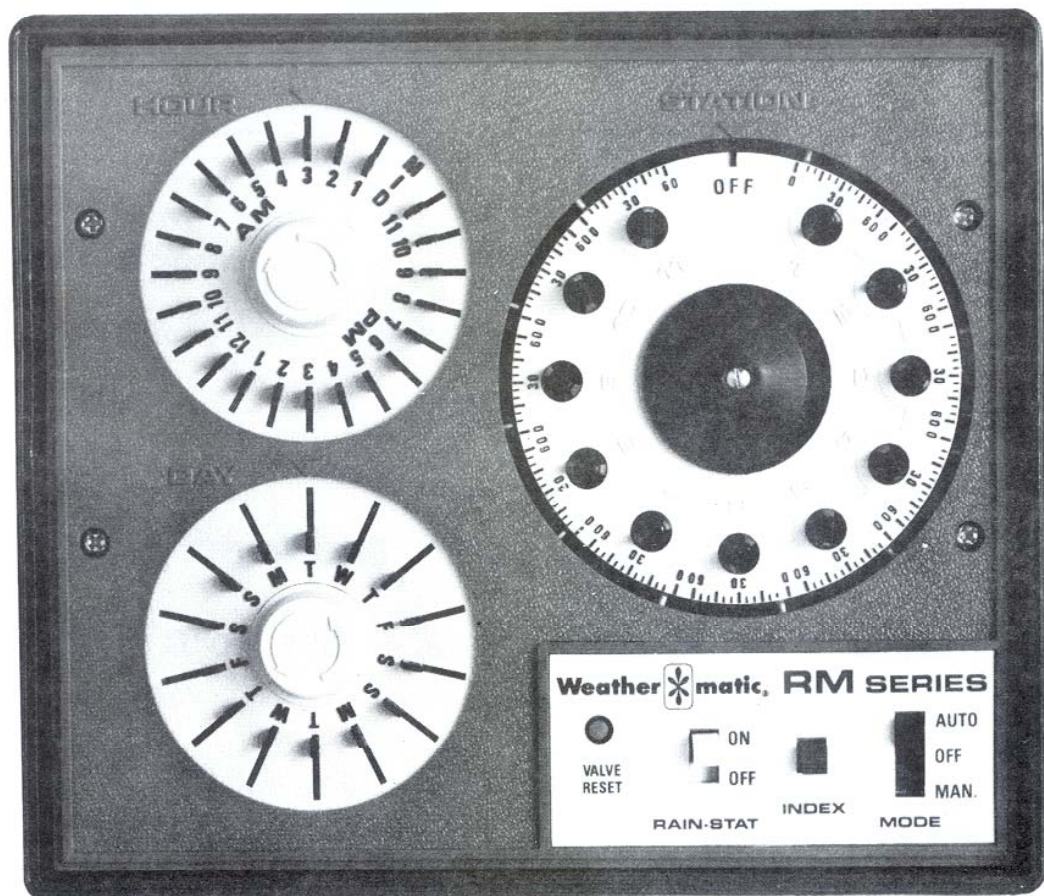




INSTALLATION AND OPERATING INSTRUCTIONS



RM SERIES CONTROLLERS

Contents

Electrical Requirements	2
Installation	2
Dual Program	5
Operation	6
Wall Mounting Template	9

Electrical Requirements

The input power source should be the nominal voltage specified on data plate and have a suitable circuit breaker or fuse. Controller output will operate up to three Weather-matic valves including master valve. If operating other equipment, do not exceed the valve output rating shown on the data plate.

