



AM01 Amplifier
and TDM01-A
Controller Interface

'm Series' Programmable Temperature Controller

- For use with Selectra® gas modulation systems
- Microprocessor-based logic
- Four set points
- Available ramping function



Maxitrol's new M-Series programmable temperature controller provides a higher level of functionality for our Selectra® electronic gas modulation systems. The microprocessor logic gives you a digital option, a next-generation upgrade from our popular series of analog controls.

This microprocessor-based control is designed and built by Maxitrol® and its Paktronics® Division - custom engineered for integral compatibility with other Selectra system components, such as the modulator or modulator-regulator (M/MR) valve.

Selectra systems maintain stable, precise temperatures. The superior alternative to mod motors and butterfly valves - M/MR valves provide instantaneous response and continual pressure adjustment.

Present microprocessor system configurations are designed for applications such as direct-fired make-up air equipment like paint spray booths. Subsequent systems will be configured for process and HVAC applications.

The TDM01-A interface connects to the AM01 amplifier by a ribbon cable. Other connections to the amplifier include an RTD temperature sensor, an M/MR valve, and a 24VAC/40VA capacity power source.

Features

- Compact modular design - 1/4 DIN panel mount controller, amplifier connects with ribbon cable
- Soft-touch keypad
- 2-line by 16-character alpha/numeric display for easy user interface
- Blue vacuum fluorescent display
- Display field programmable for Fahrenheit or Centigrade
- Programmable bandwidth
- Four user-programmable setpoints
- Offset adjustment for each setpoint
- Ramping function available (if needed) - user programmable
- EEPROM (non-volatile) memory for status of all programmed parameters - eliminates the need for a battery backup
- Short circuit (valve output) protected
- Open or shorted temperature sensor (RTD) detection
- Water resistant cover

Specifications and Dimensions

Power Requirements:

Independent 24VAC, 40VA capacity transformer

Ambient Limits:

TDM01-A Controller and AM01 Amplifier

Operating.....32° to 131° F / 0° to 55° C

Non-operating.....-4° to 158° F / -20° to 70° C

Controller Dimensions - 1/4 DIN panel mount:

Cover - 4.06" W x 4.06" H

Rear Mounting Box Cutout - 3.531" W x 3.531" H

Rear Mounting Box Depth - 1.08" D

Dimensions - Amplifier:

7.5" W x 3.38" H x 1.89" D

Valves:

M411, M511, M611, MR212

Cannot control automatic (safety shut-off) valve

Sensor:

1,000 ohm RTD such as TS394-3B-48FQ or

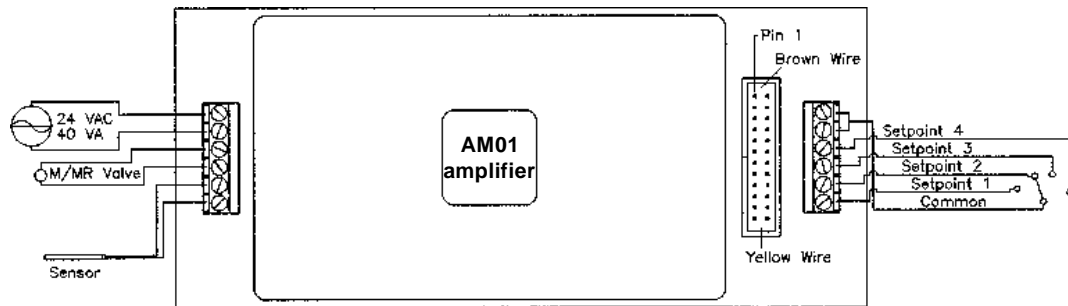
TS194 (w/mixing tube)

Notes:

- Under high noise conditions, extra shielding may be required.
- All wiring to and from the amplifier and display should BE distanced from any other wires to minimize noise and interference.



