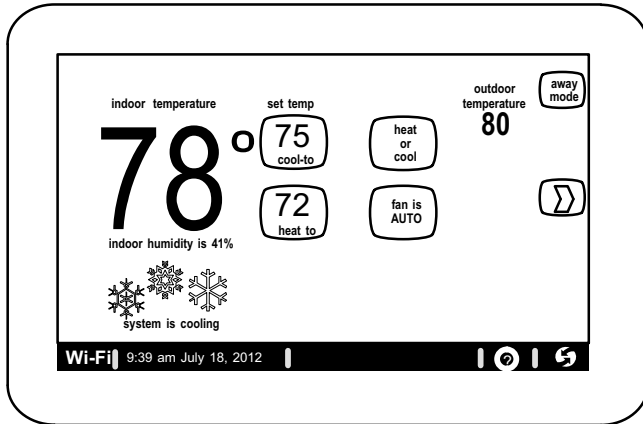




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ALLIED AIR ENTERPRISES  
215 METROPOLITAN DR.  
WEST COLUMBIA, SC 29170



**THIS MANUAL MUST BE LEFT WITH THE HOMEOWNER  
FOR FUTURE REFERENCE**

## HOMEOWNER'S MANUAL

### Comfort Sync™ Thermostat

Touch Screen Programmable Communicating Thermostat

#### CONTROLS

507065-01  
09/12

TP Technical  
Publications

#### General

Congratulations on choosing the Comfort Sync™ touch screen, programmable thermostat! The state-of-the-art technology built into this device makes it easy for you to keep your home comfortable while at home, and it allows you to adjust your home's comfort settings from wherever you have access to the internet!

Help screens are just a touch away; this manual will get you started experiencing a whole new world of home comfort.



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### WARNING

Do not switch system to cool if the outdoor temperature is below 45°F (7°C). This can damage the cooling system.

### NOTICE

Use this thermostat only as described in this manual.

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## Comfort Sync™ Thermostat

The communicating Comfort Sync™ thermostat is an electronic 7-day programmable touch screen thermostat with color display. It also offers enhanced capabilities which include humidification measurement and control, dew point adjustment control, dehumidification measurement and control, and equipment maintenance reminders. The thermostat's autochangeover mode permits control of heating, cooling, humidification, and dehumidification without user involvement.

The Comfort Sync™ thermostat can connect to the internet using your home's wireless Wi-Fi access point. After online registration is completed, weather information is automatically sent to the thermostat, and you will have full access to the thermostat from anywhere using a remote internet connection via computer, smartphone, or iPad.

The thermostat stores system parameters in nonvolatile memory (retains data when electrical power fails or is turned off), and includes on-board help screens.

Indoor Air Quality accessories are supported with time-based notification of consumables including media filters, UVC bulbs and humidifier pads service / replacement.

## Thermostat Lock-out

A “lock” icon at the bottom center screen (shown in the picture), indicates the thermostat is either partially- or fully-locked.



Partially-locked, any user can adjust the temperature up or down to set a “hold” for a selectable time.

Fully-locked, no one can make any changes to the thermostat's settings. To unlock, press and hold the “lock” icon for 5-6 seconds.

To lock the thermostat, access “Screen lockout” through the dashboard's “display settings” described on Page 7.

## Start up

**In event of power failure**—If a power failure occurs, when the power comes back on, the thermostat will reboot and when complete, the HOME screen will return.



### What the Home screen tells you...

After the thermostat and the system has been fully connected and powered on, the Comfort Sync™ thermostat's Home screen is displayed. Figure 1 shows a display and describes what the thermostat is telling you.

Note that set to **heat or cool** communicates that the system is operating in *manual* mode; if it were in *program* mode, the heat or cool button would read **summer program is on** (or other named program).

### Other information...

Until and unless the indoor temperature is at or between the two settings (70 to 75 degrees in this example), the system should run until it does measure within that temperature range.

The Wi-Fi indicator is  (not ) , therefore, the thermostat is connected with your wireless network router.

**Away** mode sets the thermostat for energy saving while you are gone for an extended period of time. In this mode, the system will only come on if indoor temperature falls below 62 degrees (for heating) or if indoor temperature rises above 85 degrees (for cooling).

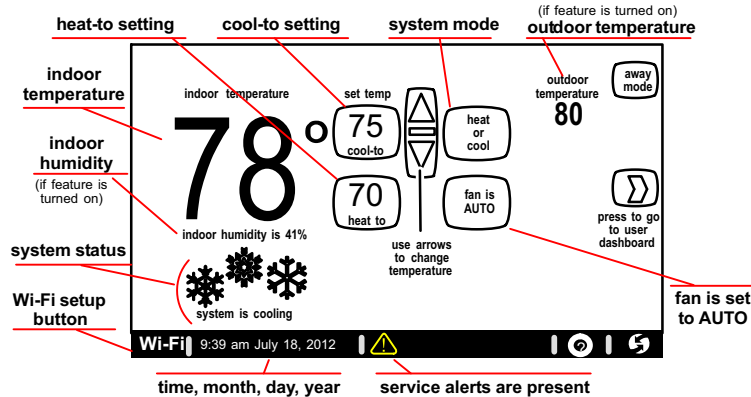




Figure 1. Home screen (typical)

### What you can do from the Home screen...

Typically, what every homeowner wants from an air conditioning system is to be able to control that system using a convenient device to adjust heating, cooling, and the level of humidity in the home.

From this screen you may:

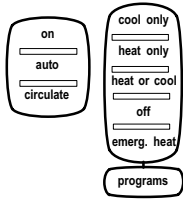
- adjust temperature settings
- access menus to change the program mode
- change how the fan operates
- access the “dashboard” (fig. 3) by pressing 
- access and view active service alerts by pressing the 
- access help screen by pressing the “?” icon.

Adjusting the temperature and changing the system mode of operation is described fully beginning on Page 14.

