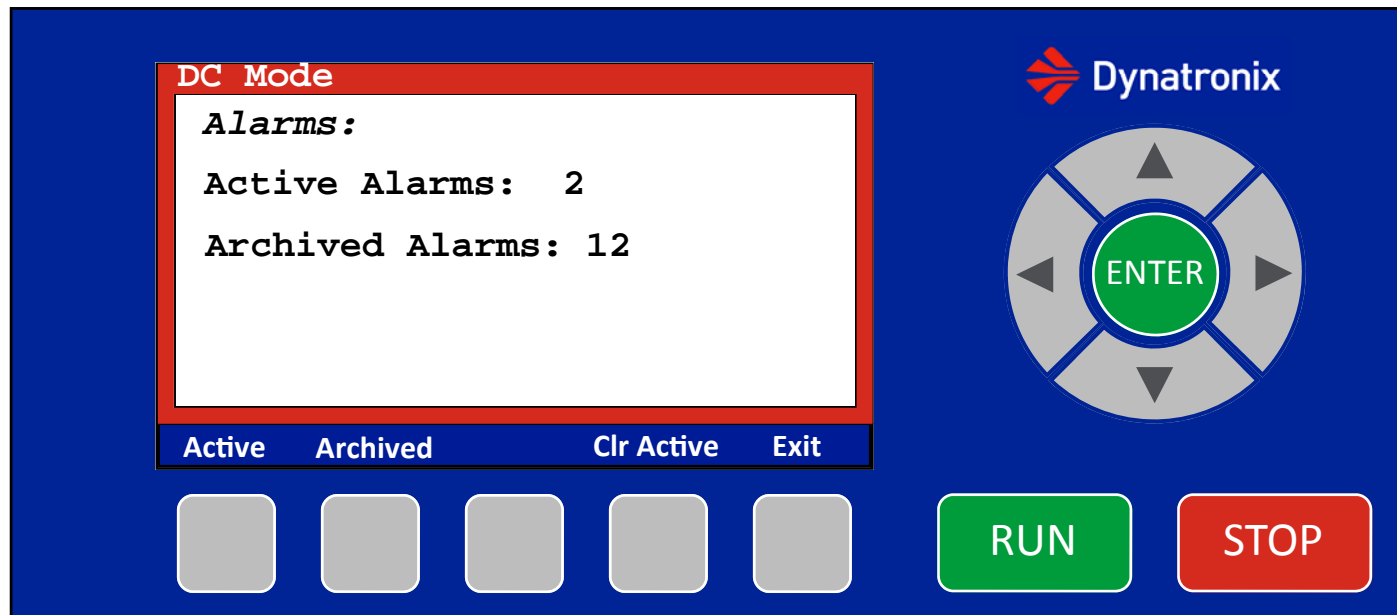
Enter—does nothing here

Run—does nothing here

Stop—does nothing here

Save—Returns to the Factory Configuration screen after saving changes

Cancel—Returns to the Factory Configuration screen without saving any changes



### Home-Alarms Screen in Standby

(Note: Alarms Screen in Operate is the same except the colored boarder is green)

Screen:

Red boarder around outside to signal Standby. (If in Operate the boarder is green)

No editable items on this screen

Buttons:

Up and Down Arrow buttons do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

If in Operate:

Run—does nothing here

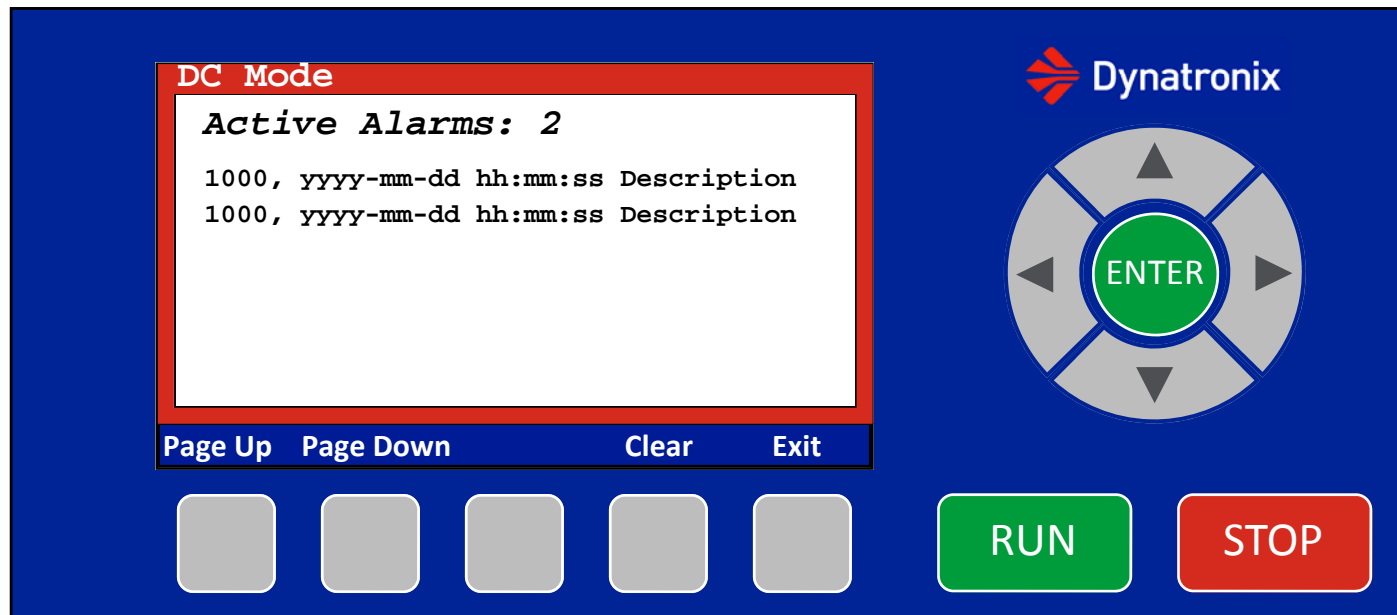
Stop—Initiates Standby, switches to Home Screen in Standby

Active—Goes to Active Alarms menu

Archived—Goes to Archived Alarms menu

Clr Active—Clears the active alarms, stays on this screen, active and archived alarm counts are updated, if an alarm condition is still active there will still be an active alarm

Exit—Returns to the Home Screen



### Home-Alarms-Active Alarms Screen in Standby

(Note: Active Alarms Screen in Operate is the same except the colored boarder is green)

Screen:

Red boarder around outside to signal Standby. (If in Operate the boarder is green)

No editable items on this screen

Buttons:

Up and Down Arrow do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

If in Operate:

Run—does nothing here

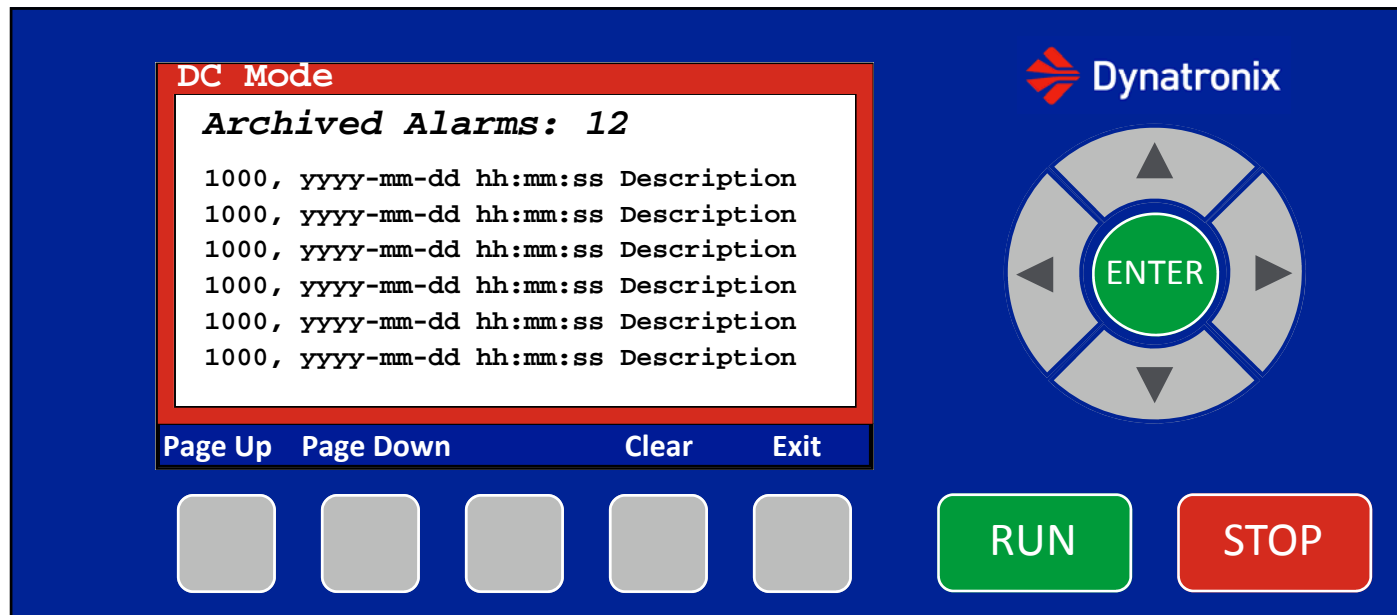
Stop—Initiates Standby, switches to Home Screen in Standby

Page Up—scrolls up a page through the active alarm list

Page Down—scrolls down a page through the active alarm list

Clear—Clears the active alarms, stays on this screen, active and archived alarm counts are updated, if an alarm condition is still active there will still be an active alarm

Exit—Returns to the Alarm Screen



### Home-Alarms-Archived Alarms Screen in Standby

(Note: Archived Alarms Screen in Operate is the same except the colored boarder is green)

Screen:

Red boarder around outside to signal Standby. (If in Operate the boarder is green)

No editable items on this screen

Buttons:

Up and Down Arrow buttons do nothing here

Left and Right Arrows do nothing here

Enter—does nothing here

If In Standby:

Run—Initiates Operate, switches to Home Screen in Operate

Stop—does nothing here

If in Operate:

Run—does nothing here

Stop—Initiates Standby, switches to Home Screen in Standby

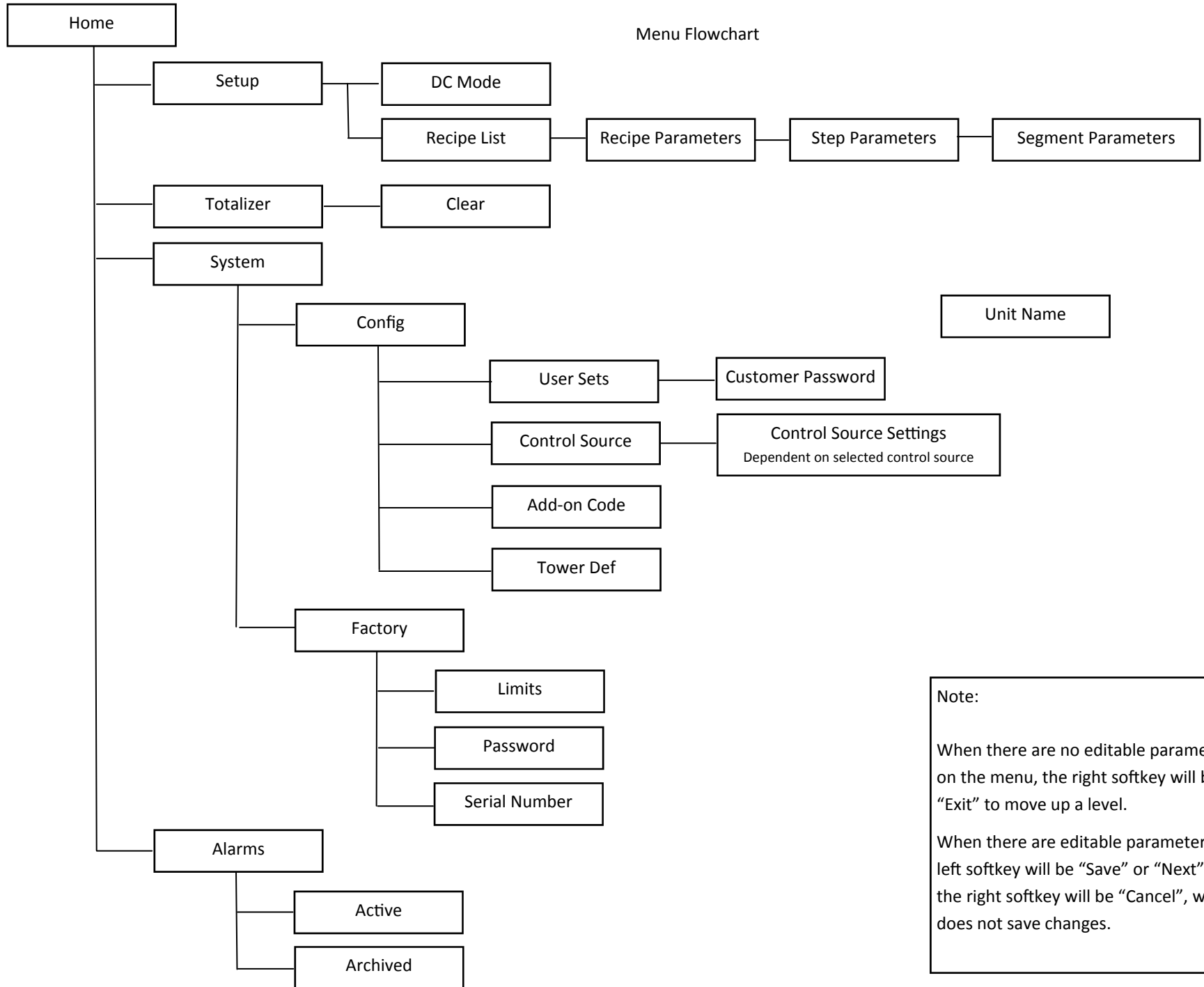
Page Up—scrolls up a page through the archived alarm list

Page Down—scrolls down a page through the archived alarm list

Clear—Clears the archived alarms, stays on this screen \*Note once the archived alarms are cleared, they are gone\*

Exit—Returns to the Alarm Screen

Menu Flowchart



Note:

When there are no editable parameters on the menu, the right softkey will be "Exit" to move up a level.

When there are editable parameters, the left softkey will be "Save" or "Next" and the right softkey will be "Cancel", which does not save changes.

## Revision History

<u>Revision</u>	<u>Date</u>	<u>Author—Changes</u>
1.0	11/2016	Initial internal release
1.1	11/16/2016	ART—Minor Updates
1.2	12/13/2016	ART—Removed Factory Confrigation FPGA Baud Rate Page
1.3	01/30/2017	ART—Round corners on home scree progress bar —Added setting customer password from System screen
1.4	8/1/2017	PJB—Add user configuration and analog configuration screens.
1.5	8/24/2017	TAM—Changed Password to user on the System Standby Screen.
1.6	8/25/2017	PJB—Update Control & User screens. Add Analog Calibration screen (not finished).
1.7	10/6/2017	PJB - Changes to calibration screen.
1.8	10/18/2017	PJB - Overhaul calibration screen for ease of use. Updated Versions screen.
1.9	10/26/17	ART—Updates, merge documents
2.0	01/24/18	ART—Finish for code release
2.1	03/07/18	PJB - Update analog calibration section. Code set 231v1.3.9, 208v1.5.11, 628v1.4.
2.2	03/12/18	ART—Added Ethernet/IP menu
3.0	11/15/18	ART—Updated for Advanced Feature Set Release
4.0	02/14/2020	ART—Updated for 12kW and SCR controllers