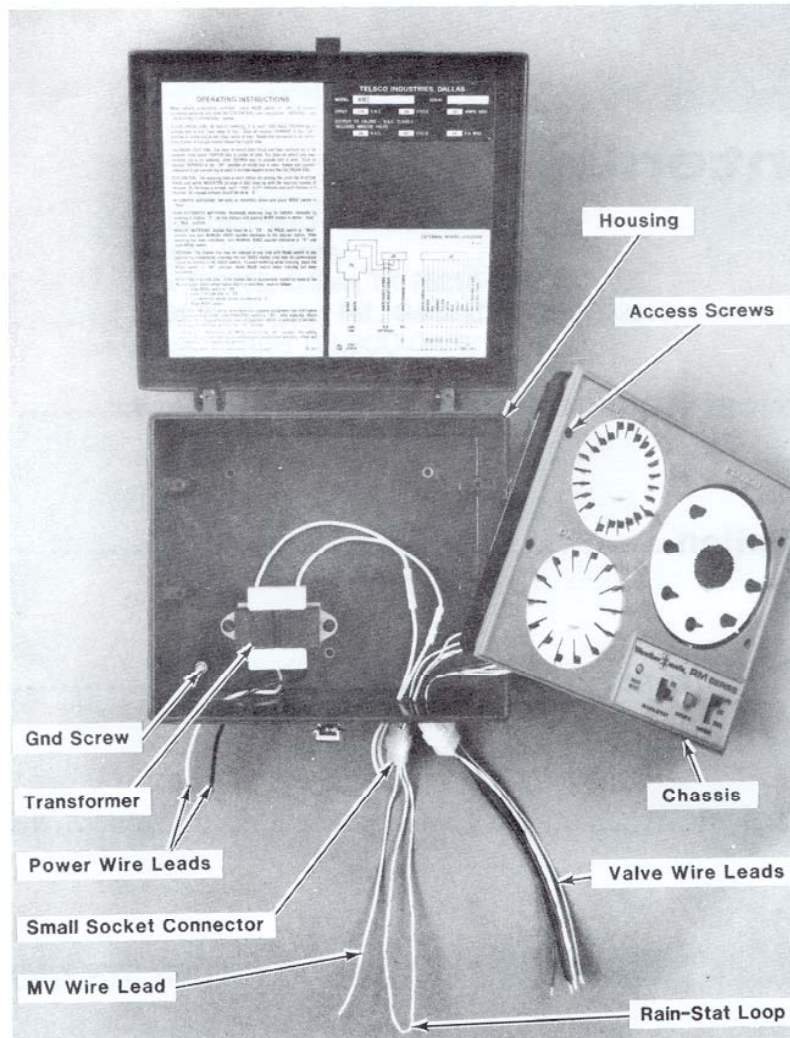


Figure 1

Installation

Remove chassis from housing by unscrewing 4 access screws shown in Figure 1. Carefully, slip chassis out of housing. Disconnect small socket connector shown in Figure 1 and lay chassis aside.

Wall mounting template on Page 9 supplied to facilitate accurate location of mounting holes on wall. Screws are provided to mount housing.

Install conduit to the appropriate openings in the bottom of the housing. Power supply (left side), valve wiring (right side). Locate a conduit access box or other suitable means on valve wiring conduit as close to housing as possible. See Figure 2 (conduit accessory package available from Weather-matic or electrical supply company).

