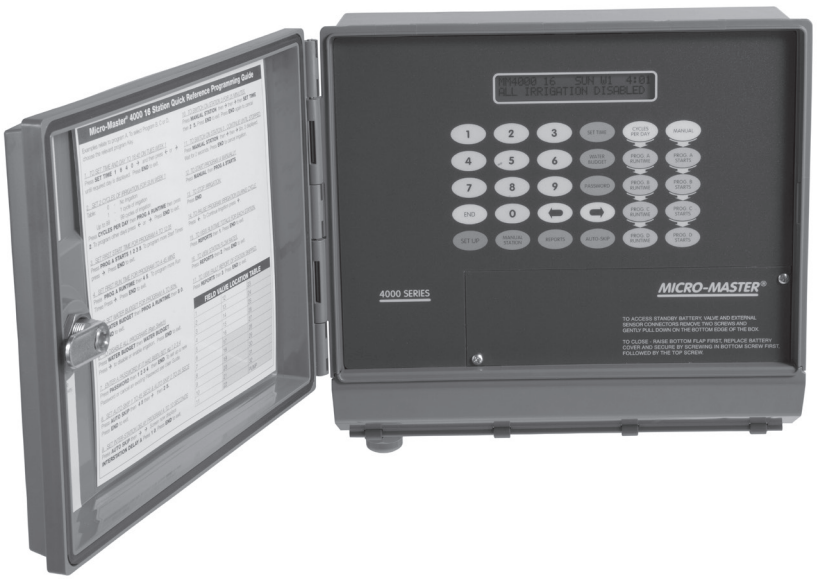
Micro-Master® 4000 Series Controllers

Application

The MicroMaster 4000 controller ideal for Municipal, Landscape, Turf and Horticultural applications.

Features

- 16 or 32 station models
- Sequential operation
- 4 independent programs (A, B, C, D)
- Program On/Off Overlap allows only one or all programs to operate at once
- 240 VAC or 12VDC in the one unit
- 12 VCD solar power option using standards 24 VAC solenoids
- 14 day calendar
- Station watering options
  0-99 hours 99 mins, 1 min increments
  0-99 min 99 secs, 1 sec increments
- 30 starts per day each program i.e. A, B, C, D
- Cyclic irrigation, 0-99 repeat cycles per program start
- Cycle repeats can be varied for each day
- User defined program delay between each cycle repeat for Cycle and Soak operation
- Water Budget feature adjusts 0-250% per each program, 1% increments
- Reports totaliser for monitoring each irrigation station operational time totals
- Sensor Inputs: Prog. A Start; Prog B Start; Reset; Irrigation Hold; Auto Skip; Door Open/Close Status
- Remote connection via Windows software for PC applications for easy central location programming and fault reporting
- Reports Flow as well as Irrigation or Electrical Failures with station skip
- Selectable dual pump start facility
- Manual Operations
  1. Program Start;
  2. Station Start; and
  3.Time Set Station Start
- Manual Stop



Micro-Master 4000, performance proven water management control system

- Suspend and Restart Feature during irrigation cycle
- Station to Station Advance during irrigation cycle.
- Up to 8 valves per station (depending on solenoid draw, 2amp limit)
- Permanent Program Memory
- Inter Station Delay 0-250secs
- Auto Skip Facility

  AS1: 0-250 secs at irrigation start to allow system to stabilise

  AS2: Operational Scanning time/frequency
- Fault Reporting
  Monitors system flow or pump pressure utilising the 2 Auto skip times.
- Extensive protection against field and mains power surges. Relay outputs to field valves ensures reliable operation under the most severe conditions.
- Isolated logic board protected by additional transformer which diverts surges to earth.

Display shows:

- Normal Time

1. Time and day
2. Next program and start time.
3. Rain Switch displayed, or power fail signal.

- During irrigation cycle:

1. Program in cycle.
2. Operating station with run time remaining.

- Activity Reports

1. Total run time per station in hours and mins.
2. i. With Pulse Flow Meter.
   A flow data base can be established for each station. In 'stand-alone' mode, a flow percentage variation can be entered to report on faulty stations, and if required, skip to the next programmed station.

   ii. Flow report/alarm indicates variations outside of programmed irrigation.

   iii. When directly connected to a PC or via telephone modem, two thresholds can be set to report flow variations or valve failures.

