

SAM 5000

USER MANUAL

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1.INTRODUCTION

This User Manual contains instructions on operating the Shower Automated Machine 5000. Images of the system are provided for users to quickly recognize, adapt to and able to operate the system efficiently. This section examines each screen of the user interface in turn, providing detailed information about what actions are possible in each state. It also describes which actions are not possible, provides error handling information, and lists known bugs.

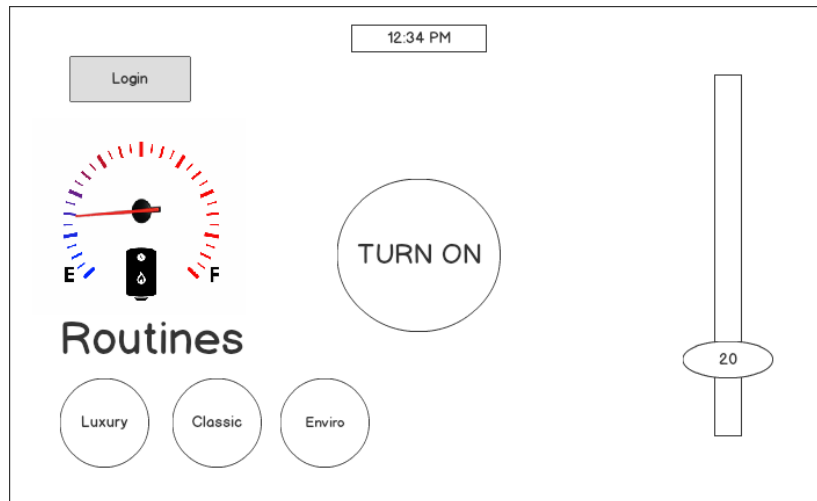


Figure 1.1 Homescreen

1.1 Home screen

This is the first screen that you will see the first time you start up your SAM 5000 smart shower system. It has the following buttons and informational displays:

1. Login – This button will allow you to log in to your user account; more on that later.
2. Water Level Gauge – This shows you how much hot water is left in the tank.
3. Temperature adjustment Slider – This lets you control the temperature of the shower with a simple sliding action.
4. Preset Routines (Luxury, Classic, Environment-friendly) – These are to demonstrate the automatic shower routines feature of the SAM 5000. You can also create your own custom routines once you have an account. Selecting any preset routine from homescreen turns **ON** the shower with the selected routine.
5. Shower Turn On – This button turns the shower **ON**.
6. Current Time

You do not need to login to use the shower; this allows guests to use the SAM 5000 with ease. However, creating a user account and logging in each time you use the shower provides a number

of extra features, including personalized default temperature, custom shower routines, and shower analytics.

2. HOW TO USE THE SYSTEM

2.1 Logging In

Tapping on the “login” button in the upper left-hand corner of the home screen(Fig 1.1) will bring you to this screen, the user profiles screen:

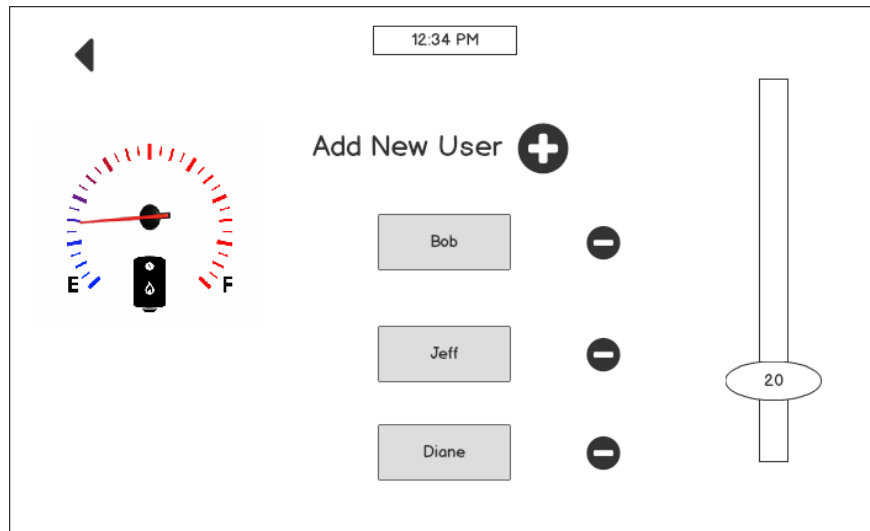


Figure 2.1.1 User Profiles

2.2 Selecting User Profile

You can tap the different user profiles available on the User Profiles screen(Fig 2.1.1) to login.