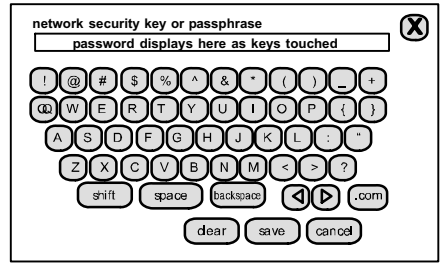
Adjusting the humidity, even if no physical humidifier or dehumidifier is present, may also be available, provided the installer has implemented the feature during setup. See Page 16 for details on humidity control.

## User Preference Quick Reference Chart (to change, use tools shown on Page 5)

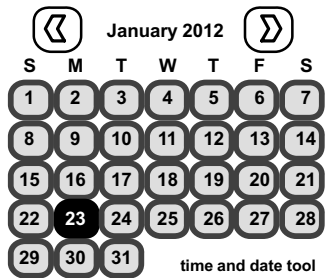
user setting	① dashboard button	Default	page	tools	variables	
Fan Setting	system settings	auto	Page 6	menu	auto, on, circulate	
Humidifier		OFF		toggle	OFF, ON	
Indoor Humidity Display		OFF			OFF, ON	
Dehumidifier		OFF			OFF, ON	
Time and Date	clock settings	—	Page 7	time/date	(Time/date elements screen)	
Daylight Saving Time		Enabled		toggle	Enabled, Disabled	
Clock Format		12H			12 Hour, 24 Hour	
Background Theme	display settings	cobalt	Page 7	toggle	cobalt, cotton, carbon	
Temperature Display Scale		(F)				(F) Fahrenheit, (C) Celsius
Power Save		ON				ON, OFF
Screen Lock-out		Unlocked		menu	Unlocked, Partially Locked, Fully Locked	
Language Displayed		English			English, French, Spanish	
Outdoor Temp Display		OFF		toggle	OFF, ON	
Backlight Intensity		100%		arrows	20 to 100% (in 20% increments)	
Clean Screen		—		(view only)	(30 sec. timer deactivates touch screen to clean screen; use damp cloth to clean)	
Weather		weather			Page 8	(shows 5-day weather forecast if connected to internet via Wi-Fi)
Setup a program		edit program		save energy	See details Page 8	—
View alerts	alerts	—	See details Page 9	—		
Filter 1 Timer	reminders	Disabled	See details Page 11		Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time	
Filter 2 Timer						
Humidifier Pad Timer						
UV Bulb Timer						
Maintenance Timer						
Dealer Name	service information	(these may show installer input data but owner may change)	See details Page 13		(keyboard)	
Dealer Address						
Dealer Phone						
Dealer Email						
Dealer Website						
System Desc						



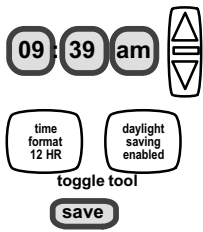
typical menu options



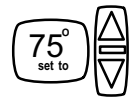
keyboard tool



time and date tool




toggle tool



up/down arrows

Figure 2. User preference change tools

## User Dashboard and Help (?) Screens

From the Home screen, press the  button to go to the dashboard. The dashboard (figure 3) allows you to set the system to operate the way you want it to operate. From the dashboard, you can access system settings, clock settings, and display settings, weather, edit programs, alerts, reminders, service and help (?).

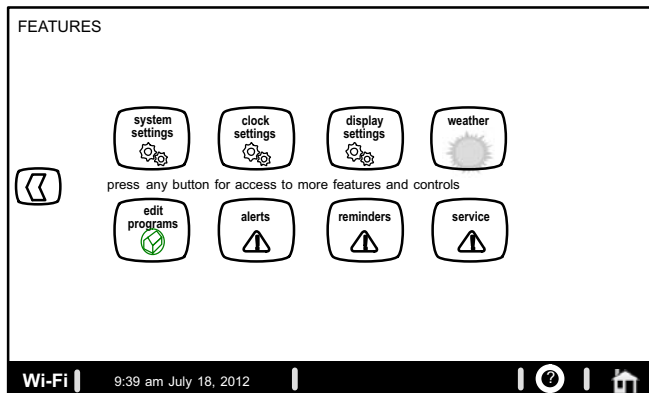



Figure 3. User dashboard - indoor settings

### System settings

Press button: **system settings**. Figure 4 “A” shows the screen with its defaults. Figure 4 “B” shows how the devices can be configured.

Press button: **set to AUTO**. (button may read: **set to ON** or **set to CIRCUL..**). Select from pop-up menu: **on**, **auto**, or **circulate**.

Press buttons: **humidifier**, **humidity display**, or **dehumidifier** to turn each on. The resulting display shows the default values of humidifier and dehumidifier; use the arrows to change either.

When **humidity display** is ON, text near the screen bottom shows the current humidity. Touch the “X” button to return to dashboard or the Home icon  for the Home screen.

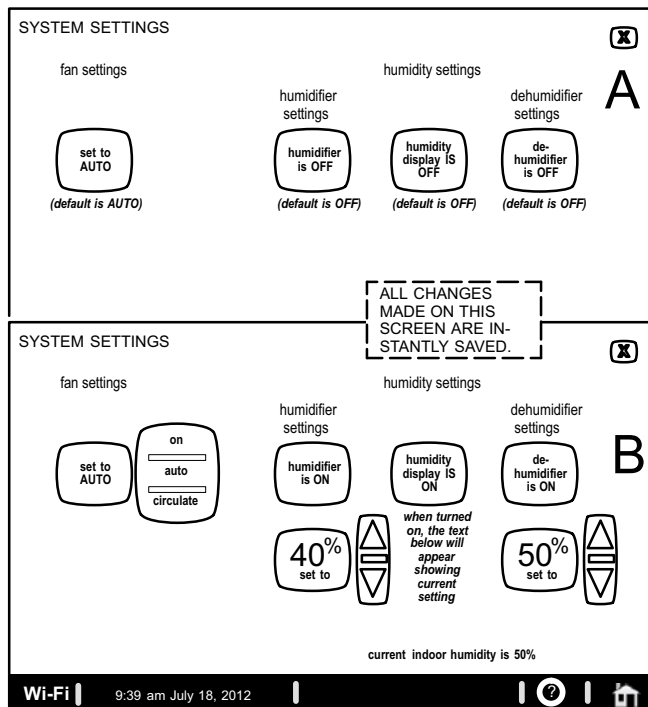


Figure 4. System Settings

## Clock settings

Press **clock settings** (see figure 3). Figure 5 shows the *Set current time and date* screen. Use the horizontal arrows to scroll to month and year; then touch a day of month to select it. Touch **time format** and **daylight saving** to toggle these options. Use the up/down arrows to change time. Touch **am/pm** to select morning or afternoon (am/pm does not appear if 24HR format is selected).

