# XR724 Touchscreen Comfort Control

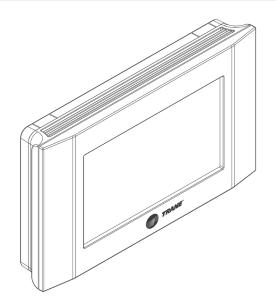


# Model TCONT724AS42DA User Guide and Installation Instructions

Trane® Home
Customer Support:
(877) 288-7707

For HVAC related issues, contact your servicing dealer

→ NOTE: A 24 Volt common and hot wire MUST be connected to the XR724 for operation.



#### Contents User Guide

realures	
Operation	3
User settings	4
Schedules	5
Display settings	5
Sensor settings	5
WiFi settings	6
Trane Home settings	
Installer settings	
Test Mode	
Reminders	
Restore Defaults	8
About	
Clean Screen	
Trane Home Enrollment	
Installer's Guide	
Product Specifications	16
Installation and Wiring	18
Physical Location	18
Field Wiring Diagrams	20
Remote Temp Sensors	
Troubleshooting	38
FCC/IC notice	

#### XR724 Features

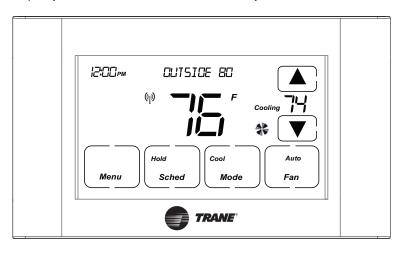
- · WiFi comfort control
- Remote access via smartphone, tablet, or P.C. (requires a Trane<sup>®</sup> Home account)
- Interactive 4.3" black & white touchscreen
- 7 Day programmable, 4 schedules/day
- · Built in humidity sensor with RH display
- · Filter, maintenance, humidifier service reminders
- Remote temperature sensing option (1 indoor/1 outdoor)
- · Auxiliary & compressor heat lockouts
- · Dehumidification (over cooling)
- Enhanced dehumidification (cooling)
- Adjustable variable speed fan settings (pwm)
- Energy Savings Mode (ESM)
- Screen lock
- Upgradable firmware (requires a Trane Home account)
- · Service test modes
- · Humidifier control

#### **XR724 Product Specifications**

Specification	Description	
Product Model:	TCONT724AS42DA	
Product:	XR724 HVAC System comfort control. WiFi communications enabled.	
Size:	5.75" wide x 3.5" height x 1" depth	
Display:	Fixed Segment LCD, 4" x 2.25", with 17 character alpha numeric display	
Touchscreen:	Yes	
Backlight:	Yes, White, Controllable, on, off, timeout	
Power:	24VAC from HVAC System	
HVAC System Type:	Standard (gas/electric), Heat Pump, or Dual Fuel	
Heat/Cool Stages:	Up to four stages of heat/two stages cool	
PWM Output (BK)	Variable speed motor control	
Heat Pump Switchover valve:	Selectable change over with cool or with heat	
Auxiliary Contact	Humidifier, Ventilation or Dehumidifier control	
Communications:	WiFi	
Memory:	Non-volatile	
Date/Time:	12 hour super capacitor backup Time is automatically updated if the control is connected to Trane Home	

# Operation

The XR724 Comfort Control provides typical operation of a forced air heating and cooling HVAC system. It also features WiFi capability for remote control and Trane Home connectivity.



Normally, the Comfort Control displays the Home Screen as shown above.