2.3 Adding a new User Profile

To create a new user profile, you can click on the “Add New User” button on the User Profiles screen(Fig 2.1.1). This will lead you to the following screen.

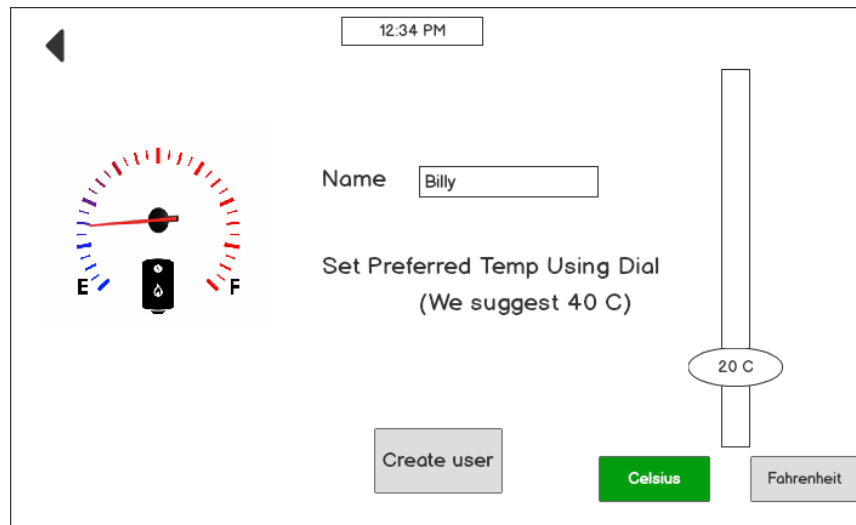


Figure 2.3.1 Create User Profile

- 1) Enter desired username
- 2) Adjust the temperature dial to set a preferred temperature for this profile.
- 3) Tap between 'Celsius' and 'Fahrenheit' to change units.
- 4) Tap on 'Create User' to save this user.
- 5) Click on the back arrow to cancel.

You will see the following prompt after tapping Create User.



Figure 2.3.2 Prompt to create personal routine

To create a custom routine at this moment, click 'Yes'. (Section 2.6)
Skip otherwise.

2.4 Edit User Preferences

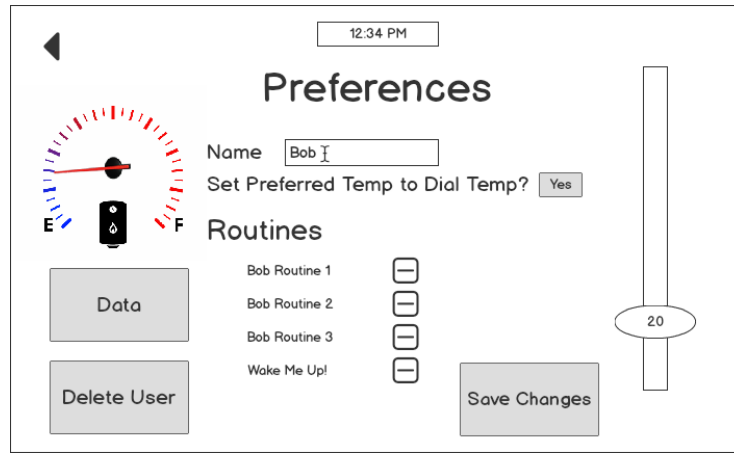


Figure 2.4.1 User Profile

Select desired User Profile from screen in Fig 2.1.1. This will lead you to the User Profile page(Fig 2.4.1)

- 1) Edit username by tapping on the box next to Name
- 2) To change the preferred temperature, Adjust the temperature dial to the desired temperature and click 'Yes' next to the 'Set Preferred Temp to Dial Temp' option.
- 3) To begin any custom routine, tap on desired routine to turn it on.
- 4) To view User Analytics, click 'Data'. (Section 2.7)

2.5 Deleting a user Profile

- 1) To delete a user from the User Profiles(Fig 2.1.1) page, click the '-' icon next to the user.
- 2) To delete a user from the User Profile(Fig 2.4.1) page, click 'Delete User'.