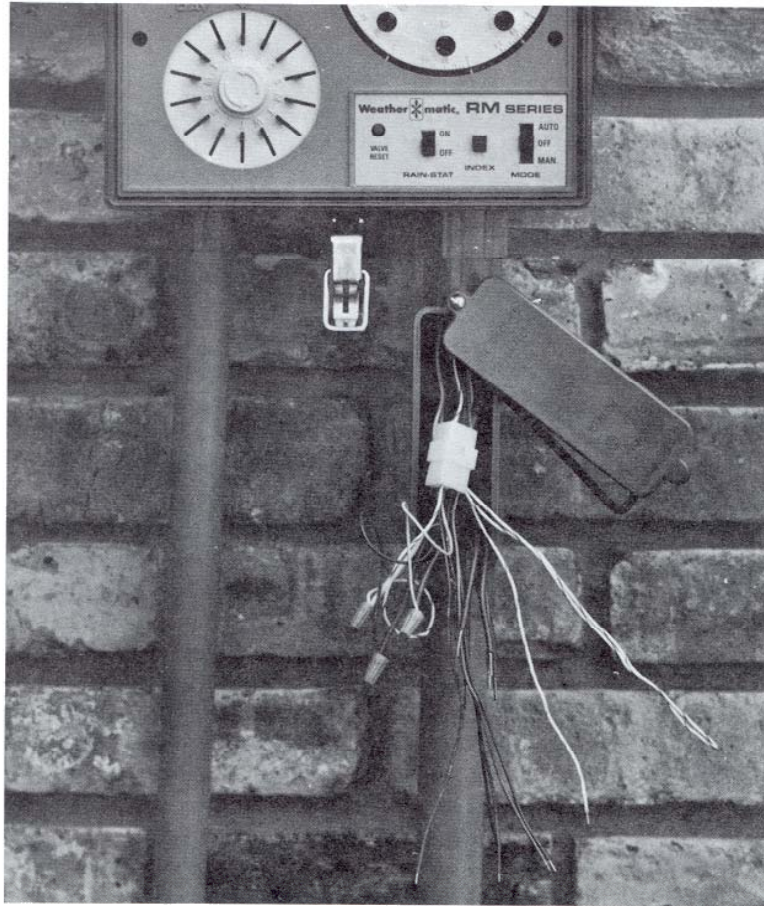


Figure 2

SPECIAL NOTES:

- . Installation with Pump Circuit: See instructions (for conduit connections and wiring) furnished with Weather-matic optional pump circuit accessory package.*
- . Installation should be in accordance with local electrical codes.*
- . Source of electrical power supply should be disconnected before attempting electrical connections to controller.*
- . Insulate all electrical connections properly to prevent shorted wiring.*

Connect power wiring leads. Earth ground the controller housing to the 'GND' terminal located inside the housing, see Figure 1.

Reconnect small socket connector. Note 'V'-groove alignment slots on one side.

Route both pigtail wiring assemblies with connectors through valve wire opening down into conduit access box. See Figure 2.

Installation Continued:

Place chassis back into housing and tighten 4 access screws. Push screws into place with screwdriver. Slight shifting of face panel may be required to align screws with holes in housing.

VALVE: The valve wiring is accomplished by connecting the appropriate valve wire 1 through 7 (RM7) or 1 through 11 (RM11), neutral wire (N), to the proper lead wire protruding through the conduit box.