Item	Description	Notes
Clock Display	The current time is displayed in the upper left corner of the main screen. The time will blink when the clock has not been set.	See <i>TIME/DATE</i> for more information. If the control is connected to Trane Home, the clock will be updated by the Trane Home portal.
Dynamic Labels and Function Control Buttons	The buttons are defined by the dynamic labels in each button. As you navigate through menus, the labels for the buttons will change.	
Setpoint Display and Setpoint Up/Down Buttons	The current heat or cool setpoint is displayed. These setpoints may be set using Trane Home, the Control's internal schedule, or by pressing the Setpoint Up/Down buttons. Pressing the setpoint button changes the setpoint screen. The current mode is displayed at the top of the screen. Adjust the setpoint by pressing the up or down arrows. To change setpoint mode press the MODE button.	The setpoints will push each other if they are adjusted to within the minimum heat/cool separation setting. This is normally 3 degrees.
Temperature Display	The Comfort Control displays the current temperature as sensed by the internal temperature sensor.	The internal temperature sensor can be adjusted as necessary.
Menu Button	Button used to access other Comfort Control menus	
System Mode Button	Button used to change the system mode.	Off: System off Heating: Heating only Cooling: Cooling only Auto: Heating/Cooling as necessary EM Heat: Heat Pump Emergency Heat, Compressor Disabled, Indoor Heat only.
Fan Mode Button	Button used to change the fan mode	Auto: Fan on when cooling/heating is necessary On: Fan constantly on Circ: Fan on for a user-selected number of minutes per hour
Schedule Mode Button	Button used to change the schedule mode The default mode is <b>HOLD</b> which disables scheduling.	Hold: System maintains the current temperature setpoints. Schedules are disregarded. Run: Run the system schedule Energy Saving Mode (ESM): Run schedule using the ESM Setpoints. Manual setpoint changes while in Run Schedule mode will only last until the next schedule period.

#### **MENU OPTIONS**

The following is a guide of the menu options available by pressing the *Menu* button. Certain menu selections, which are marked by an asterisk (\*), may or may not be present depending on other menu settings.

#### **HUMIDITY** \*

\* Only appears as a menu item if Dehumidify is set to Yes, Aux Relay is set to Dehumidifier, or Aux Relay is set to Humidity.

HUMIDITY		
Setting	Range	Description
Cooling RH Target*	30% to 60% [50%]	Select the desired indoor relative humidity during cooling mode. Dehumidification must be enabled in the Installer Settings for this option to be available.
Heating RH Target*	10% to 45% [40%]	Select the desired indoor relative humidity during heating mode. Humidification must be enabled in the Installer Settings for this option to be available.

#### **USER SETTINGS**

User Settings allow the user to customize various settings on the XR724 control. To access User Settings simply press the *Menu* button once and "User Settings" will be displayed. To enter the User Settings menu, press the *Select* button, then use the *Next* button to navigate through the options below. The default setting will be shown in brackets. After each selection press the *Done* button to save changes. Certain menu selections, which are marked by an asterisk (\*), may or may not be present depending on other menu settings.

Setting	Range / Sub Setting	Description / Range of Sub Settings
Temperature Scale	[Fahrenheit], Celsius	Select the temperature display scale
Max Heat Setpoint	55 - [90] Degrees	Select the highest heating setpoint allowed
Min Cooling Setpoint	[60] - 99 Degrees	Select the lowest cooling setpoint allowed
Time/Date*	Set Hour	1 - 12 AM, 1 - 12 PM [12PM]
If connected with Trane Home, then time and date are provided by the	Set Minutes	0 - 59 [0]
	Day of Week	[Sun], Mon, Tue, Wed, Thr, Fri, Sat
	Year	[2013] - 2113
network	Month	[Jan], Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
	Date	[1] - 31
	DST Enable	[Yes], No
Continuous Fan Airflow*	35% - 100% [50%]	Select the desired fan speed when the Fan Mode selected is Continuous (variable speed blower required). Only available if ID Fan Type = Variable.
Fan Circulate On Time	[10] - 55 minutes	Select the desired amount of time the fan will cycle per hour when the Fan Mode selected is Circ

# **USER SETTINGS** continued

The following is a guide of the menu options available by pressing the *Menu* button. Certain menu selections, which are marked by an asterisk (\*), may or may not be present depending on other menu settings.