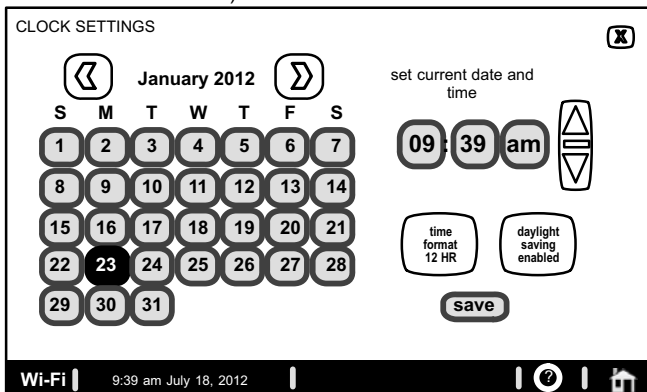


Figure 5. Set current time and date

## Display settings

Press **display settings** (see figure 3). Figure 6 “A” shows the *Display settings* screen and defaults.

**Press buttons:** **Temp scale** (°F/°C), **power save** (ON/OFF) and **outdoor temp display** (ON/OFF) to toggle these options.

**Press buttons:** **Background theme**, **language** and **screen lockout**; press to select options from pop up menus (figure 6 “B”).

**Press button:** **backlight intensity**; use up/down arrows to change the intensity of backlighting in 20% increments.

Use the **press to CLEAN SCREEN** button to give yourself a 30 second timer to clean off the screen (use a damp cloth to clean).

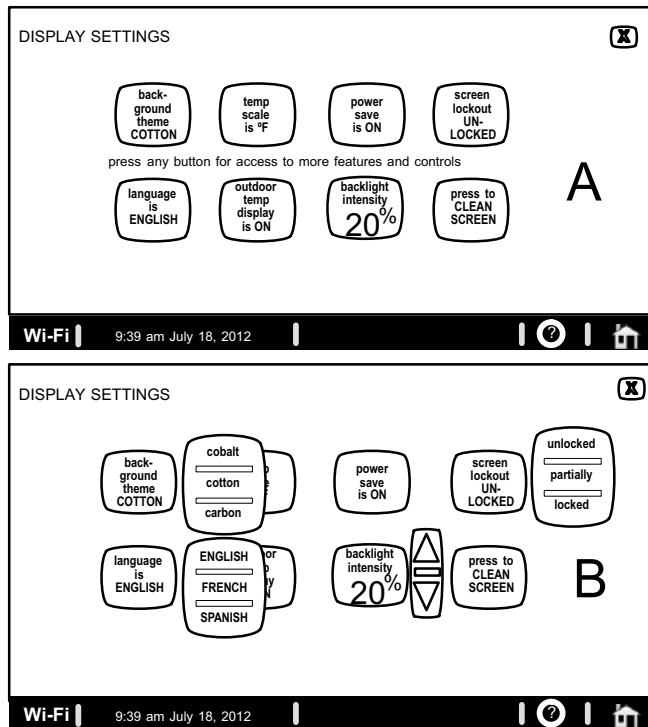


Figure 6. Display settings

## Weather

Press **button: weather** (see fig. 3). Figure 7 shows a typical 5-day forecast screen. Use “**X**” button to return to the previous screen.

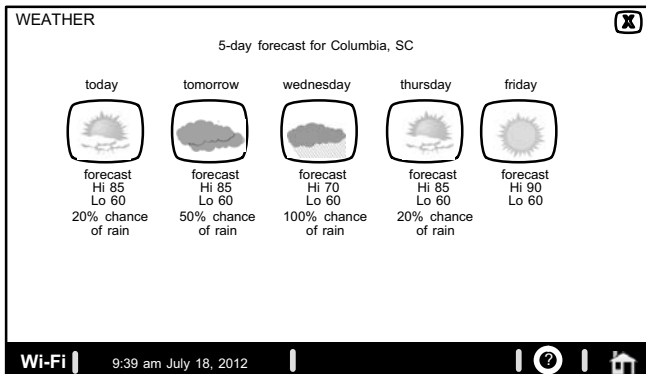


Figure 7. Typical weather screen

## Edit program

Press **button: edit program** (see fig. 3). Figure 8 “**A**” shows edit program screen. Figure 8 “**B**” shows pop up menus that appear when the selections are touched and it illustrates changes made to the program.

Edit the “season programs” to your preference. (**Save energy** uses high-efficiency EnergyStar settings to promote energy conservation).

**select programs** - select a preset program; or press and hold any button for the keyboard and change button names to user preference.

**select days** - week/weekend, individual days, all 7 days.

**time** - up/down arrows to change time in 15 minute increments.

**cool- & heat-to** - up/down arrows to change temperature in 1° increments.

**fan mode** - on, auto, circulate.

Figure 8 “**B**” also shows that the evening time has been disabled; this is done by pressing and holding the time button for that time period. (Touch **add**

**setting** to re-enable that time period). Use the **restore** button to restore defaults for the preset programs. Press “**X**” button after changing; a pop-up prompts with **back**, **discard** and **save** options. Select **save** to save and return to the dashboard.