2.6 Create Custom Routine

Creating a new shower routine can be done when creating a new user profile, or at any time from the home screen (when logged in). Shower routines are associated with a specific user profile, and they can only be seen when you are logged in with that user profile.

Once you are logged in to your user profile, the home screen will have a button with your username in place of the "login" button. It will also display your saved shower routines, and there will be a button to allow you to create a new shower routine. An example of the logged in home screen is shown in figure 2.6.1.

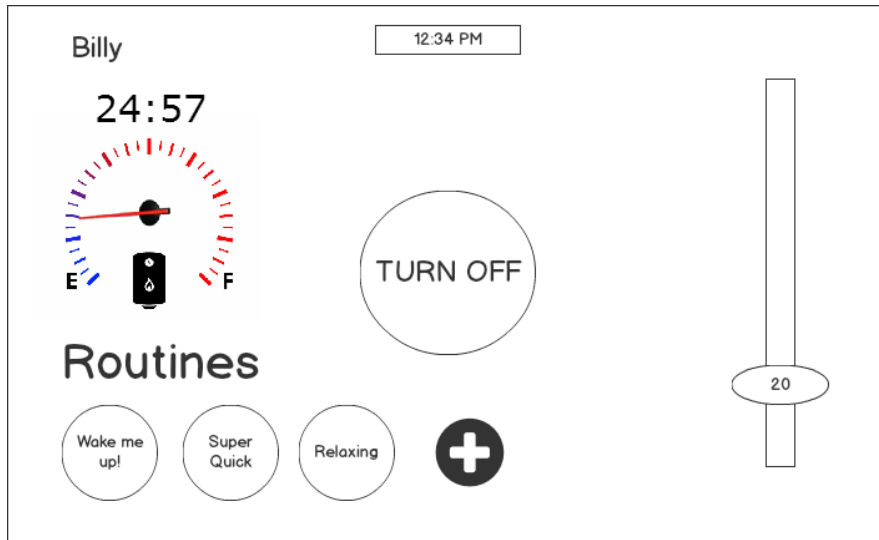


Figure 2.6.1 Home Screen, logged in

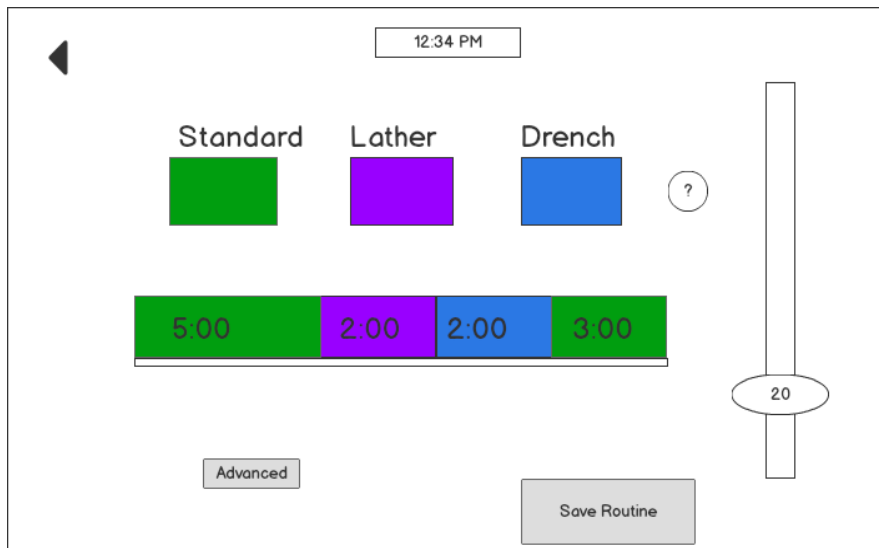


Figure 2.6.2 Create New Routine

Figure 2.6.2 shows an example of creating a new routine. Three options for shower pressure are provided, which are described in figure 2.6.3.