SCHEDULES		
Setting	Range / Sub Settings	Description / Range of Sub Settings
ESM Heat Setpoint*	55 - 90 degrees [62]	Select the desired Heating Setpoint when ESM (Energy Savings Mode) is selected
ESM Cooling Setpoint*	60 - 99 degrees [85]	Select the desired Cooling Setpoint when ESM is selected
Edit Schedule*	Select Day (use Back/Next) Wake Period	This section is done for each day Set Time [6:00 am] Heat Setpoint 60'- 90' [70] Cool Setpoint 60'- 90' [78]
	Day Period	Set Time [8:00 am] Heat Setpoint 60'- 90' [62] Cool Setpoint 60'- 90' [85]
	Eve Period	Set Time [6:00 pm] Heat Setpoint 60'- 90' [70] Cool Setpoint 60'- 90' [78]
	Night Period	Set Time [10:00 pm] Heat Setpoint 60'- 90' [62] Cool Setpoint 60'- 90' [78]
Copy Schedule*	Copy from (use Back/Next) Select day to copy Copy (day selected) To	Copy selected day to current schedule period.
Smart Recovery*	Yes, [No]	

Once all selections have been made, press the Done button to exit and return to menu. Press Next to navigate to the next setting.

DISPLAY		
Setting	Range	Description
Backlight On	0 - [100] percent	Select the screen brightness level when the backlight is lit
Backlight Off	[0] - 100 percent	Select the screen brightness level when the backlight timeout expires
Display Lock	[Unlocked], Display lock	Select security level  • Unlocked - Enables selection of all menus and settings  • Display Lock - Disables selection of all menus and settings Note: When Display Lock is selected a lock icon will appear next to the up arrow.  Note: To disable Display Lock, press and hold the Menu button 5 seconds until the lock icon disappears.

Once all selections have been made, press the **Done** button to exit and return to menu. Press **Next** to navigate to the next setting.

CALIBRATE SENSORS		
Setting	Range	Description
Sensor Cal	+/- 7 degrees (F or C) [0 deg]	Calibrate the internal temperature sensor (1° in F = 2° in C)
Remote Sensor Cal*	+/- 7 degrees (F or C) [0 deg]	Calibrate an attached remote sensor
ODT Sensor Cal*	+/- 7 degrees (F or C) [0 deg]	Calibrate an attached outdoor sensor
RH Cal	+/- 7 % [0 %]	Calibrate the internal humidity sensor
Once all selections have been made, press the Done button to exit and return to menu. Press Next to navigate to the next setting.		

# WIFI

Even though open networks (no password) and WEP WiFi encryption are supported, it is recommended to use a more secure network encryption such as WPA2 or later.

Setting	Range	Description
Network	Join a Network OR leave network	Network connection action required: Yes, No
Status	WiFi not configured OR Trane Home enrolled	Status of Network connection
Connection Result	WiFi not configured OR Success	Status of WiFi connection
Info	SPWF FW	Firmware version displayed
	SSID	Not Available OR Network Name displayed
	IP	Not Available <b>OR</b> IP Address displayed
	Mask	Not Available <b>OR</b> Mask displayed
	GW	Not Available OR Gateway IP address displayed
	DNS	Not Available OR DNS IP address displayed
	MAC	Not Available OR MAC address displayed
Retries	Retries (X)	Number of connection retries
Connection Time	Disconnected OR X hours	Connection hours
RSSI	RSSI – xx DBM	Connection signal strength

#### TRANE HOME

Setting	Range	Description
Status	WiFi Not Configured Enrolled	WiFi connection status
Info	Port (XXXXX) HOME APP Pin (XXXX)	Trane Home connection info
Enroll OR Unenroll	Enroll, Unenroll	Join OR leave a Trane Home connection

The following is a guide of the menu options available on screen accessed by pressing the *Menu* button. Certain menu selections, which are marked by an asterisk (\*), may or may not be present depending on other menu settings.

