Color Touch-screen Communicating Wall Control
For use in Single or Multi-Zone Installations

EASIER TO SELL
- Supports Observer System communicating equipment multistage Heating and Cooling operation, including modulating gas furnaces (version 4.02 and later) and inverter compressor sections (version 5.01 and later). NOTE: The TSTAT0101SC wall control is NOT compatible with inverter outdoor units.
- Model TSTAT0201CW features Remote Access via home Wi-Fi® network; See *www.MyObserverComfort.com* for more information and access to iOS and Android mobile apps.
- High definition full color touch-screen display
- Simplified programming with options for 4 daily periods during individual days, all days same, or weekday/weekend schedule; California Title 24 compliant
- Two hold options, including indefinite hold and timed override hold
- Selectable constant fan speed option – Low, Medium, High (with compatible indoor equipment)
- Selectable screen backlight brightness, including 30%/Off
- Screen cleaning function (disables touch-screen for 30 seconds)
- Adjustable/resettable filter and service reminders
- Touch-screen lockout option
- When installed as part of a complete Observer Zoning System, the TSTAT0101SC and TSTAT0201CW can be used as a Zone Sensor option for Zones 2 through 6.

EASIER TO INSTALL
- 4–wire (or 2–/3– wire depending on the communicating outdoor unit used) installation from each compatible component in the system
- Communication with all compatible components in the system
- Self configuration with all compatible components in the system
- Option to use NAXA00101DB Daughter Board for connection with non-communicating system components (Single or Multi-Zone Installations)
- Supports up to 4 stages Heat, 2 stages Cool for non–communicating equipment
- True Dual Fuel compatible
- Full humidity control (with compatible equipment)
- Outdoor temperature automatically received from compatible outdoor component, or use accessory OD temp sensor with non-communicating equipment and daughter board
- QWERTY keyboard for data entry
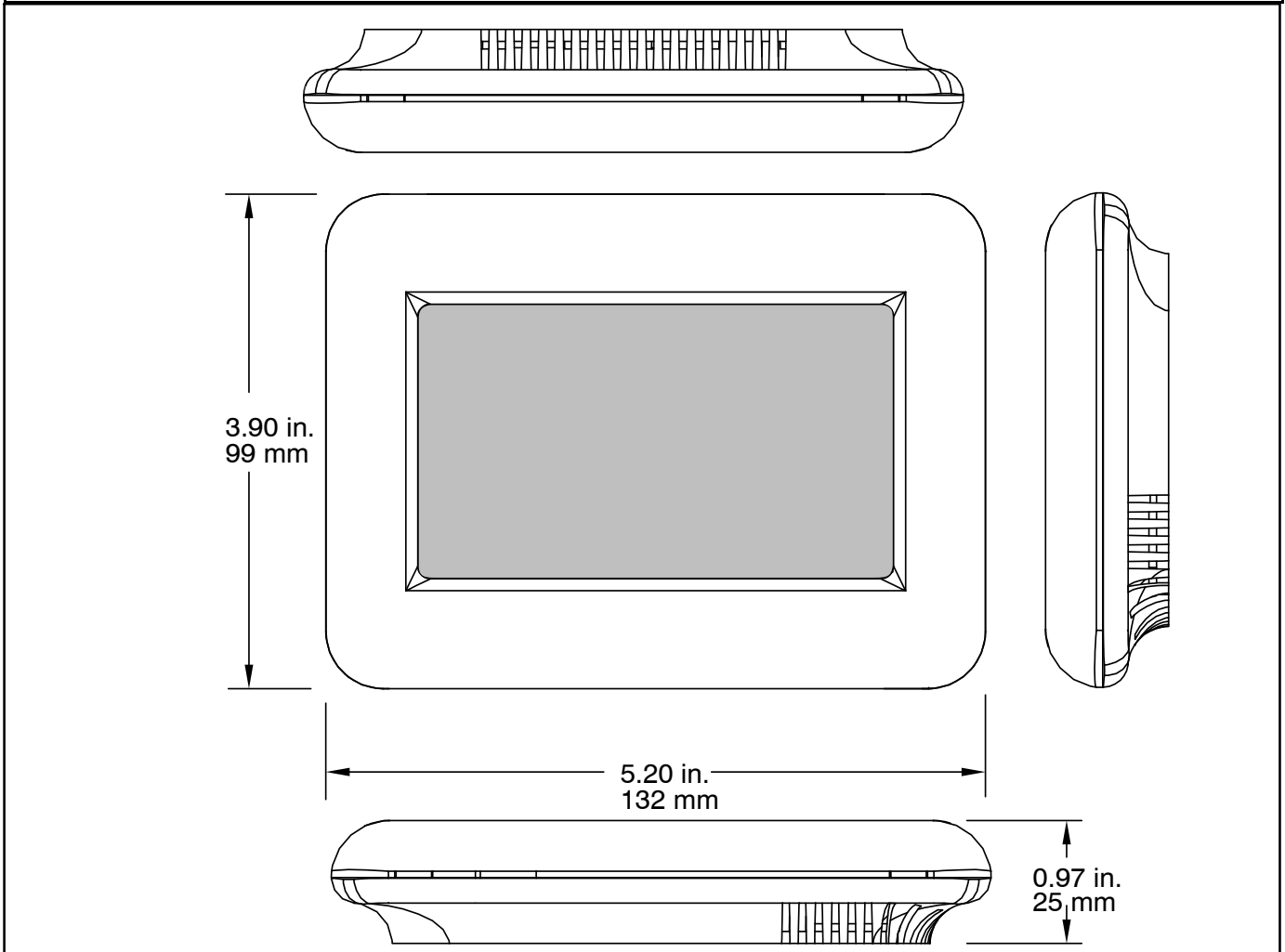- Selectable brand logo (or no logo)