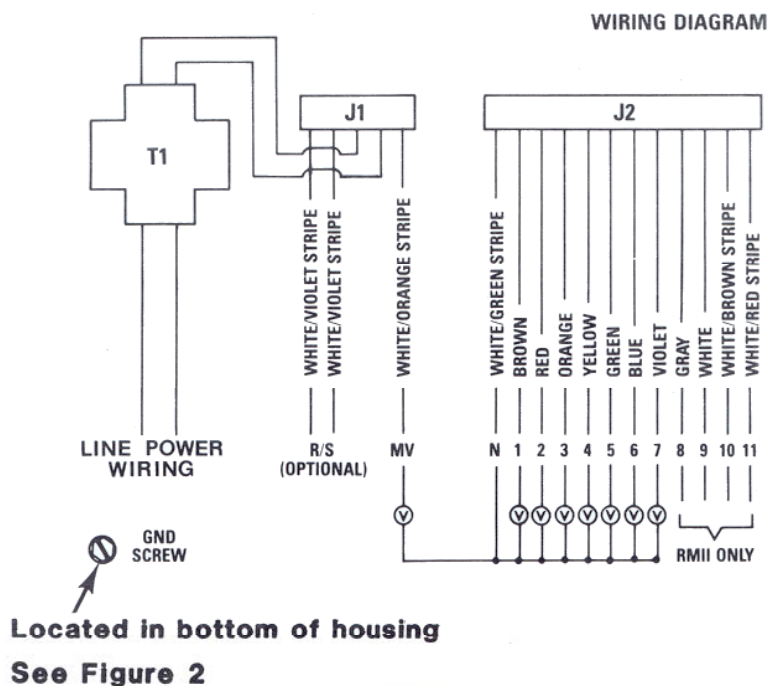


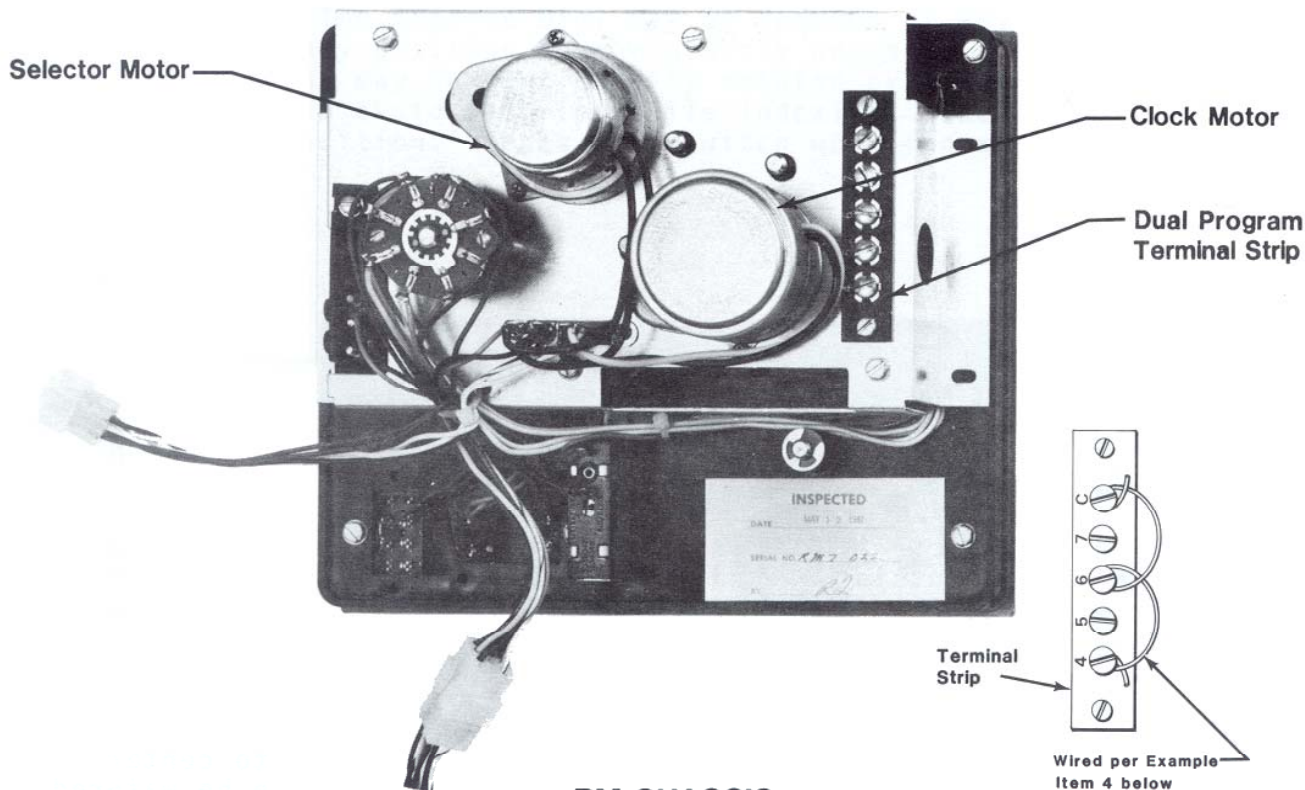
Figure 3

See Figure 3 for color coding. With this method the protruding pigtail and connectors are enclosed in the box allowing for convenient disconnection should it become necessary in the future.

RAIN-STAT (Optional): Cut Rain-Stat loop (white/violet stripe) at center of loop, see Figure 2, and strip the insulation back at each end. Connect these wires to the gray lead wires that come from the Rain-Stat. (Note: Rain-Stat loop must remain intact if Rain-Stat is not utilized.)

MASTER VALVE/PUMP CIRCUIT: Master valve circuit may be used to operate a small pump circuit auxiliary relay in addition to a master valve. Weather-matic optional pump circuit relay accessory package required. Installation instructions included in accessory package.

Controller should be reset in accordance with instructions for "Resetting Station Dial" in the operation section of this manual before operating the controller.



**RM CHASSIS
REAR VIEW**

Figure 4

Dual Program

This programming feature is normally used in systems with separate shrub sections.

The last four stations on either model may be used for lawn or shrub sections. To designate any or all of these four stations for shrub watering, connect the tinned bare wire (furnished in envelope with mounting screws) to the dual program terminal strip as outlined below:

1. Remove controller from housing.
2. The terminal strip is marked "C", 7, 6, 5, 4 ("C", 11, 10, 9, 8 on RM11) and is located on back of control chassis as shown in Figure 4 above.
3. Using the tinned wire, take 1 or 2 turns around terminal screw "C" and any others which are to be shrub sections. Make small loops (about finger size) over unused terminal screws. Trim off excess wire at each end.
4. EXAMPLE: Stations 4 and 6 to be shrub sections; all other stations to be lawn sections.