#### **SERVICE**

Press and hold Service button for 5 seconds until service menu is displayed

Setting	Sub Settings	Range
Equipment Type	ODU Type (Outdoor Unit)	None, [AC], HP
	ODU Stages	[1 Stage], 2 Stages
	Compressor Type*	[1 Comp - 2 Stage], 2 Comp - 2 Stage
	IDU Type	[Gas / Oil], Electric, Hydronic
	Hydronic Type*	[Hydro Air], Wet Heat
	ID Heat Stages	[1 Stage], 2 Stages
	ID Fan Type	[Non-Variable], Variable
	SOV Operation*	[with Cool], With Heat
Sensor Settings	Remote Sensor	[None], Replace Indoor, Average
	ODT Sensor	[None], Outdoor
Accessories	Aux Relay	[None], Humidity, Ventilation, Dehumidifier
	Control Option*	[With Active Heat], Without Active Heat
	Vent Run Time*	[Off], 5 - 60 min in 5 min increments
Comfort Settings	Control Response	[Normal], Less Aggressive, More Aggressive (see page 9 for definitions)
<u> </u>	Dehumidify*	[Yes], No
	Overcooling Limit*	[Off], 1 deg, 2 deg, 3 deg
	Smart Cont Fan*	[No], Yes
Airflow Settings	One of the following groups will be displayed	
Fan type = Non Variable	On Delay Cooling	[0], 5-90 Sec in 5 sec increments
	Off Delay Cooling	[0], 5-90 Sec in 5 sec increments
	On Delay Heating*	[0], 5-90 Sec in 5 sec increments
	Off Delay Heating*	[0], 5-90 Sec in 5 sec increments
Fan type = Variable	On Delay Cooling	Disabled, [Enhanced Mode], 30 sec delay
	Off Delay Cooling	Disabled, [1.5 Min at 100%], 45 sec delay
	On Delay Heating*	Disabled, [Enhanced Mode], 30 sec delay
	Off Delay Heating*	Disabled, [1.5 Min at 100%], 45 sec delay
Hydronic Type = Hydro Air	On Delay Heat	[0], 5-90 Sec in 5 sec increments
	Off Delay Heat	[0], 5-90 Sec in 5 Sec increments
Lockouts*	Aux Heat	[No], Yes
	Aux Lockout ODT*	30 - 70 Deg [50 Deg]
	Comp Heat	[No], Yes
	Comp Lockout ODT*	5 - 70 Deg, [40 Deg]

#### **SERVICE** continued

The following is a guide of the menu options available on screen accessed by pressing the *Menu* button. Certain menu selections, which are marked by an asterisk (\*), may or may not be present depending on other menu settings.

TEST MODE (stays on for 30 minutes)		
Test Mode	Settings	Description
Blower (Non-VS)	Blower On	Energize "G" circuit
Blower (VS)	50%, 100%	Energize "G" and "BK" circuit
Cooling	Single Stage, 1st Stage, 2nd Stage	Energize selected "Y1" or "Y2", "O" and "G" circuit (BK also for VS indoor unit)
Comp Heating*	Single Stage, 1st Stage, 2nd Stage	Energize selected "Y1" or "Y2" and "G" circuit ("BK" also for VS indoor unit)
Indoor Heating	Single Stage, 1st Stage, 2nd Stage	Energize selected "W1" or "W2" ("G" circuit also for electric heat)
Aux Relay	Relay On	Close normally open dry contacts

Once testing is complete, press the **Done** button to exit and return to menu.

REMINDERS			
Setting	Range	Description	
Filtration Enable	[No], Yes	Filter change reminder	
Filter Period*	[Monthly], Quarterly, Bi-Annually, Annually	Filter change reminder period	
Start Month*	[Jan], Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	Period start month	
System Maint Enable	[No], Yes	System Maintenance reminder	
Maint Period*	[Bi-Annually], Annually	Maintenance reminder period	
First Maint Month*	Jan, Feb, [Mar], Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	Period start month	
Second Maint Month*	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, [Sep], Oct, Nov, Dec	2nd period start month	
Humidifier Enable	[Yes], No		
Start Month	[Jan], Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec		

Once all selections have been made, press the Done button to exit and return to menu. Press Next to navigate to the next setting.