EASIER TO SERVICE
- Non-volatile memory with 8+ hour clock retention, holds program settings indefinitely without power
- Text based diagnostics viewable on screen
- Up to last 10 diagnostic fault messages viewable on service screens
- Enter dealer name and contact info for display during a fault

Physical Characteristics	
Dimensions – H x W x D inch(mm)	**Appearance**
3.9 x 5.2 x .97 (99 x 132 x 25)	Plastic, white color, textured

Electrical Characteristics / Communication	
Input Volts/Amps	24VAC, 500ma maximum
Each device in the Observer Communicating System has a four-pin connector labeled DX+, DX-, R, C It is recommended that the color code be used when wiring each device	DX+ = Green = Data A DX- = Yellow = Data B C = White = 24VAC (Com) R = Red = 24VAC (Hot)

Wiring Requirements – Wall Control	
Power Supply	**Wiring Material (field supplied)**
24VAC, 12 VA maximum, 50/60 Hz, via indoor equipment DX+ DX- C R Connector	Standard thermostat wire, 18 AWG recommended

Environmental Requirements – Wall Control and Accessories		
Operating Temp./ Relative Humidity	**Storage Temp./ Relative Humidity**	**Setpoint Specifications**
Wall Control and all sensors: 32°F to 104°F / 0°C to 40°C, 95% rh non-condensing	Wall Control: -40°F to 134°F / -40°C to 57°C, 95% rh non-condensing	Temperature set point range: 40°F to 90°F / 4°C to 32°C

DIMENSIONS – in(mm)

