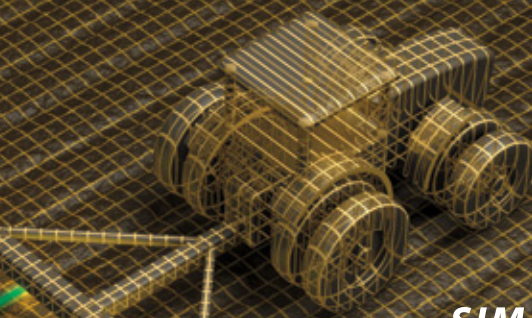




AUTOMATIC RATE
CONTROLLERS FOR LIQUID



*SIMPLE
AFFORDABLE
RELIABLE
ACCURATE*

LIQUID FERTILIZER?
SIDE DRESS?
ANHYDROUS AMMONIA?
FUMIGATION?
STRIP-TILL?
SPRAYERS?
AIR BLAST?

} **YES.**

IT CAN DO THAT.



MICRO-TRAK[®]
SYSTEMS, INC.



AUTOMATIC RATE CONTROLLERS FOR LIQUID

Advanced Liquid Rate Control

Flexible, powerful, automatic liquid rate control solutions for agriculture, turf, and highway maintenance. Customizable monitoring options and advanced features let you manage your liquid applications with absolute peace-of-mind.

- Flow or Pressure based Control
- Expanded PWM control capabilities
- Unique Multifunction outputs to control on/off valves for Master, Relief, Flow Trigger, or Flush functions
- **RateKing Dual Plus** - Dual channel design allows application of two products from one controller

	SprayMate™ Plus	RateKing™ Plus	RateKing™ Dual Plus
Channels	1	1	2
Section Outputs	3	3, 5, or 7	3, 5, or 7
Multifunction Outputs	1	2	2 on each channel
PWM Duty Cycle Monitoring	No	Yes	Yes
VRA Enabled	Yes	Yes	Yes
Control Modes: PWM or Servo	Yes	Yes	Yes
Flow Based Control	Yes	Yes	Yes
Pressure Based Control	Yes	Yes	Yes
Open Loop Control	Yes	Yes	Yes
Pressure Limit Alarms	Yes	Yes	Yes
Liquid or NH3 Mode	Yes	Yes	Yes
Agitation in Hold	Yes	Yes	Yes

SPRAYMATE Plus



Available in 3-section model.

RATEKING Plus



Available in 3, 5 and 7-section models.

RateKing Dual Plus Channel Modes

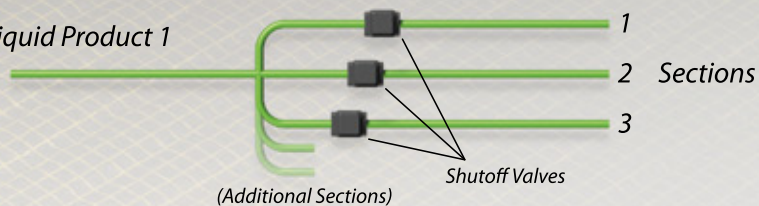
Normal Mode

Example Use:
Applying fertilizer and NH3
on the same pass.

Channels operate independently.

Channel 1 uses section switches,
Channel 2 is single width - on/off.

Channel 1 – Liquid Product 1



Channel 2 – Liquid Product 2



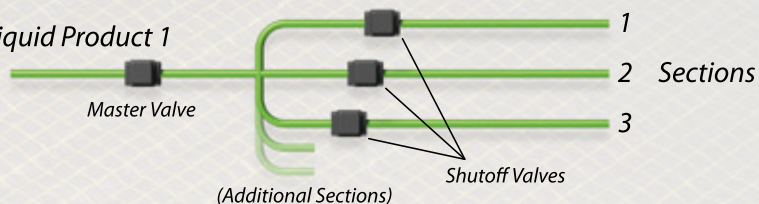
Parallel Mode

Example Use:
Applying fertilizer and herbicide
on the same pass.