RESTORE DEFAULTS		
Setting	Action	Description
Restore HVAC Defaults	Yes, No	Resets all HVAC settings to Default Settings
Restore Factory Defaults	Press and Hold "Yes"	Press and hold " <b>Yes</b> " button until "Factory" is displayed Resets HVAC and WiFi defaults

#### **ABOUT**

Setting	Range	Description
Version	XXXXXX	Firmware version number
Device ID (SIN)	XXXXXX	Unit serial number
ODU Type	None, AC, HP	Outdoor unit type setting
IDU Type	Electric, Gas/Oil, Hydronic	Indoor unit type setting
SOV	W/Cool, W/Heat	Switchover value type setting (HP only)
Once all selections have	e been made, press the <b>Done</b> button t	o exit and return to menu. Press <b>Next</b> to navigate to the next setting.

#### **CLEAN SCREEN**

Setting	Range	Description
Clean Screen	Yes, No	30 sec countdown
Once all selections have been	en made, press the <b>Done</b> button to e	exit and return to menu. Press <b>Next</b> to navigate to the next setting.

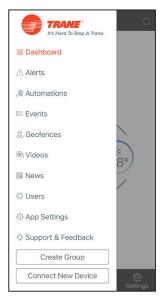
# **XR724 Control Response Profiles**

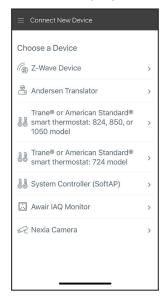
From Installer Settings / Comfort Settings (numbers are in degrees, F or C)

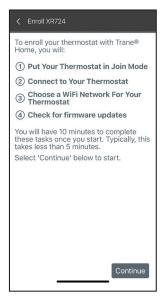
Cooling	Normal	Less Aggressive	More Aggressive
Cooling Delta Stage 1 ON	0.5	1	0.5
Cooling Delta Stage 2 ON	1.5	2	1
Cooling Delta Stage 1 OFF	-0.5	0	-1.0
Cooling Delta Stage 2 OFF	-0.5	0	-1.0
Heating - HP	Normal	Less Aggressive	More Aggressive
Comp Heat Delta Stage 1 ON	0.5	1	0.5
Comp Heat Delta Stage 2 ON	1.5	2	1.0
Indoor Heat Delta Stage 1 ON	2.5	3	1.5
Indoor Heat Delta Stage 2 ON	3.5	4	2.0
Comp Heat Delta Stage 1 OFF	0	0	0
Comp Heat Delta Stage 2 OFF	0	0	0
Indoor Heat Delta Stage 1 OFF	0	0	0
Indoor Heat Delta Stage 2 OFF	0	0	0
Heating - Gas	Normal	Less Aggressive	More Aggressive
Indoor Heat Delta Stage 1 ON	0.5	1	0.5
Indoor Heat Delta Stage 2 ON	1.5	2	1.0
Indoor Heat Delta Stage 1 OFF	0	0	0
Indoor Heat Delta Stage 2 OFF	0	0	0
Timers	Normal	Less Aggressive	More Aggressive
Heat Stage UP Timer	15 min	20 min	10 min
Cool Stage UP Timer	15 min	20 min	10 min

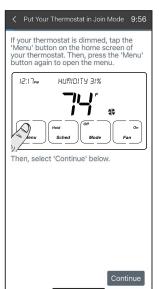
#### **XR724 TRANE HOME Enrollment**

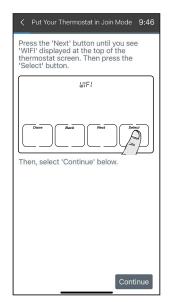
The XR724 uses the Trane Home mobile app to enroll into Trane Home. To enroll download the Trane Home app from the Google Play™ Store or App Store®, then launch the app. Once in the app, click **Connect New Device**, **select smart thermostat 724 model** then follow installation wizard prompts.

