tekmar - Data Brochure

Room Temperature Unit (RTU) 060

D 060

09/00



The tekmar Room Temperature Unit (RTU) 060 consists of a temperature sensor, adjustable dial, push button, and indicator LED. The adjustable dial is used to set the desired indoor temperature during the occupied period. The push button is used to provide either a temporary occupied override or a permanent unoccupied override. The indicator LED is used to indicate the type of override that is currently in effect. The RTU 060 dial has a temperature range from 40 to 100°F (4 to 38°C). In cases where a restricted temperature range is required, the dial rotation can be limited using limit pins supplied with the RTU.

Note: This RTU is only compatible with the tekmar Zone Control 369.

Installation

STEP ONE REMOVING THE FRONT COVER -

Place a screwdriver or similar object into the small slot located in the top of the 060. Push the screwdriver against the plastic tab and pull the top of the front cover so that it pivots around the bottom edge of the 060.



The base of the 060 should be securely installed in the desired location. Mount the 060 directly to the desired location using two #6 - 1" screws. The screws are inserted through the mounting holes and must be securely fastened to the desired location. If possible, at least one of the screws should enter a wall stud or similar surface. If the 060 is to be mounted to a 2" x 4" electrical box, an Adaptor Plate 007 is required. This plate will mount to the electrical box and the 060 will then mount to the plate.

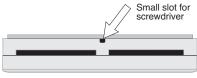


Run 18 AWG twisted pair or similar wire between the 060 and the control. Insert the wires through the hole provided in the back of the 060 enclosure and connect them to the Com and tekmar $Net^{TM}(tN1)$ terminals. Do not run the wires parallel to telephone or power lines as this may interfere with the operation of the 060. If the 060 wires are located in an area with strong sources of electromagnetic noise, shielded cable should be used or the wires can be run in a grounded metal conduit.

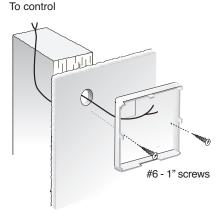
NOTE: Do not apply power to the 060. The 060 is to be wired directly to the control. The connection between the control and the 060 is polarity sensitive. The Com terminal of the 060 must be connected to the appropriate terminal of the control. If the wires are reversed, the 060 will not function and the control will display an error message.

STEP FOUR ——— INSTALLING THE FRONT COVER -

Align the hinges on the bottom of the front cover with the bottom of the 060 mounting base. Pivot the front cover around the bottom hinges and push the top against the mounting base until it snaps firmly into place.



Top view of RTU





Settings

To set a desired temperature, turn the RTU dial until the temperature is seen in the display window.

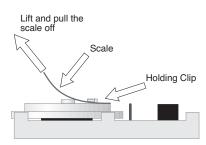
Temperature Scale

The RTU is supplied with two temperature scales. The RTU comes with the $^{\circ}F$ scale displayed in the window. The $^{\circ}C$ temperature scale is located on the back of the $^{\circ}F$. In order to change the scale to $^{\circ}C$, remove the front cover, lift and pull the scale off the dial, flip it over and replace it.

Limiting the Temperature Range -

The temperature range on the 060 can be limited in order to avoid extreme temperature settings or any tampering with the setting.

- Turn the dial until the desired temperature is at the bottom of the 060.
- Remove the front cover by following Step One of the Installation procedure.
- Lift and pull the scale off the dial. Be careful not to turn the dial while removing the scale. With the scale off, a series of small holes will be visible around the dial. Behind the dial there is a post which can be used to limit the rotation of the dial. Two aluminum limit pins are provided in the dial.



Setting a Minimum Temperature Limit

Remove one of the limit pins and re-insert it into the hole that is slightly to the left of the post at the bottom of the dial. With the pin in place the dial should only rotate clockwise from its current position as the counter-clockwise rotation is now restricted by the pin.

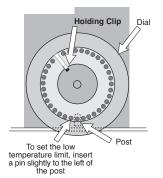
Setting a Maximum Temperature Limit

Insert one of the pins into the hole that is slightly to the right of the post.