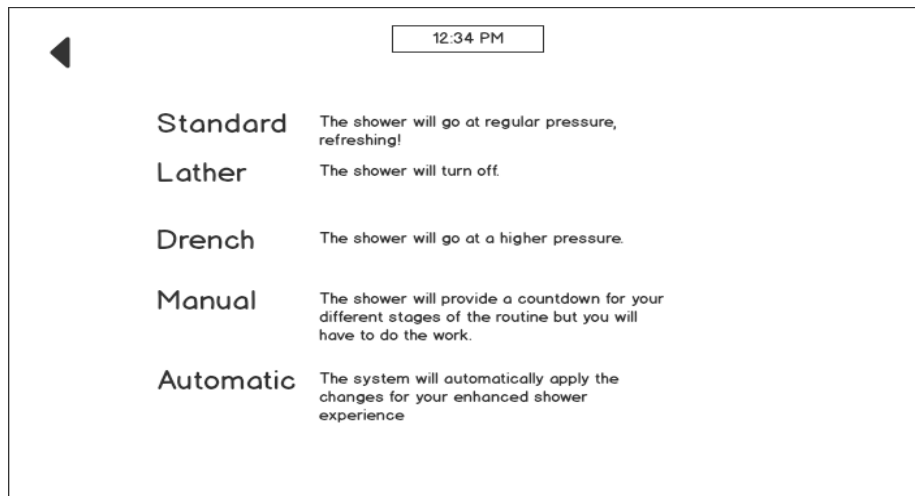


Figure 2.6.3 Routine modes description

Follow these steps to create the routine:

1. Tap one of the pressure options - lather, standard, or drench - to add a new stage to the routine.
2. The stage will be created with default time and temperature: it will last for 60 seconds at your default temperature (set in your user profile).
3. Adjust the timing of the stage by tapping on the new stage and selecting a time from the drop down menu.
4. Adjust the temperature of the stage by moving the slider. The stage that you are currently working on will be highlighted, and you can switch between different stages by tapping on them.
5. Add more stages by following steps 1-4.
6. When you are satisfied with the routine, tap "save routine" to save your changes. Your new routine will now be accessible from the home screen when you are logged in. By default, it will be named <username>'s routine <#>; you can change the name under "advanced".
7. You can come back and change this routine from your preferences screen.

In addition to these basic options, shower routines have some advanced options. These can be reached by tapping the "advanced" button from the shower routine creation screen, shown in figure 2.6.4.

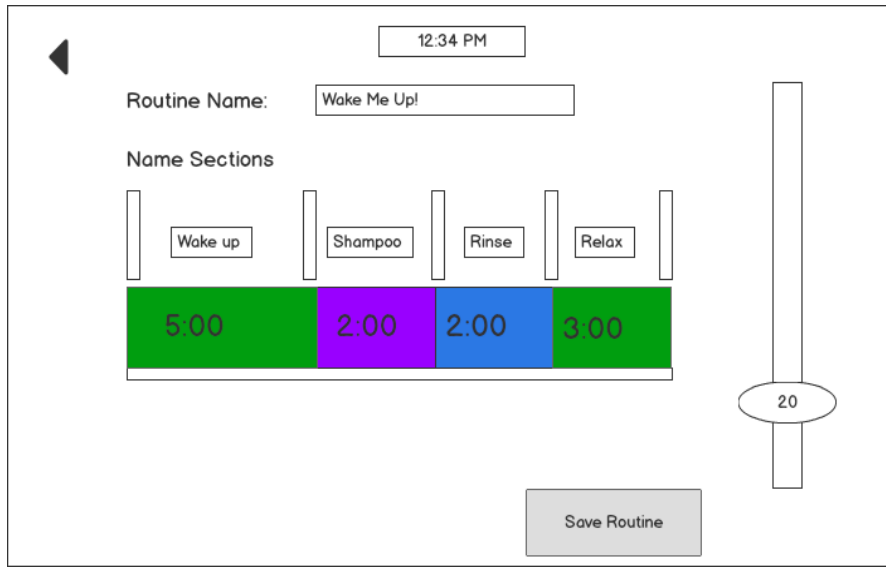


Figure 2.6.4 Create Routine Advanced Options

With the advanced options, you can change the name of your shower routine. You can also name each individual stage. Creating a shower routine from this screen otherwise follows the basic instructions described above.

When the shower routine is saved, you will be brought back to the home screen. Here, the new routine can be seen along the bottom left of the screen:



Figure 2.6.5 User Profile with available routines

2.7 View User Analytics

From the User Profile page(Fig 2.4.1), click 'Data' to view User Analytics.