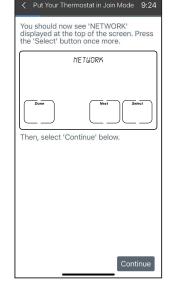








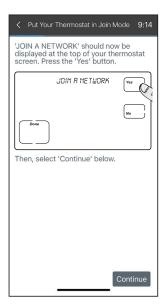


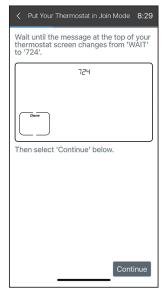


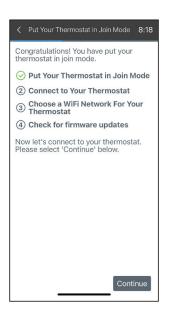
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#### XR724 TRANE HOME Enrollment continued

Even though open networks (no password) and WEP WiFi encryption are supported, it is recommended to use a more secure network encryption such as WPA2 or later.

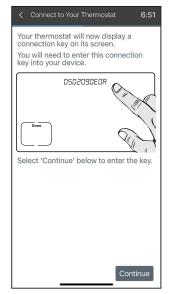






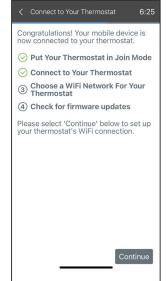






#### XR724 TRANE HOME Enrollment continued







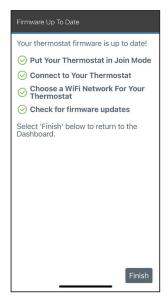






#### XR724 TRANE HOME Enrollment continued



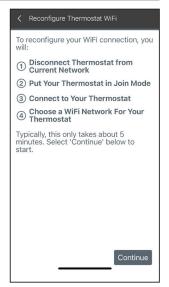




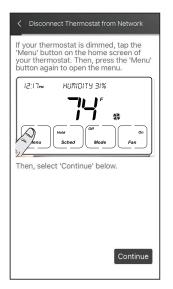
### XR724 TRANE HOME WiFi Reconfiguration

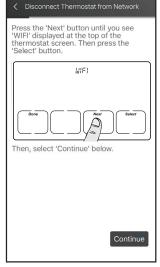


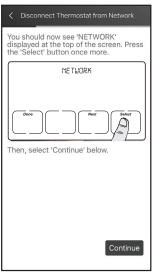




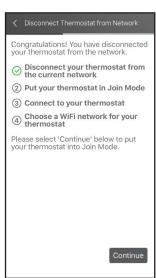
# XR724 TRANE HOME WiFi Reconfiguration continued

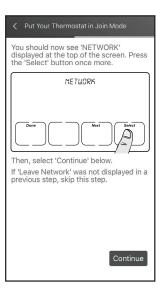




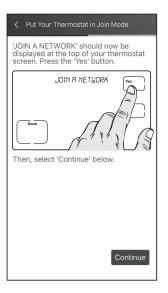


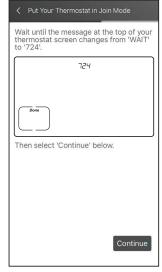


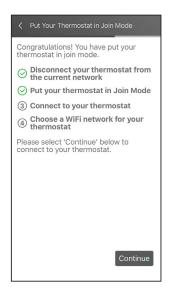




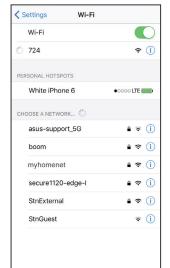
#### XR724 TRANE HOME WiFi Reconfiguration continued

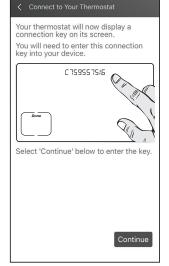






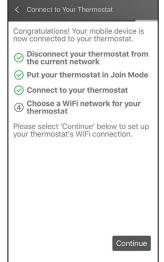






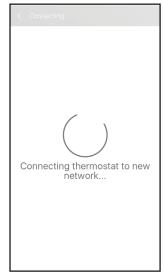
#### XR724 TRANE HOME WiFi Reconfiguration continued

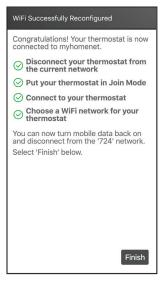












# XR724 TRANE HOME WiFi Reconfiguration continued