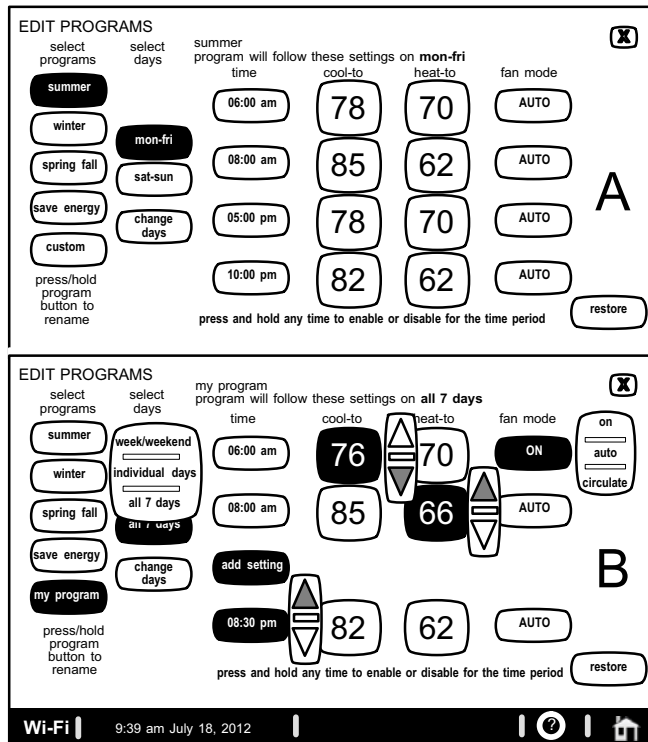


Figure 8. Edit program screen



## Alerts

Figure 10 shows how an alert appears when it occurs after the system has been put into operation. Use information on this screen to contact your HVAC serviceman. Use the “X” to return to the previous screen.

A **red alert** (red icon) identifies a problem that could prevent the system from working properly or not working at all, and if allowed to run, could cause damage to the system. You **MUST** call for service immediately.

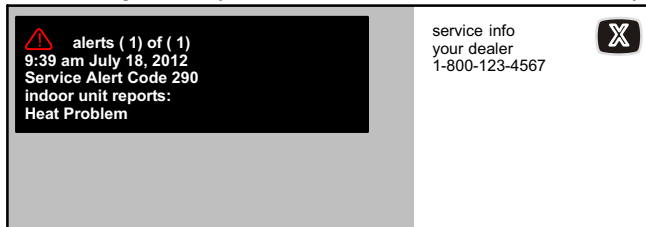


Figure 9. Typical red alert

A **service alert** (yellow icon) tells you to perform routine service, or to call the dealer to service, one or more of the following: Filters, Humidifier Pad and UV Light Service and Maintenance. These alerts will appear based on elapsed time set per the “reminders”. For information on clearing and remind later, see reminders on Page 11.

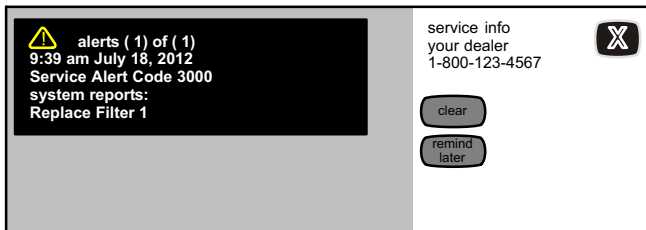


Figure 10. Typical service alert

## Access alerts through the dashboard

Press the Home screen alert icon (△) or the **alerts** button on the dashboard (see figure 3). Any alerts will appear similar to those shown in figure 11. Touch the “**select alert time period for viewing**” button to view alerts that occurred in the last 24 hours, last 30 days, or last 12 months. Contact your HVAC serviceman to report the alerts and related problems.

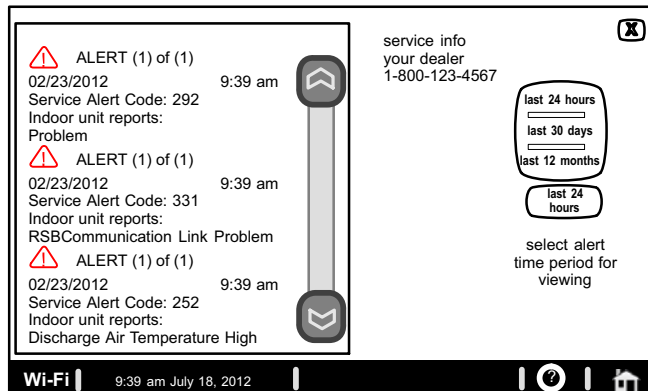


Figure 11. Alerts viewed from dashboard option

Navigate to different screens (see figure 12). You can clear alerts and set new reminders after routine service. You may also set a “remind later” to be reminded at a more convenient time for doing the service. If a red alert (red  $\Delta$ ) is present, contact the party identified under **service info**.