Connect wire from terminal "C" to screws 6 and 4 (looped over unused terminals 7 and 5). When calendar trippers are set in center position of slots, all sections will water including 4 and 6. When calendar trippers are set at outside end of slots, only lawn sections will water; shrub sections 4 and 6 are omitted.

Operation

OPERATION: When initially programming controller, place MODE switch at "Off" to prevent accidental watering and reset the STATION DIAL (see paragraphs "INDEXING" and "RESETTING STATION DIAL" below).

CLOCK (HOUR) DIAL: At hour(s) watering is to start, slide black TRIPPER tab to outside end of slot (near edge of dial). Slide all unused TRIPPERS to the "Off" position at inside end of slot (near center of dial). Rotate dial clockwise to set correct time at point of triangle located above the CLOCK DIAL.

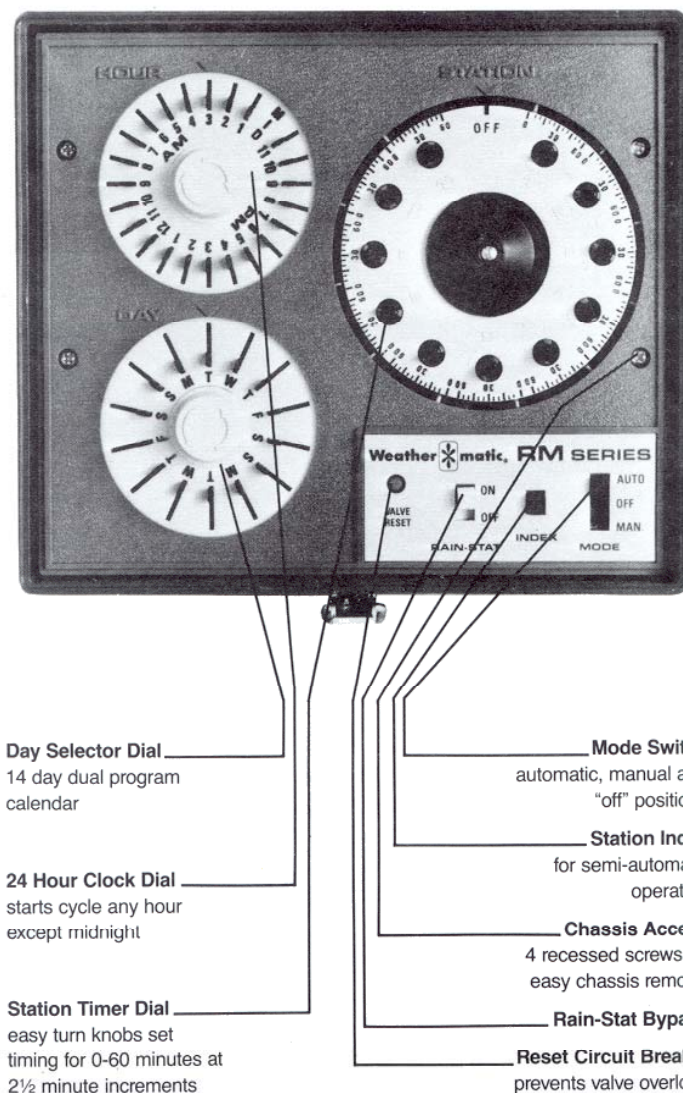
CALENDAR (DAY) DIAL: For days on which both shrub and lawn sections are to be watered, slide black TRIPPER tabs to center of slots. For days on which only lawn sections are to be watered, slide TRIPPER tabs to outside end of slots. Slide all unused TRIPPERS to the "Off" position at inside end of slots. Rotate dial counter-clockwise to set current day at point of triangle located above the CALENDAR DIAL.

STATION DIAL: Set watering time at each station by turning the small flat STATION KNOB until white INDICATOR (at edge of dial) lines up with the required number of minutes. As the knob is turned, each "click" is $2\frac{1}{2}$ minutes and each division is 5 minutes. All unused sections should be set at "0". Note: To set $2\frac{1}{2}$ minute time, select the 5 minute time and back up 1 "click".

AUTOMATIC WATERING: Set dials as described above and place MODE switch in "AUTO".

SEMI-AUTOMATIC WATERING: Automatic watering may be initiated manually by indexing to Station "1" (or any station) and placing MODE switch in either "Auto" or "Man" position.