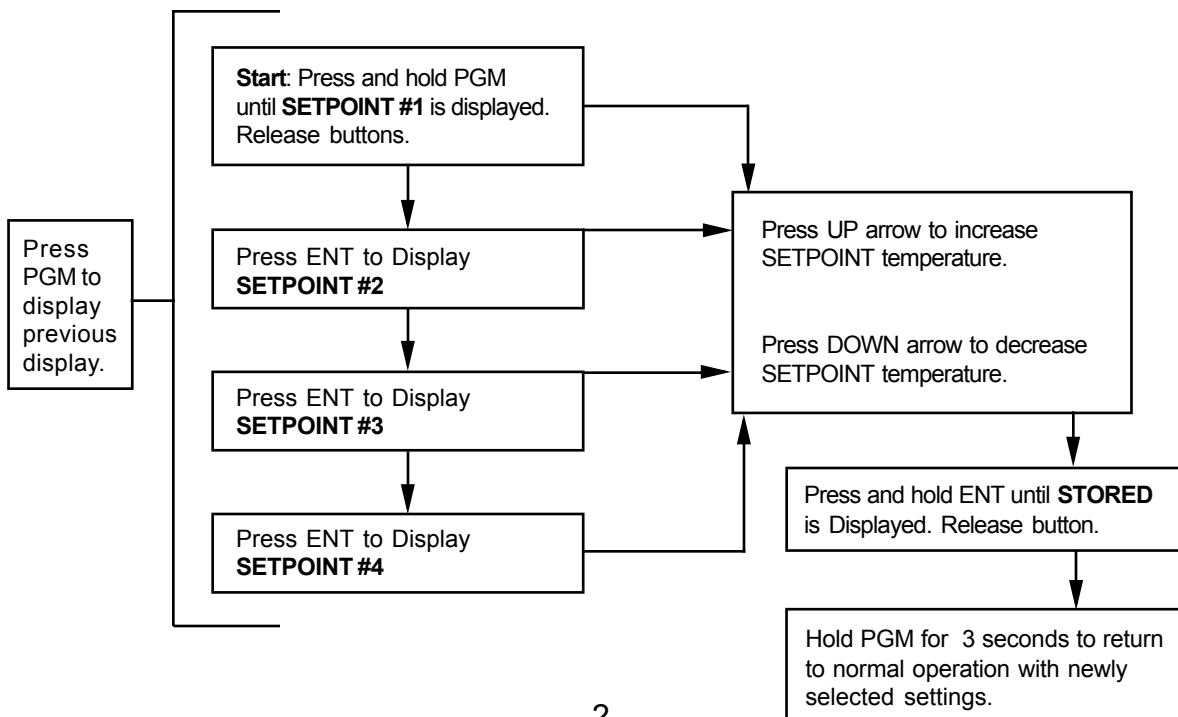
Amplifier Wiring Diagram



Controller Programming Flowchart

Setpoints 1 thru 4

(once programming begins, user has 12 seconds between key entries before controller will drop back to normal operation)

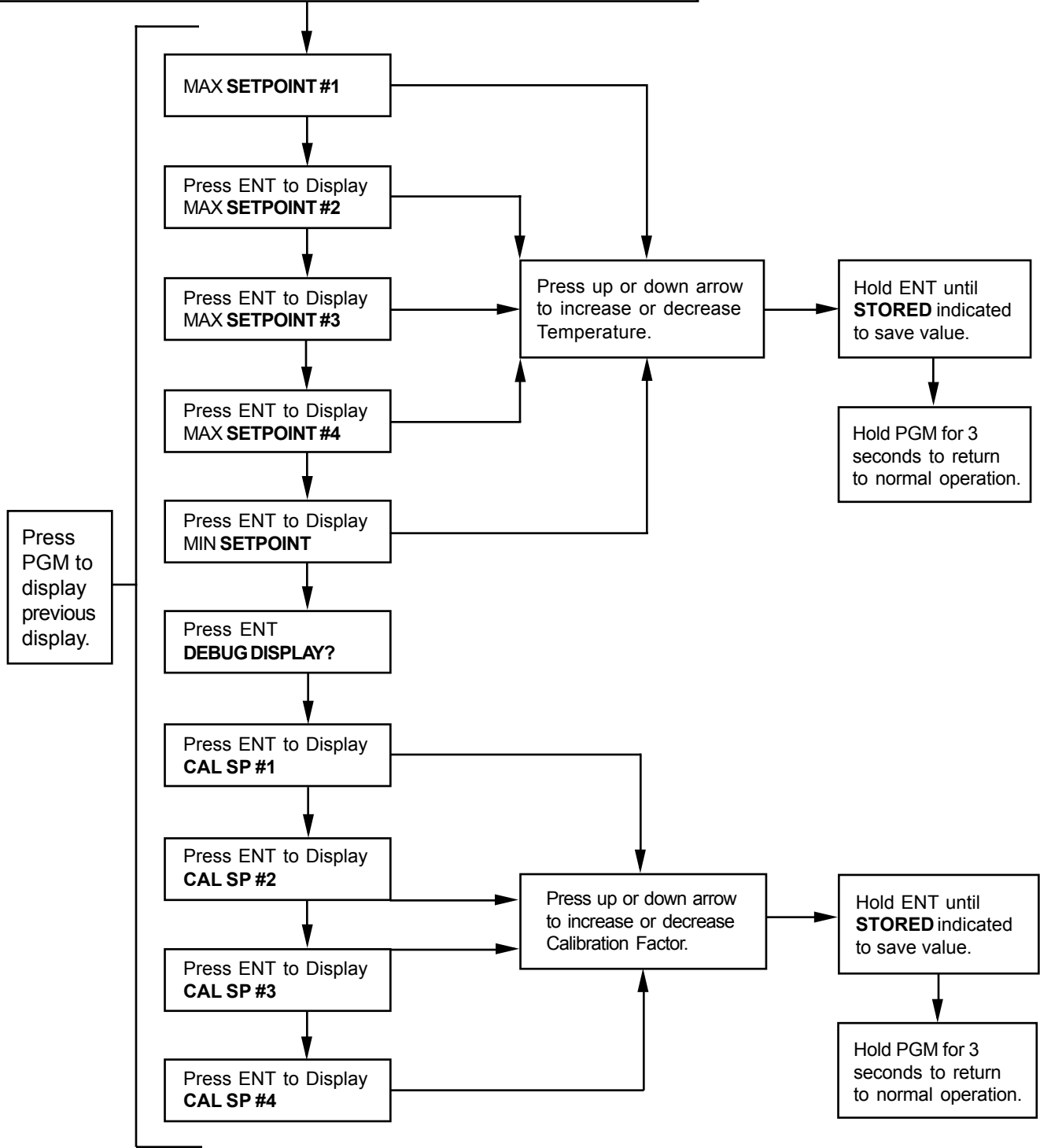


Controller Programming Flowchart

Diagnostics

(once programming begins, user has 12 seconds between key entries before controller will drop back to normal operation)

Start: Press and hold PGM, ENT, and up arrow simultaneously until **DIAG MENU XXX** indicated. Release buttons. The software revision is indicated for 3 seconds.



A copyrighted publication of



www.maxitrol.com

Maxitrol Company
 23555 Telegraph Rd., P.O. Box 2230
 Southfield, MI 48037-2230 U.S.A.
 248.356.1400 • Fax 248.356.0829

European Representatives
 Warnstedter Strasse 3, 06502 Thale, Germany
 49.3947.400.0 • Fax 49.3947.400.200
 Industriestrasse 1, 48308 Senden, Germany
 49.2597.9632.0 • Fax 49.2597.9632.99