

kanmor® - User Brochure

Universal Reset Control 363e

U 363e

06/03



The Universal Reset Control 363e is a microprocessor based control designed to maximize the comfort and efficiency provided by a hydronic heating system. The control automatically adjusts the boiler circuit and mixed circuit water temperatures that are delivered to the heating system using outdoor reset. Outdoor reset also increases the energy efficiency of the heating system by not allowing more heat into the building than the building normally loses to the outside. Another benefit of outdoor reset is the reduction of indoor temperature swings - especially in the fall and spring months. The control can intelligently integrate indirect fired Domestic Hot Water (DHW) and kanmor zone controls into the heating system.

User Interface

Access Level(s) The kanmor Universal Reset Control 363e has four access levels which are **LTD** (limited), **USER**, **INST** (installer), and **ADV** (advanced). This brochure only covers the **LTD** (limited) and **USER** levels. Only qualified service people should make adjustments in the **INST** (installer) and **ADV** (advanced) access levels.

Item Field
Displays an abbreviated name of the selected item

Number Field
Displays the current value of the selected item

Menu Field
Displays the current menu

Status Field
Displays the current status of the control's inputs, outputs and operation

Buttons
Selects Menus, Items and adjusts settings

Open / Close <i>Open</i> <i>Close</i>	Displays when the actuator is opening or closing the valve.
Burner 	Displays when the boiler relay is turned on.
Pump 1 2	Displays when boiler pump 1, and / or mixing pump 2 is operating.
DHW Pump / Valve 	Displays when the DHW pump or valve is on.
Boost 	Displays when the control is in boost after setback.
UnOccupied Mode <i>UnOcc</i>	Displays when the control is in unoccupied mode.
Occupied Mode <i>Occ</i>	Displays when the control is in occupied mode.
Override <i>Ovr</i>	Displays when the control is in override mode.
Warning 	Displays when an error exists or a limit has been reached.
Lock / Unlock 	Displays whether the access levels are locked or unlocked.
°F °C <i>min hr</i> <i>sec</i>	°F, °C, sec, min, hr Units of measurement.
Pointer 	Displays the control operation as indicated by the text.

The kanmor Universal Reset Control 363e has a Liquid Crystal Display (LCD) and four push buttons (Menu, Item, ▲, ▼) which are used to view and adjust the settings.

Menu All of the items displayed by the control are organized into various menus. These menus are listed on the left hand side of the display (Menu Field). To select a menu, use the **Menu** button. By pressing and releasing the **Menu** button, the display will advance to the next available menu. Once a menu is selected, there will be a group of items that can be viewed within that menu.

Item The abbreviated name of the selected item will be displayed in the item field of the display. To view the next available item, press and release the **Item** button. Once you have reached the last available item in a menu, pressing and releasing the **Item** button will return the display to the first item in the selected menu.

Adjust To make an adjustment to a setting in the control, begin by selecting the appropriate menu using the **Menu** button. Then select the desired item using the **Item** button. Finally, use the **▲** and / or **▼** button to make the adjustment.

Additional information can be gained by observing the Status and Pointer fields of the LCD. The status field will indicate which of the control's outputs are currently active. Most symbols in the status field are only visible when the View menu is selected.

Note: Depending on the settings the installer makes in the control, certain items may not appear.

Item	Ltd	User	View Menu	Range
OUTDOOR	●	●	Current outdoor air temperature as measured by the outdoor sensor.	-67 to 149°F (-55 to 65°C)
ROOM TRG		●	Target room air temperature. "—" denotes no heat is required. Will not display if RTU is connected.	— — —, 35 to 100°F (2 to 38°C)
ROOM	●	●	Measured room air temperature at the indoor sensor. Will not display if RTU is connected.	-58 to 167°F (-50 to 75°C)
MIX SUP		●	Current mixed supply water temperature as measured by the mixing sensor.	-31 to 266°F (-35 to 130°C)
Boil SUP		●	Current boiler supply water temperature as measured by the boiler sensor.	-31 to 266°F (-35 to 130°C)
DHW TRG		●	Target DHW cylinder temperature. This item can only be viewed if a kanmor sensor is used to measure the DHW cylinder temperature.	— — —, OFF, 70 to 190°F (— — —, OFF, 21 to 88°C)
DHW	●	●	Current DHW cylinder temperature as measured by the DHW cylinder sensor.	-31 to 266°F (-35 to 130°C)