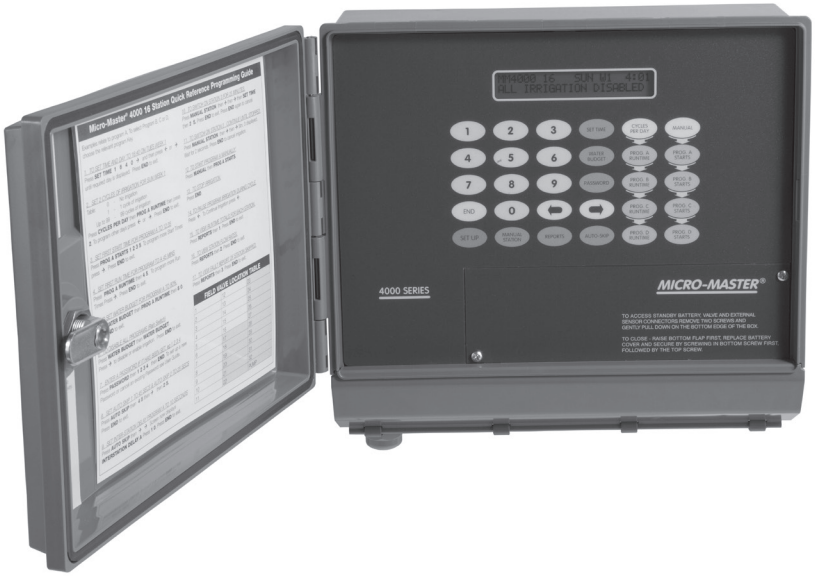
Micro-Master® 4000 Series Controllers

Computer Software

- Windows based* driven Software
- Operates on 100% compatible IBM PC, or lap-top, see page 289 for minimum computer specification
- User friendly, mouse driven
- Multiple controller software able to operate up to 999 controllers
- Remote programming for one, a group of controllers or “all at once” controller management
- Connection direct via serial port or digital modem communication
- Global Rainswitch with rain tipping bucket connected to at least one controller
- Database for communication network, controllers can be given ID number for easy access
- PC monitors controllers and reports any faults. If a fault is registered, controller can dial any of 3 telephone numbers to report fault. PC also logs faults
- Totalised flow and time logged for each station
- Global percent override. Can be easily adjusted for all controllers
- Fault reports back to central control on flow if no irrigation is in progress, i.e. broken valve or pipe

Electrical Specifications

- Input power: 240 volt 50 Hz Single phase or 12 volt DC
- Operating limits: 210 VAC to 265 VAC or 11 VDC to 16 VDC
- Quiescent 12V input power: 15 mA at 12VDC (55 mA with one output relay and pump start relay active), total current = solenoid current + 70mA
- Output power: Total station capacity, 24 VAC at 2.0 A max. or 12 VDC at 2.0 A max
- Superior lightning and surge protection: Transformer primary, 275V, 2,500 amp/20 micro sec. Surge protection, A-E, N, E. Transformer secondary, 24 VAC, 6,500 amp/20 micro sec. Field wiring (32 stations and pump start), 6,500 amp/20 micro sec.



- Large valve wiring terminals, detachable, do not need to remove valve wires for servicing
- Permanent program memory maintains all saved programs if power fails. No standby battery is required
- 9 volt Alkaline battery keeps correct time during power failure. (150 hours nominal)
- Relay outputs to field valves ensure reliable operation in the most rugged conditions

Operating Conditions

- Temperature: -10˚C to 65˚C
- Humidity: Max 95% non-condensing.
- Australian Approval Certificate

Dimensions				
Code	Description	Height (mm)	Width (mm)	Depth (mm)
1013522/1013524	MicroMaster 4000	270	295	140

Ordering Information	
Code	Description
1013522	4000 Series 16 Station 240/24 VAC Controller
1013524	4000 Series 32 Station 240/24 VAC Controller
CMM4000200	4000 Series Software Pack
1013574	4000 Series Power Conversion Kit for 12VDC

* Compatible with Windows 98, 2000, ME, XP and Vista