Setting a Fixed Temperature

Insert one of the pins into the hole in the bottom of the dial such that the pin enters the post behind the dial. With the pin in place the dial should be fixed in position.

Replace the scale by sliding it onto the dial until the rectangular hole slips into the holding clip. Replace the front cover by following Step Four of the Installation procedure.



Overrides

OVERRIDES =

The 060 RTU allows the user to override the zone's schedule by using the push button on the face of the RTU.

Temporary Occupied (Three Hours)

If the push button on the face of the RTU is pressed and held for more than one second, the zone will enter into a temporary occupied override. The LED will turn green and the zone will operate at the occupied temperature for the next three hours.

Permanent UnOccupied

If the push button on the face of the RTU is pressed and released, the zone will enter into a permanent unoccupied override. The LED will turn red and the zone will operate at the unoccupied temperature until the override is cancelled.

To cancel an override, press and release the push button. The LED will turn off.

Specifications

Room Temperature Unit (RTU) 060 -

Literature — D 060

Packaged weight — 0.16 lb. (72 g), Enclosure G, white PVC plastic Dimensions — 2-7/8" H x 2-7/8" W x 13/16" D (73 x 73 x 21 mm)

Approvals - CSA C US

Ambient conditions — Indoor use only, 15 to 120°F (-10 to 50°C), non-condensing.

Power supply — tekmar control; tekmar Net™ 1 (tN1)

Sensor – NTC thermistor, 10 k Ω @ 77°F (25°C ±0.2°C) β =3892

Setpoint range — 40 to 100°F (4 to 38°C)



Limited Warranty and Product Return Procedure

Limited Warranty The liability of tekmar Control Systems Ltd. and tekmar Control Systems, Inc. ("tekmar") under this warranty is limited. The purchaserby taking receipt of the tekmar product ("product"), acknowledges receipt of the terms of the warranty and acknowledges that it has read and understands same.

tekmar warrants each tekmar product against defects in workmanship and materials, if the product is installed and used in compliance with tekmar's instructions. The warranty period is for a period of twenty-four (24) months from the production date if the product is not installed during that period, or twelve (12) months from the documented date of installation if installed within twenty-four (24) months from the production date.

The liability of tekmar under this warranty shall be limited to, at tekmar's sole discretion: the cost of parts and labor provided by tekmar to repair defects in materials and/or workmanship of the defective product; or to the exchange of the defective product for a replacement product; or to the granting of credit limited to the original cost of the defective product, and such repair, exchange or credit shall be the sole remedy available from tekmar and, without limiting the foregoing in any way, tekmar is not responsible, in contract, tort or strict product liability, for any other losses, costs, expenses, inconveniences, or damages, whether direct, indirect, special, secondary, incidental or consequential, arising from ownership or use of the product, or from defects in workmanship or materials, including any liability for fundamental breach of contract.

This warranty applies only to those products returned to tekmar during the warranty period. This warranty does not cover the cost of the parts or labor to remove or transport the defective product, or to reinstall the repaired or re-

placement product. Returned products that are not defective are not covered by this warranty.

This warranty does not apply if the product has been damaged by negligence by persons other than tekmar, accident, fire, Act of God, abuse or misuse; or has been damaged by modifications, alterations or attachments made subsequent to purchase which have not been authorized by tekmar; or if the product was not installed in compliance with tekmar's instructions and the local codes and ordinances; or if due to defective installation of the product; or if the product was not used in compliance with tekmar's instructions.

This warranty is in lieu of all other warranties, express or implied, which the Governing Law (being the law of British Columbia) allows parties to contractually exclude, including, without limitation, warranties of merchantability, fitness for a particular purpose, durability or description of the product, its non-infringement of any relevant patents or trademarks, and its compliance with or non-violation of any applicable environmental, health or safety legislation; the term of any other warranty not hereby contractually excluded is limited such that it shall not extend beyond twenty-four (24) months from the production date, to the extent that such limitation is allowed by the Governing Law.

Product Return Procedure Products that are believed to have defects in workmanship or materials must be returned, together with a written description of the defect, to the tekmar representative for that territory. If the address of the representative is not known, please request it from tekmar at the telephone number listed below.



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