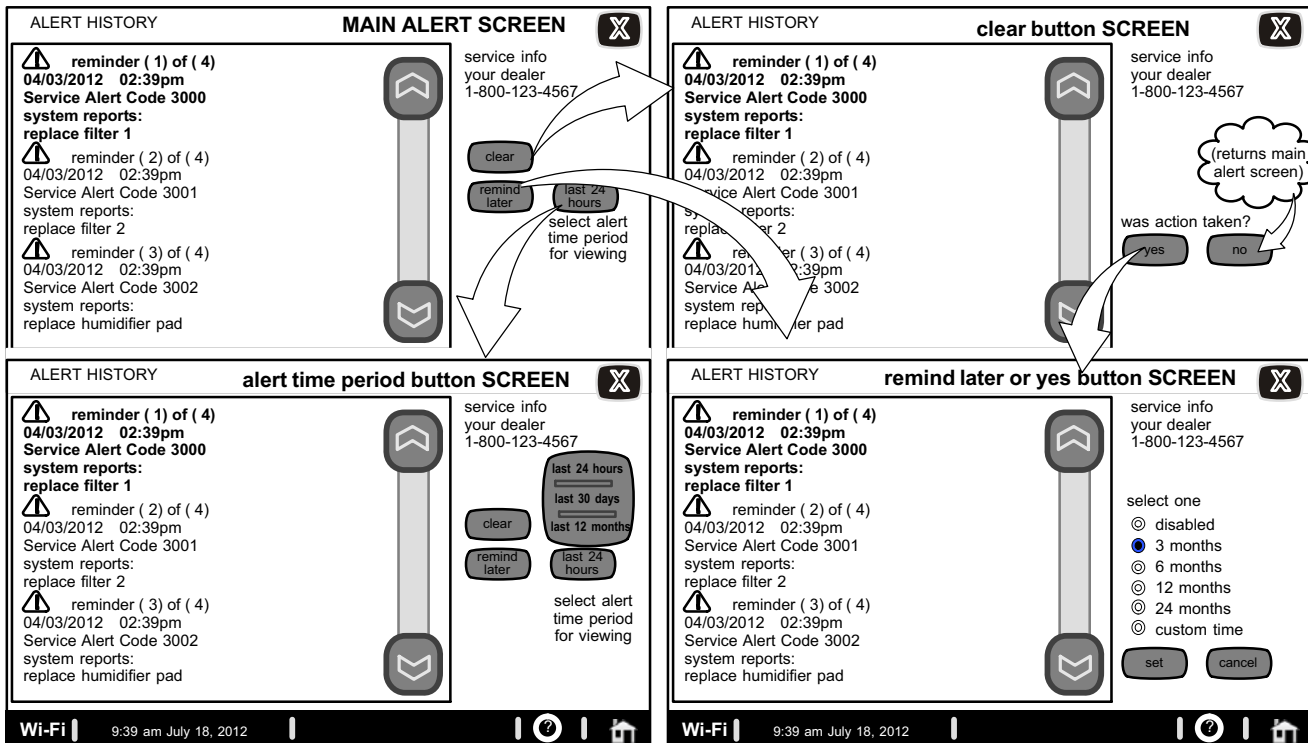


Figure 12. Alerts

## Service Alert Codes

Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
3000	Filter 1	3002	Humidifier Pad	3004	Maintenance	4000	User WiFi state change, disable	4002	Image file download failed
3001	Filter 2	3003	UV Light	3005	PureAir Maintenance	4001	Firmware download failed		

## Reminders

Reminders alert you to perform routine services, such as replacing filters. Access the reminders from the dashboard **reminders** button.

### Setting reminders

*NOTE - A previously set service time can be changed using the “custom time” option.*

Use one of the “month” reminders to be reminded when to perform the routine service again.

Use **custom** to pop-up the time/date screen (figure 14) to set an exact date and time for a reminder to appear. Use the arrows to select a month; then select a day of the month. Press **save** when finished.

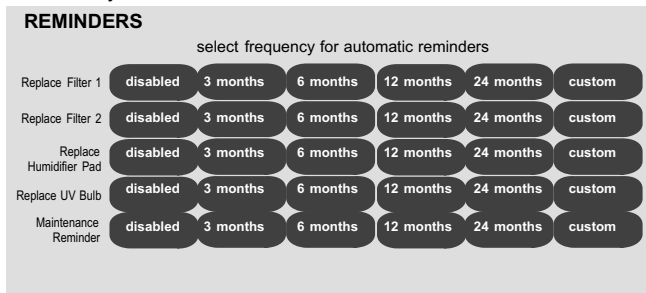
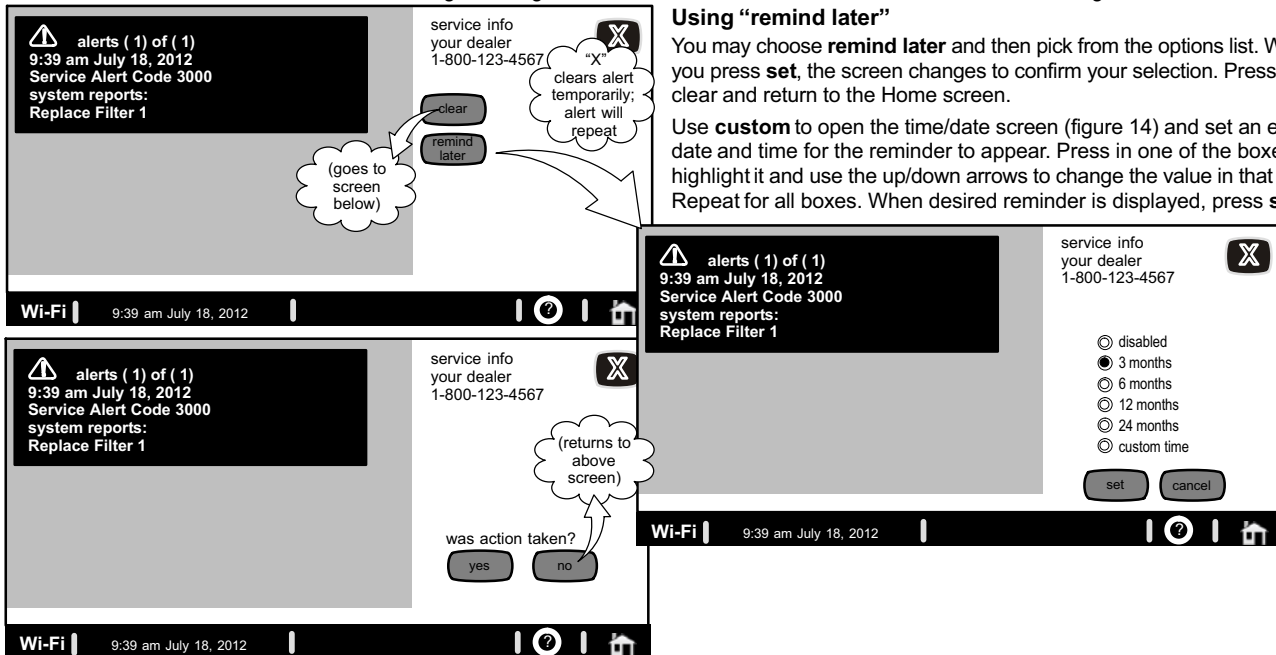


Figure 13. Set new alert date



Figure 14. Setting custom time

Service reminders can be cleared or date-changed through the service alert's **clear** and **remind later** buttons on the right side of the screen.