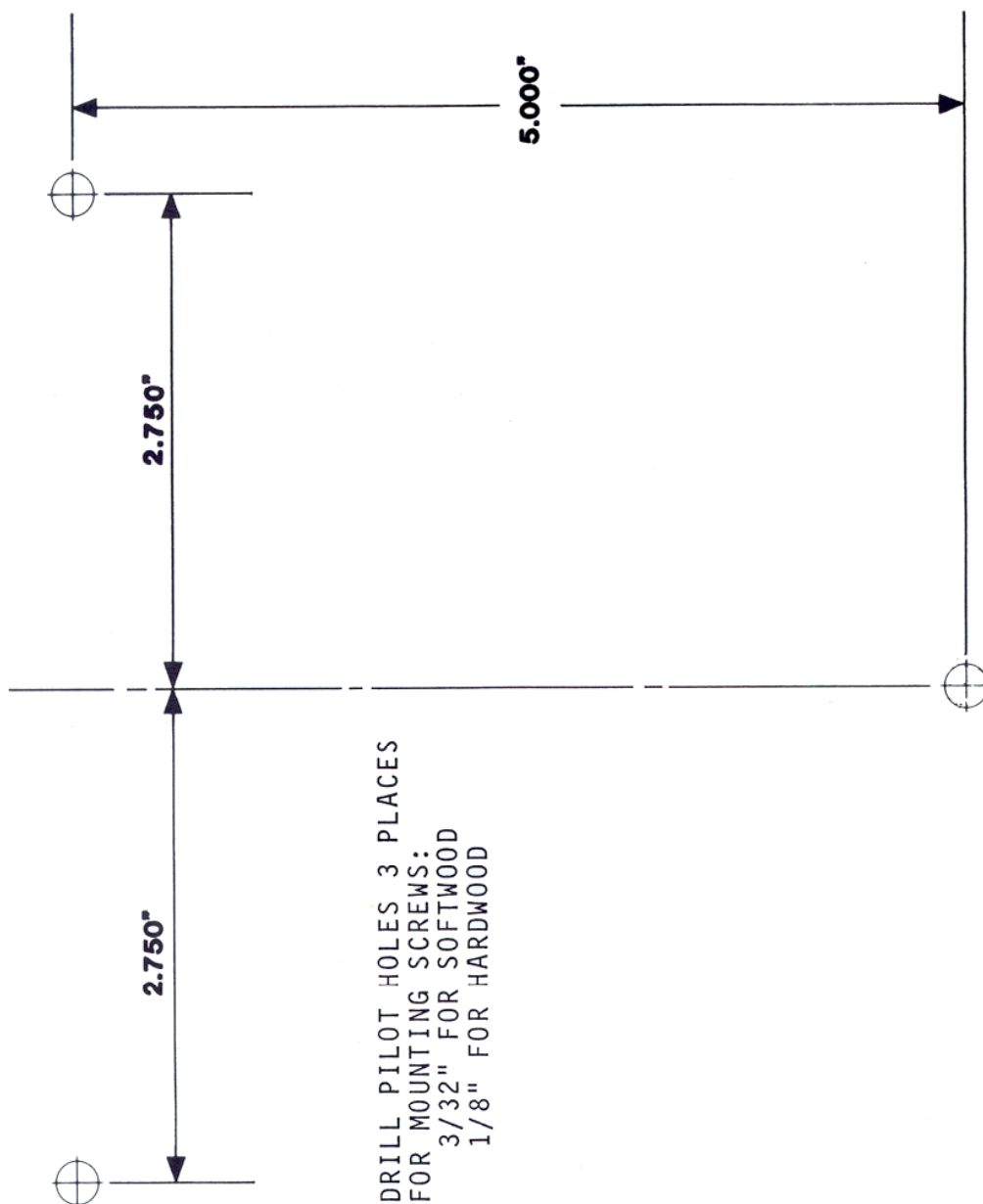
INDEXING: The Station Dial may be indexed at any time with MODE switch in any position by momentarily pressing the red INDEX switch (dial may be continuously rotated by holding in the INDEX switch). To avoid watering while indexing, place the MODE switch in "Off" position. Reset MODE switch when indexing has been completed.



RM Controller Features

Figure 5

TOP



FULL SIZE TEMPLATE
FOR WALL MOUNTING
RM CONTROLLER