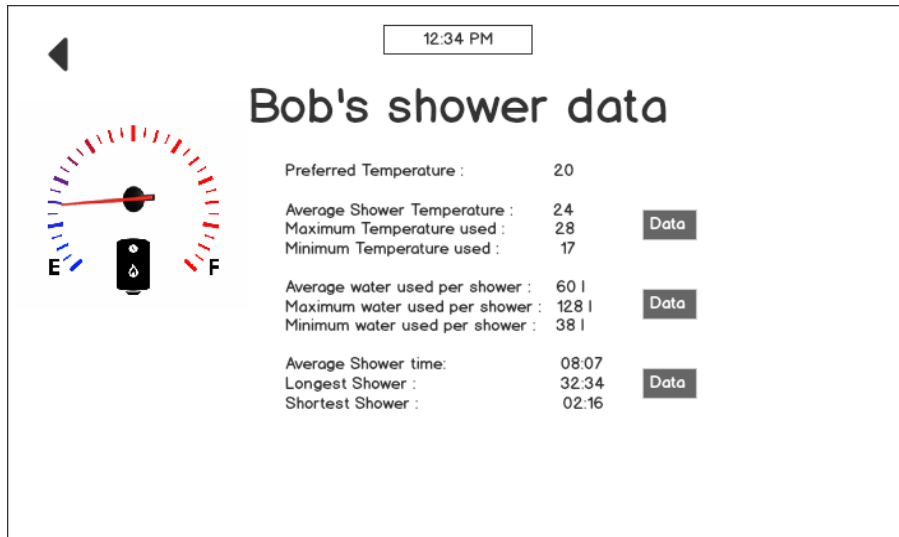


Figure 2.7.1 User Data

The User Data page(Fig 2.7.1) contains the following shower data information:

- a. Temperature Analytics
- b. Water Usage Analytics
- c. Shower Usage Analytics
2. Clicking on the respective “Data” button will show a pop-up window showing the respective analytics. You will need to tap the Exit button to hide the pop-up window. This window is show below in figure 2.7.2