### Using "remind later"

You may choose **remind later** and then pick from the options list. When you press **set**, the screen changes to confirm your selection. Press **X** to clear and return to the Home screen.

Use **custom** to open the time/date screen (figure 14) and set an exact date and time for the reminder to appear. Press in one of the boxes to highlight it and use the up/down arrows to change the value in that box. Repeat for all boxes. When desired reminder is displayed, press **set**.

Figure 15. Viewing, clearing, and changing reminder time

## Service Information

Service information is normally filled in by the installer at time of initial installation. However, you can change this information, when and if needed.

Touch any line of text to produce a keyboard and then enter any new information. Touch the **save** button when finished entering information.

The screenshot shows the 'SERVICE INFORMATION' screen with a list of fields: Dealer Name, Dealer Address, Dealer Phone, Dealer Email, Dealer Website, and System Desc. A 'thermostat info' button is shown above the keyboard tool. The keyboard tool is a virtual keyboard with a 'save' button.

Field	Value
Dealer Name	my dealer
Dealer Address	1234 Fifth St
Dealer Phone	1-800-448-5872
Dealer Email	my dealer's email
Dealer Website	—
System Desc	my home system

click any line;  
keyboard will  
pop up to input  
information

thermostat info

System Desc  
my home system

clear save cancel

Figure 16. Service Information

## HELP (?)

When you touch the help icon (?) the screen changes to show an array of (?)'s located at "active" points on the screen. When you touch a (?) a popup describes what you can do by pressing the active button(s) near-est it. Figure 17 shows an example of the screen and a popup.

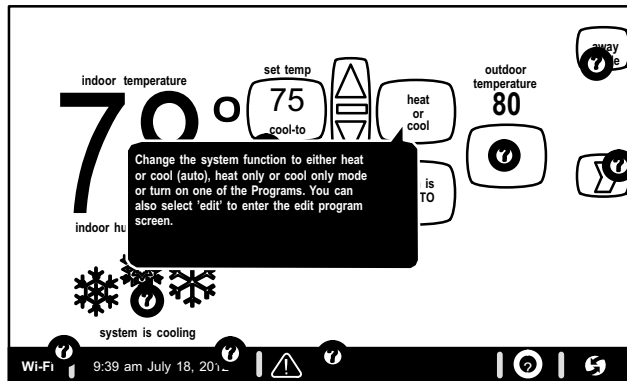
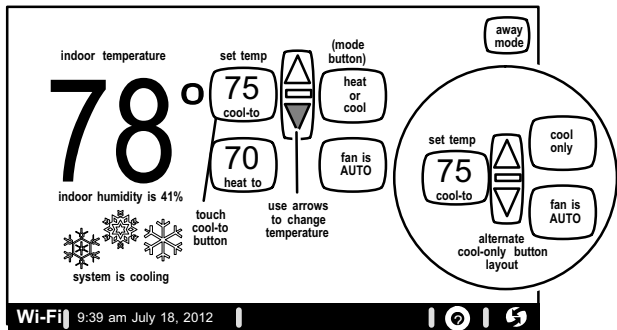


Figure 17. Typical Help (?) screen

## Adjust temperature and change programs

**Adjust temperature when programming is OFF**—When the programming is OFF, the mode button (shown in figure 18, labeled **heat or cool**) indicates a manual state (no mention of “program”). In this mode, change temperature by pressing a **set temp** button, which produces an up or down arrow, then use the arrows until the “cool to” (or “heat to”) number is at the desired temperature.

This setting will remain until you decide to change it again. (The inset shows an alternate configuration of button layout in non-program mode.)

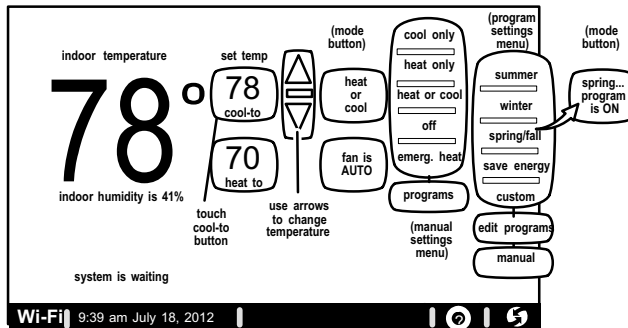


**Figure 18. Adjusting temperature with NO program running**

**Away Mode (Vacation)**—The **away mode** button on the home screen sets the system for manual operation and allows you to set the thermostat for energy saving while you are gone for an extended period of time. In this mode, the system will only come on if indoor temperature falls below a set degree (62 default for heating) or if indoor temperature rises above a set degree (85 default for cooling). You may adjust those settings as desired.

**Turn Programming ON**—If the programming is OFF, turn it on by pressing the mode button (shown in figure 19, labeled **heat or cool**). The manual settings menu includes an option to access programs. Select **programs**. The program settings menu takes the place of the manual settings menu. (Either menu will time out and disappear if you don't make a selection within a few seconds). Select an option (e.g. **spring/fall**). The menu disappears and the mode button will display the selected program (e.g. **spring...program is ON**).

**Turn Programming OFF**—If the programming is ON, turn it off by pressing the mode button (e.g. **spring...program is ON**). The program settings menu includes an option for manual. Select **manual**. The menu changes to the manual settings. Select one (e.g. **heat only**). The menus disappear and mode button will display the selected manual option (e.g. **heat only**).



**Figure 19. Turning on the program**

## Adjust temperature when program is ON—Program HOLD

When the program is ON, the mode button (shown in figure 20, labeled **spring...program is ON**) indicates which program is running. In this mode, change temperature by pressing a **set temp** button, which produces an up or down arrow, then use the arrows until the “cool to” (or “heat to”) number is at the desired temperature (see **A** in figure 20).

While changing the setting, the **other options** menu appears (see **B** in figure 20), giving a list of options you can choose.

You may select one of the hour buttons (1, 2, 8, or 24) if desired. If you select **custom**, a time/date appears and you have the option of setting the hold for any length of time (see **C** in figure 20).