3.90 in.
99 mm

5.20 in.
132 mm

0.97 in.
25 mm

WALL CONTROL ACCESSORIES

Part Number	Description
NAXA00101DB	Daughter board for use with non–communicating equipment. Converts 4–wire signal to conventional multi–wire signals (Y1, Y2, W1, W2, G, O) NOTE: Can be used in either Single or Multi-Zone Installations
NAXA00101WA	Observer® Wireless Access Point for use with TSTAT0201CW model wall control. Provides gateway/router services to an Observer Wi-Fi® network if other Wi-Fi networks are unavailable or unusable. Connects to an existing Ethernet network that provides Internet access. DOES NOT add Wi-Fi capability to the TSTAT0101SC model wall control.
TSTATXXSEN01B	Outdoor Temperature Sensor, use with non-communicating equipment (communicating outdoor equipment factory equipped with OD temp sensor)
TXMBP01	Backplate, medium size. Covers wall spots left when replacing larger thermostats
SYSTXGRPLG10	Communicating Plug, 4-wire (DX+, DX-, C, R). Matches connector on control board of communicating indoor and outdoor equipment, 10 pack
SYSTXIIRRS01	Remote Room Sensor (not required), requires 2-wire stat cable, use 1 or 4 with Observer control for optional remote temperature sensing (temperatures averaged)
40106750000	(Available from Literature Ordering System) Mini–USB–B Male to USB–A Female Adapter. Used to connect USB memory sticks to the Observer Wall Control to update software versions.

Specifications subject to change without notice.

616 51 1003 01

WIRING REQUIREMENTS – ZONING PANEL AND SYSTEM

Logic Power Supply and Communications	DX+, DX, R, C from indoor unit **NOTE:** the requirement for the R wire (24vac) may be replaced by an independent transformer for the zoning communication bus, see below
Zoning Power Supply	Class 2, 24volt 75 VA maximum (sufficient to power all dampers); recommend second field–supplied transformer for communication bus, when multiple CTS are used as zone sensors, or zone panel reports low voltage fault. See Zone Panel Installation Instructions
Wiring Material	Standard thermostat wire, 18 AWG recommended; smaller gauge wire may cause operational and bus communication issues

ZONING ACCESSORIES

Part Number	Description
ZONE0101ZP6	Observer Zone Panel supports up to 6 zones and provides basic relay logic for damper operation and serves as the common connection point for the Observer Zoning System.
ZONE0101RRS	Observer Communicating Room Sensor is a Zone Sensor option for Zones 2 through 6. It provides full setback capabilities (through the Observer wall control interface only) and communicates to Observer Zoning System).
ZONEXX0DTS01	**REQUIRED FOR ALL ZONING SYSTEMS:** Leaving Air Temperature (LAT) Sensor provides temperature readings to the zoning system to optimize performance and to protect the equipment
ZDAMPRND06INCB	Round Dampers 6 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPRND08INCB	Round Dampers 8 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPRND10INCB	Round Dampers 10 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPRND12INCB	Round Dampers 12 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPRND14INCB	Round Dampers 14 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPRND16INCB	Round Dampers 16 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC08X10B	Rectangular Dampers 8 inch X 10 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC08X14B	Rectangular Dampers 8 inch X 14 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC08X18B	Rectangular Dampers 8 inch X 18 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC08X24B	Rectangular Dampers 8 inch X 24 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC10X10B	Rectangular Dampers 10 inch X 10 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC10X14B	Rectangular Dampers 10 inch X 14 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC10X18B	Rectangular Dampers 10 inch X 18 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPREC10X24B	Rectangular Dampers 10 inch X 24 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPBAR08X14	Rectangular Barometric Bypass 8 inch X 14 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPBAR08X24	Rectangular Barometric Bypass 8 inch X 24 inch power open, power closed damper with self-aligning shaft and actuator hub
ZDAMPACT45DEGR	45° Replacement Actuator for Round Dampers
ZDAMPACT90DEGR	90° Replacement Actuator for Round Dampers

Notes for Non–ICP Damper Requirements:
1. Dampers may be power open / power close or spring open / power closed.
2. Power Open / Power Close will be 3 terminals: OPEN / CLOSE / COMMON
3. Drive times are controlled through the OBSERVER® set up will be: 15, 30, 45, 50, 75, 105 and 120 seconds
4. No more than 3 dampers, wired in parallel, per zone
5. Total load for ZONE0101ZP6 is 75VA (3 amps) total. No more than 48VA (2 amps) per single zone.
   (Class 2 systems only allow a maximum of 75VA for the circuits.)