Item	Ltd	User	Adjust Menu	Range
MIX ROOM <i>Occ</i>	●	●	The desired room temperature during an Occupied period for mixing zone(s). Will not display if an RTU is connected. In LTD access level, this setting can only be adjusted $\pm 3^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$).	35 to 100°F (2 to 38°C)
MIX ROOM <i>UnOcc</i>		●	The desired room air temperature during an UnOccupied period for mixing zone(s). Will not display if an RTU is connected.	35 to 100°F (2 to 38°C)
FLOOR MIN		●	The minimum temperature at the floor (slab) sensor, provided the control is not in Warm Weather Shut Down. This item can only be adjusted if a kanmor floor (slab) sensor is connected.	Off, 35 to 120°F (Off 2 to 49°C)
Boil ROOM <i>Occ</i>	●	●	The desired room air temperature during an Occupied period for the boiler zone(s) in the heating system. In LTD access level, this setting can only be adjusted $\pm 3^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$).	35 to 100°F (2 to 38°C)
Boil ROOM <i>UnOcc</i>		●	The desired room air temperature during an UnOccupied period for boiler zone(s) in the heating system.	35 to 100°F (2 to 38°C)
DHW TANK <i>Occ</i>		●	The DHW storage cylinder's temperature during the Occupied period. This item can only be adjusted if a kanmor sensor is used to measure the DHW cylinder temperature.	OFF, 70 to 190°F (21 to 88°C)
DHW TANK <i>UnOcc</i>		●	The DHW storage cylinder's temperature during the UnOccupied period. This item can only be adjusted if a kanmor sensor is used to measure the DHW cylinder temperature.	OFF, 70 to 190°F (21 to 88°C)
WWSO <i>Occ</i>		●	The system's warm weather shut down during the Occupied period	35 to 100°F, OFF (2 to 38°C, OFF)
WWSO <i>UnOcc</i>		●	The system's warm weather shut down during the UnOccupied period	35 to 100°F, OFF (2 to 38°C, OFF)

Note: Depending on the settings the installer makes in the control, certain items may not appear.

Item	Ltd	User	Monitor Menu	Range
OUT HI	•	•	The highest recorded outdoor air temperature since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	-67 to 149°F (-55 to 65°C)
OUT LO	•	•	The lowest recorded outdoor air temperature since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	-67 to 149°F (-55 to 65°C)
TANK HI	•	•	The highest DHW cylinder temperature since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	0 to 255°F (-18 to 124°C)
TANK LO	•	•	The lowest DHW cylinder temperature since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	0 to 255°F (-18 to 124°C)

Item	Ltd	User	Schd (Schedule) Menu	Range
OVERRIDE	•	•	The type of setback override that is in effect. DIP Switch = Setback HOL is available even if DIP ≠ Setback	NONE, TMPY Occ, PERM Occ, TMPY UnOcc, PERM UnOcc, HOL

None - No override. *TMPY Occ* - Overrides to Occupied setting for 3 hours. *PERM Occ* - Overrides to Occupied setting until new override is selected. *TMPY UnOcc* - Overrides to UnOccupied for 3 hours. *PERM UnOcc* - Overrides to UnOccupied setting until new override is selected. *HOL* - Room & WWSD temperature at 62°F (17°C), no DHW.

Item	Ltd	User	Misc (Miscellaneous) Menu	Range
UNITS	•	•	The units of temperature used to display the items.	°F °C
BACKLITE	•	•	The operating mode for the back lighting on the LCD as well as the time of keypad inactivity until the control automatically returns to the default display. BACKLITE = OFF (returns after 10 seconds) BACKLITE = 30 sec (returns after 30 seconds) BACKLITE = ON (returns after 90 seconds)	OFF, 30 sec, ON
ACCESS	•	•	The access level that is to be used by the control. DIP switch = Unlock Only qualified service people should adjust items in the ADV (Advance) and INST (Installer) access levels.	ADV, INST, USER, LTD



Room Temperature Unit (RTU) 062e, 063e

A single RTU may be connected to the Universal Reset Control 363e in order to provide the control with indoor temperature feedback for the mixing side of the heating system. When using an RTU, several items related to the mixing side of the heating system are no longer available in the control's User Interface. These items are available only in the RTU's User Interface. Also, the number of items that are available on the RTU depends on the type of RTU that is connected to the control.