After a hold is set, the **other options** menu disappears and a message will state when the hold expires, along with a **cancel** option should you choose to revert back to the program.

Note that if you do not choose one of the “other options”, the default setting will be that the program is held until the next period.

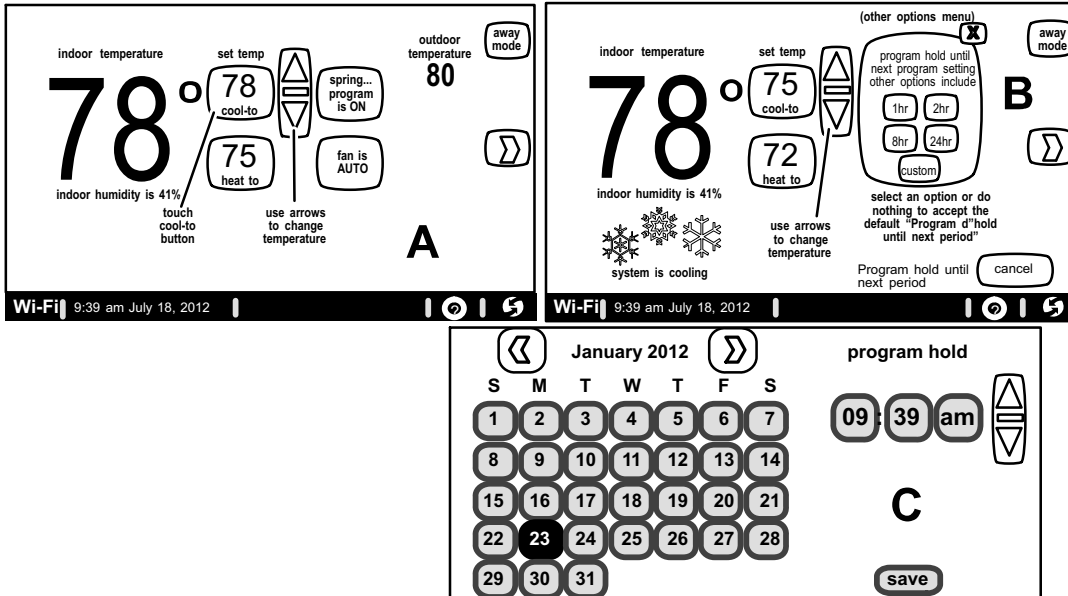



Figure 20. Adjusting temperature with program running

## Setting humidity controls

# NOTICE

**Humidifier and dehumidifier controls must be setup by the installer or these controls will not be visible. If your system has one or both of these features and the controls are not visible, contact your dealer for proper setup.**

**If the controls have been setup, they will appear and will be ON.**

To adjust humidity controls (either to humidify or dehumidify), click the  button to go to the dashboard controls; then **select system** settings button. Some systems may have a humidifier and some may have a dehumidifier, while still other systems may have both (as shown in figure 21). You can control either or both from this screen.

Both controls work identically. Touch the button of the humidity control you want to address; if it says (de)humidifier is OFF, one touch will change it to (de)humidifier is ON and bring on the RH setting button below that button. When you touch the **set-to** button, the arrows appear, allowing you to change to the desired humidity setting.

Remember that the “humidify” control only operates while in the heating mode and “dehumidify” only operates while in the cooling mode.

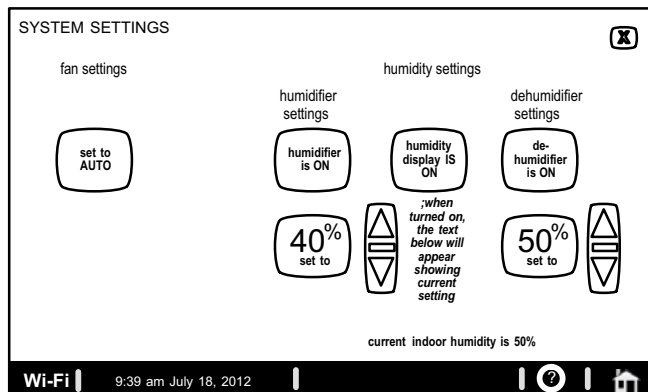


Figure 21. Humidifier controls



## Enabling the thermostat's Wi-Fi feature from the Home screen

**Secure Connection Recommended!**

Make sure the router is capable of, and set to operate in wireless network "b" mode. Check router utility program or contact service provider for help. A secure wireless network is recommended over an open (unsecured) network. You will need the homeowner's approval and router password to enable Wi-Fi in a secured connection.

**Enable Wi-Fi**—To enable the Wi-Fi feature to communicate with a wireless router:

1. Press and release "Wi-Fi" in the lower left corner of the HOME screen (see **START HERE**). The screen changes from the Home Screen to the WI-FI SETTINGS screen.
2. Press the **Wi-Fi enable** button.
3. Press **next** as necessary; then press **accept** after reading the User Agreement.
4. Press NETWORK SETTINGS; this screen shows a graphical view of buttons representing Wi-Fi options OPEN and SECURE wireless networks and a button for creating a new access point (AP).
5. Decide which of the following buttons you need to select:
  - 5.0—OPEN Wi-Fi Port (no password required).
  - 5.1—SECURE Ports (requires router password).
  - 5.2—Create new AP (Access Point).
  - 5.2a—When creating a new AP, you have the option of selecting a security level (default is none; choose from WEP, WPA, WPA2, depending on the security defined in the homeowner's router); the password field appears.
6. When you touch in one of the input fields (press here to enter...), the keyboard tool appears. Enter password (if simply logging into an existing network) or enter the network name if creating a new AP. If you mistype the password or if you cannot access the selected network, a message will alert you to retry.
7. Press **connect** to complete the connection. Note that "Wi-Fi enable" button on the WI-FI SETTINGS screen changes to "Wi-Fi disable".

Figure 22. Wi-Fi setup

## Registering the Comfort Sync™ thermostat

From NETWORK SETTINGS screen, you can change to the desired network as shown in figure 23. Enter security key or passphrase. "X" back to the WI-FI SETTINGS screen.

