

Individual Controller Operation.



Or Multiple Site Systems.

Controllers

- Stainless steel wall mount or pedestal units.
- 32 station.
- Grouping or single station programs 10 independent grouping programs of up to 10 standard valves per group and 40 groups per program.
- 32 Single Station Programs with separate run time, start time and day table for each individual station.
- 0-250% percentage global adjustment for fine tuning of programs.
- Up to 14 day programmable calendar with 9 daily cycle repeats per program.

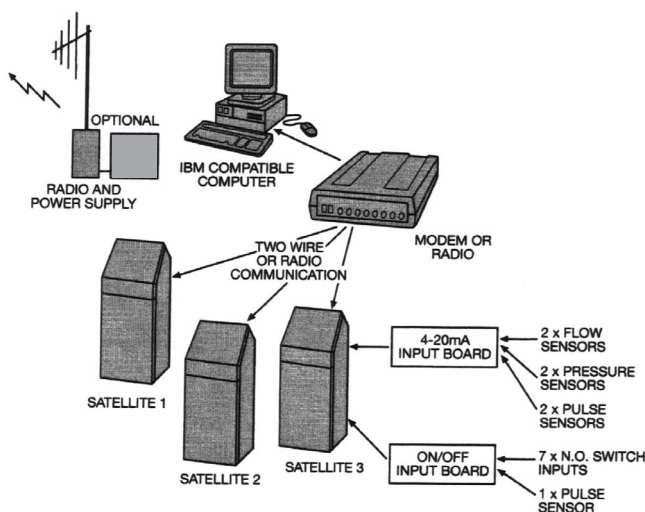
- Up to 10 valves per group with a settable run time for manual spot watering
- Internal communication check and set up function for field testing.
- Reports on solenoid current, flow testing, run times, and flow and pressure status (optional).
- In-built 'help' facility.
- Programs are stored permanently. Can never be 'lost'.
- Battery back-up keeps accurate time in the event of a power failure.
- Password setting for field protection against unauthorised programming adjustments.
- Australian Approval Certificate.

Application

The ultimate in irrigation controllers. A centrally located computerised control system providing for exact water management at the touch of a button.

Features

- Stand alone operation, pedestal or wall mounted field controllers, networked from a centrally located computer; or operated independently of the central computer if required.
- 32 stations grouping and 32 single station programmes with concurrent operation capability.
- 10 valves per group capacity.
- With central control installation the MM5000 has the ability to auto-schedule and flow manage irrigation based on ET and the agronomic data for each valve output.
- The computer software has the capacity to operate up to 999 individual controllers if required.
- Communication is by either underground wiring or radio control.
- Software package ensures optimum use watering at all times. An in-built 'flow manager' avoids overloading the system.
- Stand-alone weather station (not supplied) can link to the software package.
- Software operates on any computer with full IBM compatibility. (see computer specification on page 113)



Features of the Software

- Windows 98, 2000, ME and XP compatible software is graphics based with a main map area.
- Ability to zoom down to a secondary level.
- The number of secondary levels is user definable.
- The status and information can be viewed by moving the mouse over the required icon. All icons are a graphic representation from the main data base that contains all agronomic, sprinkler/emitter, zone pipe size, area and map images and pump databases.
- Software is designed for irrigation networks that are radio control and/or 2 wire communication.
- **Flow-managed Programs:**
The Flow Manager will create an optimised irrigation program, taking into consideration pump flow, ramp rate, maximum active stations per satellite, zone pipe sizing, and flow velocity. A graph of the irrigation program will then be displayed.
- **Auto-schedule Irrigation:**
The Auto-Scheduler calculates the combined loss, each day, of water from both soil and plant surfaces by taking into account different soil types, gradient of slopes, adjustable crop types and prevailing weather conditions. The Flow Manager then creates the irrigation schedule using the valve data base.
- **Single Station Programs:**
Single station programs can be useful for operating lights, fountains, BBQ areas.
- **Valve Information Database:**
Includes location, sprinkler type, nozzle, arc and flow, sprinkler spacing and efficiency.
There are global adjustments on flow and efficiency.
- **Agronomic Information Database:**
Includes soil type, compaction factor, ground slope, root depth and crop factor. Global adjustments on crop factor root depth.
- **Standard Reporting Functions:**
Diary of last 7 day's functions including commands at the PC, activity status and error logs
- **Real Time Flow and Pressure Sensors:**
Shows the real time status of all flow and pressure sensors in the system.
- **Expected Flow Graphs:**
Graphically shows the expected flow of irrigation program schedules.
- **Valve Current Reports:**
Investigates and reports solenoid valve current for maintenance programs.
- **Totalised Time Reports:**
Shows totalised station run times.
- **Flow Reports:**
Shows totalised flow or irrigation and auxiliary flow sensors.
- **General Purpose Reports:**
Show totalised quantities of ancillary meters
- **Graphical 24 Hour Reports:**
Flow, pressure sensors, valve current, controller power, on/off switches.
- **Group Program Naming Facility:**
Programs are named for easy identification at field controller i.e. turf, shrubs, greens, etc.
- **Satellite Password Protection:**
A four digit password to avoid unwanted field tampering.
- **Flow Control Limits:**
Fully settable for fault reporting.
- **Rain Switch:**
Global rain switching function.
- **Program Validation:**
Verifies field controller programs to central system software.
- **Manual Program Start and Stop, Field Status:**
On-line field status reports all field controller operations valve, and sensors as they happen.
- **Pump Set-up:**
Can control up to ten pumps with ramping rate, and loading factors.
- **Electric Capacity Limiter:**
Restricts the maximum number of stations operating at each satellite.
- **Weather Station Control:**
Wind and rain alarm functions. High and low temperature program triggers for frost or germination stressing.
- **Agronomic History And Schedule Reporting:**
Daily reports of agronomic and watering condition.
- **Global Overrides:**
Assists in the fine tuning of the irrigation system.
- **Flow Adjust:**
Hydraulic flow adjust percentage for fine tuning by sprinkler.
- **Efficiency:**
Sprinkler application efficiency adjustment by sprinkler type.
- **Crop Factor:**
Global percentage crop factor adjustment by location name.
- **Root Depth:**
Global percentage root depth adjustment by location name.
- **Velocity:**
Hydraulic velocity adjustment for flow manager.



Central Computer Operation