

IRROMETER®

Serving the Irrigation Industry since 1951

Turf Model TGA

for Turf and Landscape Irrigation



Ceramic
Sensing Tip

Filler Cap

Sprinkler, Drip and Subsurface applications for

Adjustable Moisture Level SELECTOR & SWITCH

(Does not obstruct
or interfere with
needle operation)



Indicating
Needle

Wire leading to
Controller or Valve

- Parks
- Golf Courses
- Cemeteries
- Freeways & Dividers
- Athletic Fields
- Industrial Landscaping

How the IRROMETER Adjustable SELECTOR and Automatic Switch Operate...

The IRROMETER registers available soil moisture directly, accurately and continuously. The instrument is, in effect, a "dummy root" registering how hard roots are working to extract moisture from the soil. The patented Adjustable Moisture Level SELECTOR mounts on top of the IRROMETER gauge and may be turned clockwise or counterclockwise to the optimum soil moisture reading. As soil moisture is depleted a vacuum is created, which is registered by the Indicating Needle on the gauge. On the photo (above left), the SELECTOR has been set at 20 centibars. When the Indicating Needle reads 20 or above, the Automatic Switch is closed and allows the Controller to operate as programmed. The Controller continues as programmed until the Indicating Needle falls below the setting on the Automatic Switch. The Adjustable Moisture Level SELECTOR can be compared to a thermostat, continuously measuring the soil moisture and signaling the Controller whenever a water application is desirable, or it prevents operation when there is no need for additional water application.

How many IRROMETER Stations are required?

Normally two IRROMETER Control Stations, wired in parallel, will be used with each Irrigation Controller to "tell" the Controller when an irrigation cycle is required. Under the least favorable soil conditions, IRROMETER Control Stations may be used to interrupt a single valve or groups of valves, as conditions require.

- **Irrometer System Saves Water**

Eliminates needless irrigations by operating only when the turf and plant material need water.

- **Reduces Labor**

Eliminates re-programming due to changing climate or water needs. Each day the IRROMETER signals the controller whether conditions require irrigation.

- **Builds Better Turf**

Continuously evaluates the moisture requirements to meet exact needs. Achieves optimum irrigation efficiency with no increased labor cost, building healthier, deeper rooted plant materials and turf.



IRROMETER COMPANY, INC.

Irrrometer Automation Doesn't Cost...It Pays!

How to install **IRROMETER TURF MODEL TGA** automatic control of irrigation systems



Turf is removed by using box as a pattern. Examine root system of the removed sod to determine most desirable depths.



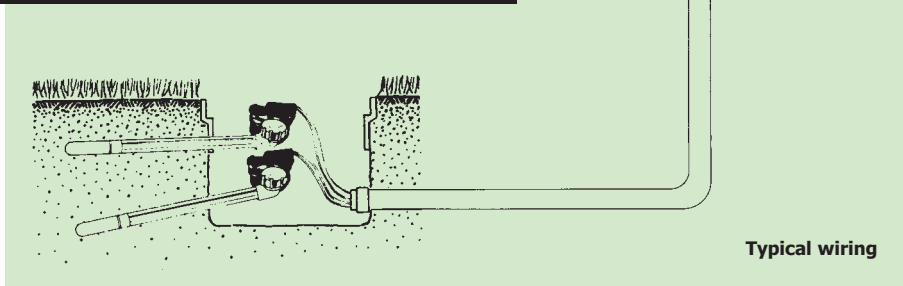
Holes for IRROMETERS are prepared by driving a 7/8" O.D. rod (1/2" galvanized pipe) into the ground at a slight angle so the tip when inserted will be located at the exact depth desired.



The depth of the tip is measured by probing with a screwdriver.



After installation, the cover provides full protection and allows easy access for readings.



SELECTION OF SITE FOR INSTALLATION

IRROMETERS should be located in areas that are typical of that being controlled. In selecting this site, factors such as sprinkler distribution, topography, appearance of the turf and landscape, plus the amount of sun exposure should be considered. Pick drier areas with sun exposure. Monitor turf, shrub or ground cover areas separately.

HOW TO INSTALL THE INSTRUMENTS

In turf and landscape installations, IRROMETERS are installed beneath the ground so that mowing equipment will not damage the instruments. Normally these are installed underneath a locking lid enclosure so they can be easily accessed, but are safe from damage from people or equipment. In preparing the hole for this enclosure, the depth of the root system should be studied. Two IRROMETERS are installed at each location so that both shallow and deep irrigation requirements are signaled to the controller. The tip of the shallow instrument should be approximately 1" to 4" deep; the deep instrument from 6" to 12" depending on the root system and type of grass. Deeper settings may be used for deeper rooted shrubs, ground covers and trees.

Holes for the IRROMETERS are easily prepared by driving a 7/8" O.D. rod (1/2" galvanized pipe) into the ground so that the tip will be located at the exact depth desired. The depth of the tip can be accurately measured by probing with a screwdriver. With the holes prepared, insert the IRROMETERS and carefully pack the surface of the soil around them with no air gaps at the bottom of the hole. Be sure IRROMETER tips are in an active root system. Following the wiring diagram and irrigation recommendations furnished with your IRROMETERS will complete the installation.

Contact IRROMETER Company for specific wiring instructions for landscape systems.

MAXIMUM SWITCHING CAPACITY 4 AMP

Turf Model available in
12" and 18" lengths.

If **NONSWITCHING** model
is desired, order **MODEL TG**.

Also available in:

NONSWITCHING version,
order **MODEL TG**

LOW TENSION VERSION,
order **MODEL TGA-LT** or **TG-LT**

DC VERSION
(for battery operated controllers),
order **MODEL TGA-DC**

NOTE:

Special **REVERSE** acting switches
available. Contact factory for details.

IRROMETER COMPANY, INC.

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