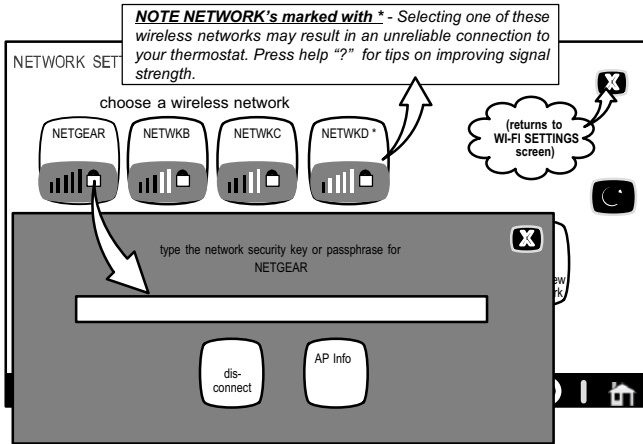


Figure 23. Change Networks

## Registration for online access

From the WI-FI SETTINGS screen, press the "thermostat not registered" button (see figure 24).

Enter homeowner email address twice and press the **register** button.

A pop up screen then appears to notify the user to check their home computer for instructions to complete the registration. After the server sends the email with the network link, registration and account creation must be completed on the homeowner's personal computer (see Page 19).

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**NOTE** - Time from pushing the registration button on the thermostat and receiving the consumer portal register link from your email on your computer is from 5 to 15 minutes.

After registration has been completed, any available firmware downloads will immediately start downloading to the thermostat.

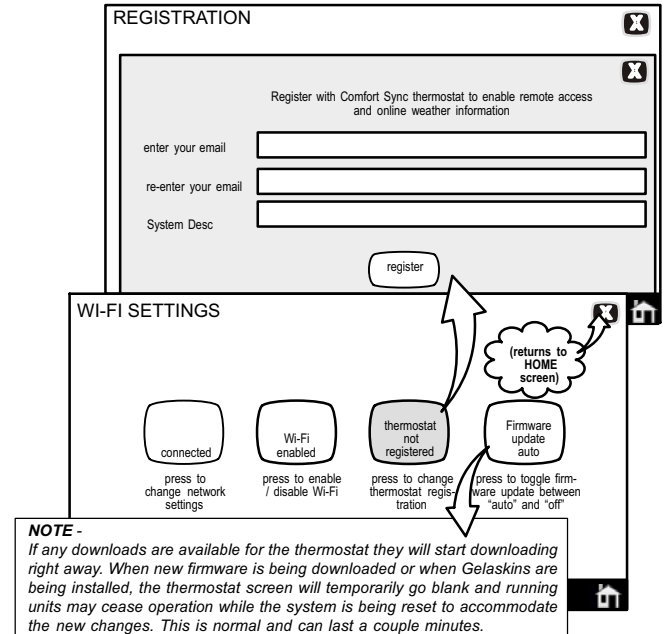


Figure 24. Registering the system for online access

For any issues with Wi-Fi connections, refer to Wi-Fi Troubleshooting Checklist 507094-01.

**Personal Computer account registration for Comfort Sync™ server**

COMFORT SYNC

Dashboard Log Out Help

My Profile My System My Dealer

Welcome Sundar Natarajan!  
Update your profile using the form below.

\*First Name

\*Last Name

\*Phone

Mobile Phone

\*Primary Email  
\*\*\*\*\*@\*\*\*\*\*.com [Change Email](#)

Password  
\*\*\*\*\* [Change Password](#)

\* indicates a required field

**NOTE - This following information is customer setup instructions and is shown here to allow the installer to help walk the customer through the setup process.**

**NOTE - if the customer has already setup an account, click the “Click Here” button to access that account.**

After registering through your Comfort Sync™ thermostat interface, go to the homeowner’s computer and locate the email sent from the server:

*Dear Customer,*

*Congratulations on your purchase of an Allied Comfort Sync thermostat! You are only a few steps away from total control of your Comfort Sync system. Registering your thermostat will allow you to remotely access it from anywhere in the world on any device with an internet connection. Please complete your Comfort Sync registration by clicking the link below:*

[Register](#)

Click on the Register link; the screen (to the left) will appear. Fill in the User Name and Password fields and check the agree to terms and conditions box. Click **Create User** button.

A series of pages and prompts follows to provide guidance through profile setup and user preference definitions.

**Figure 25. Computer login for online access**

**Personal Computer Welcome page; Interactive Demo; Online Comfort Sync™ information; Using Gelaskins**



**Figure 26. PC Welcome Screen**

**For quick reference, locate the quick reference card in the thermostat package.**

**Welcome home.**

Access all the great Wi-Fi enabled features on your Comfort Sync™ thermostat from our secure web portal. After signing in, you'll be able to view your Comfort Sync™ system settings, adjust the temperature and view reminders and alerts – just as you would on your Comfort Sync™ thermostat at home. With a familiar look and settings this simple, you should feel right at home. Don't forget to check out the available Apps and customizable skins using the links on the right side of the page. From the welcome page, you may also click on links to launch an interactive demo or learn more about Comfort Sync.

**How Do I Turn on Skins on the Comfort Sync™ Thermostat?**

From the thermostat **Home** screen, press **ⓘ** then **display setting** then **power save** buttons. From the popup menu, select **skins**. The skin picture will appear after 30 seconds of inactivity.

**How Do I Upload a Skin?**

Skins should be ordered from [www.gelaskins.com/comfortsync](http://www.gelaskins.com/comfortsync). After ordering the skin, Gelaskins will email the image file (.jpg) to the homeowner. This ".jpg" has been altered to display correctly on the Comfort Sync™ Thermostat. Images can be uploaded to the Comfort Sync™ thermostat from the consumer portal site ([www.mycomfortsync.com](http://www.mycomfortsync.com)) under the tab "skins".

Date	Revision description
07-2012	Preliminary release (Draft 1)
09-2012	Draft 2