Item	Ltd	User	062e	063e	RTU View Menu	Range
ROOM	•	•	•	•	Current room air temperature RTU SENS = AIR	---, 14 to 167°F (-10 to 75°C)
ROOM TRG	•	•	•	•	Target room air temperature RTU SENS = AIR	---, 35 to 100°F (2 to 38°C)
OUTDOOR	•	•	•	•	Current outdoor air temperature as measured by the outdoor sensor.	-67 to 149°F (-55 to 65°C)
FLOOR	•	•	•	•	Current floor (slab) sensor temperature. This item is only available if a kanmor slab sensor is connected to a RTU 063e.	-58 to 167°F (-50 to 75°C)

Item	Ltd	User	062e	063e	RTU Adjust Menu	Range
ROOM <i>Occ</i>	•	•	•	•	The desired room air temperature during an Occupied period for the mixing zones. In LTD access level, this setting can only be adjusted $\pm 3^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$).	35 to 100°F (2 to 38°C)
ROOM <i>UnOcc</i>	•	•	•	•	The desired room air temperature during an UnOccupied period for this mixing zone. In LTD access level, this setting can only be adjusted $\pm 3^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$).	35 to 100°F (2 to 38°C)
FLOR MIN		•	•		The minimum temperature desired at the floor (slab) sensor while the control is not in WWSD. This item can only be viewed if a kanmor floor (slab) sensor is connected to a RTU 063e.	OFF, 35 to 120°F (OFF, 2 to 49°C)

Item	Ltd	User	062e	063e	RTU Monitor Menu	Range
OUT HI	•	•	•	•	The highest outdoor air temperature recorded since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	67 to 149°F (-55 to 65°C)
OUT LO	•	•	•	•	The lowest outdoor air temperature recorded since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	67 to 149°F (-55 to 65°C)
ROOM HI		•	•	•	The highest room air temperature recorded since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	14 to 167°F (-10 to 75°C)
ROOM LO		•	•	•	The lowest room air temperature recorded since this item was last cleared. To clear this item, press and hold the ▲ and ▼ buttons until 'CLR' is displayed.	14 to 167°F (-10 to 75°C)

Item	Ltd	User			RTU Schd (Schedule) Menu	Range
OVERRIDE		•			The type of setback override that is in effect. This menu and item can only be viewed if the Setback / None DIP Switch is set to <i>Setback</i> .	NONE, TMPY Occ, PERM Occ TMPY UnOcc, PERM UnOcc, HOL

None - No override. **TMPY Occ** - Overrides to Occupied setting for 3 hours. **PERM Occ** - Overrides to Occupied setting until new override is selected. **TMPY UnOcc** - Overrides to UnOccupied for 3 hours. **PERM UnOcc** - Overrides to UnOccupied setting until new override is selected. **HOL** - Room & WWSD temperature at 62°F (17°C), no DHW.

Item	Ltd	User	062e	063e	RTU Misc (Miscellaneous) Menu	Range
UNITS		•	•	•	The units of temperature used to display the items.	°F °C
BACKLITE		•	•	•	The operating mode for the back lighting on the LCD as well as the time of keypad inactivity until the control automatically returns to the default display. BACKLITE = OFF (returns after 10 seconds) BACKLITE = 30 sec (returns after 30 seconds) BACKLITE = ON (returns after 90 seconds)	OFF, 30 sec, ON
ACCESS	•	•	•	•	The access level that is to be used by the control. DIP switch = Unlock Only qualified service people should adjust items in the ADV (<i>Advance</i>) and INST (<i>Installer</i>) access levels.	ADV, INST, USER, LTD



Remote Display Module (RDM)

An optional Remote Display Module can be connected to the 363e if an RTU is not used. All items displayed on the 363e menu will also be displayed on the remote module. Adjustments can be made from the Remote Display Module. This module is connected to the control through two wires and has the same physical appearance as an RTU.



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