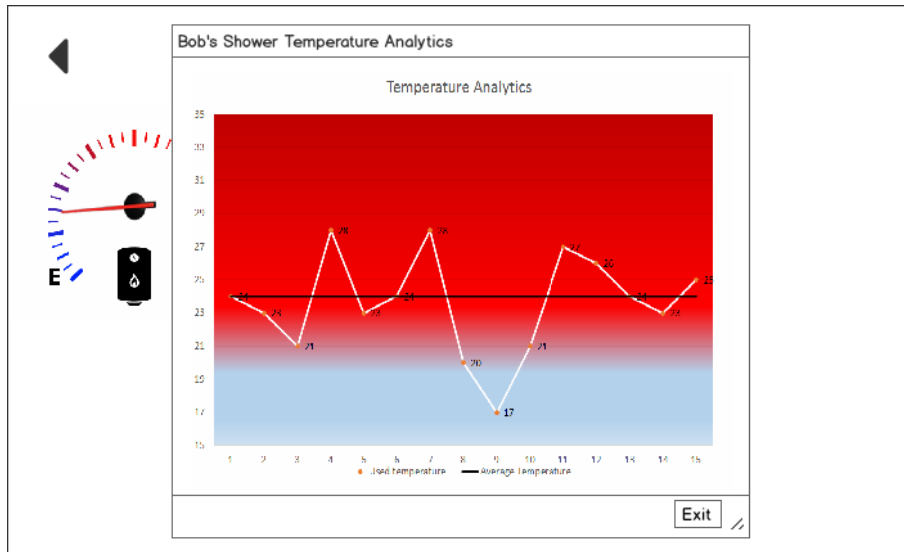


Figure 2.7.2 User Data Analytics

2.9 Adjusting System Time

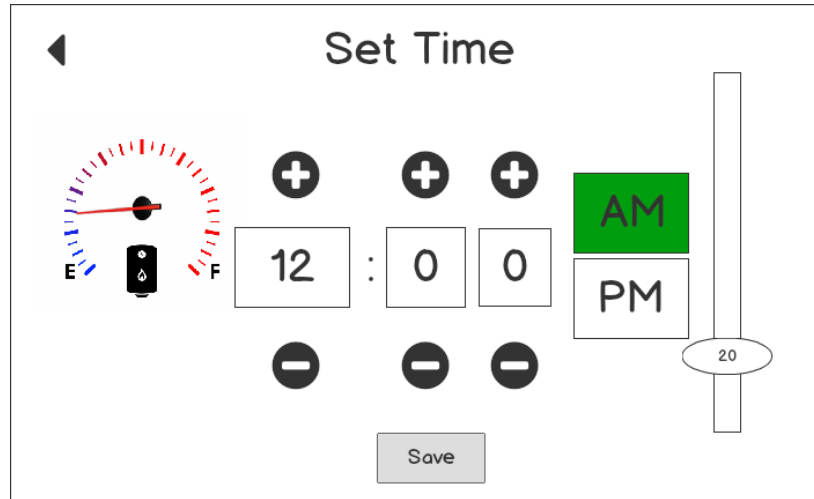


Figure 2.9.1 Adjust Time

When you tap on the current time, you will be able to change each digit individually by tapping on the plus and minus buttons on the top and bottom of that digit. You may also indicate whether the time is AM or PM; the selected option will be highlighted as shown.

When the time is changed, it will be changed for the system, not for a specific user profile. You will need to update the system in the case of power outage or daylight savings time, as the system will not do this automatically.

2.10 Running a Routine

Once a custom shower routine has been created, it can be started from the main screen:

1. Tap on the circle containing the desired shower routine's name. It will be located under "Routines" on the bottom left of the screen.
2. You will be prompted to select "automatic" or "manual". If "automatic" is chosen, the routine will switch to the next stage as soon as the previous stage's time runs out. If manual is chosen, the system will instead show a pop-up to notify you when one stage is over, and wait for your input to switch to the next stage. Manual Mode lets you adjust temperature at any time while the routine is running.
3. When you have made your choice, the routine will start. The routine's progress will be shown on the bottom of the screen, as shown in figure 2.10.1

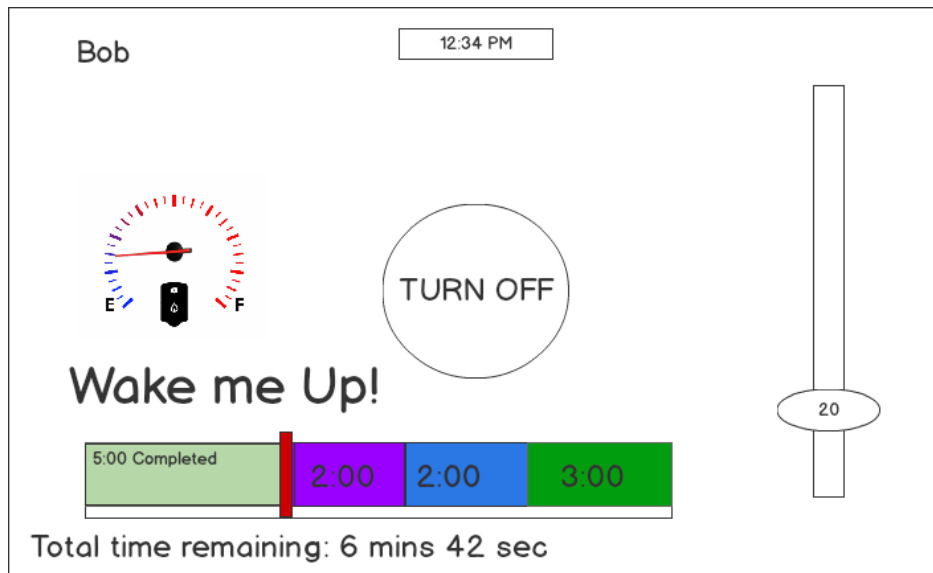


Figure 2.10.1 Routine Running

When a routine is running, you can tap the “turn off” button in the middle of the screen. This will exit the shower routine and also turn the shower off, if it is on.

You will not be able to change the temperature while a routine is running, since the shower routine is setting the temperature based on the current stage. You can modify the temperature of each stage, as well as the rest of the routine’s parameters, through your user preferences page.

3. KNOWN BUGS AND DEFICIENCIES

- Clock does not update time automatically, you will need to update the time for any time zone changes
- Currently only three set pressures; which can only be accessed when making routines. There is no way to change pressure while not in a pre-created routine.