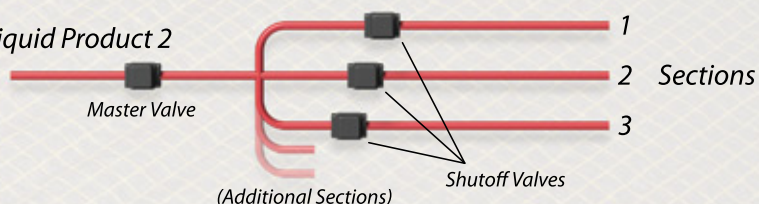
Channels operate independently,
but Channel 2 uses section widths
defined by Channel 1.

Both channels use Channel 1
section switches. On/off status is
also shared unless one of the
channels is turned off.

Channel 1 – Liquid Product 1



Channel 2 – Liquid Product 2



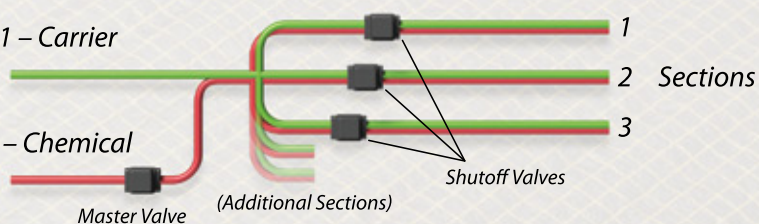
Injection Mode

Example Use:
Injecting a chemical into a carrier.

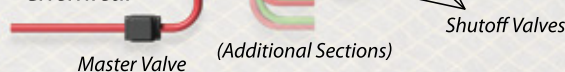
Channels 1 & 2 are linked together
with Channel 1 in control. Channel 2
uses section widths defined by
Channel 1.

Channel 1 switches control product delivery.

Channel 1 – Carrier



Channel 2 – Chemical



RATEKING DUAL Plus



Available in 3, 5 and 7-section models.

Precision vs. Guesswork

Why gamble on the profitability
and future of your operation?

The stakes are simply too high to
rely on guesswork when applying
herbicides, fertilizer, or NH3.

The Plus Series of controllers are
designed to *automatically*
compensate for the unseen
variables that cause over and
under application.

Multifunction Outputs

The **SprayMate Plus** has a single Multifunction Output that can be configured for these valve control functions:

- **Master** - valve closes only when all sections are off - controls a Master valve for a multi-section NH3 installation
- **Relief** - opens a relief valve when all sections are off to avoid excess pressure when using a positive displacement pump
- **Flush** - opens a valve to purge the lines when in Hold to prevent fumes from disturbing workers on the ground
- **Fixed Flow** - turns on another electric pump at a preset gallon per minute trigger point to add additional flow capacity to your system only when you need it
- **Proportional Flow** - opens another valve (or valves) at a preset gallon per minute to reduce the system pressure required to achieve the target rate

The **RateKing Plus** and **RateKing Dual Plus** feature two Multifunction outputs for **each** of their operating channels:

Multifunction "A"

- **Master**
- **Relief**
- **Flush**
- **Fixed Flow**
- **Proportional Flow**

Multifunction "B"

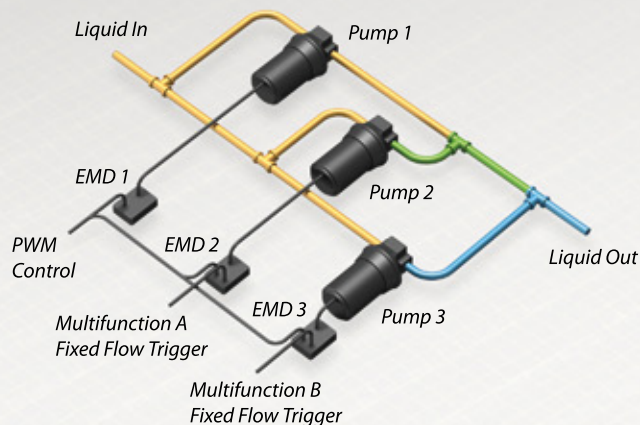
- **Master**
- **Relief**
- **Fixed Flow**
- **Proportional Flow**

The interaction of the two Multifunction outputs offers **unparalleled** flexibility in setup.

The possibilities are nearly limitless.

Accomplish more with **one** controller than ever before.

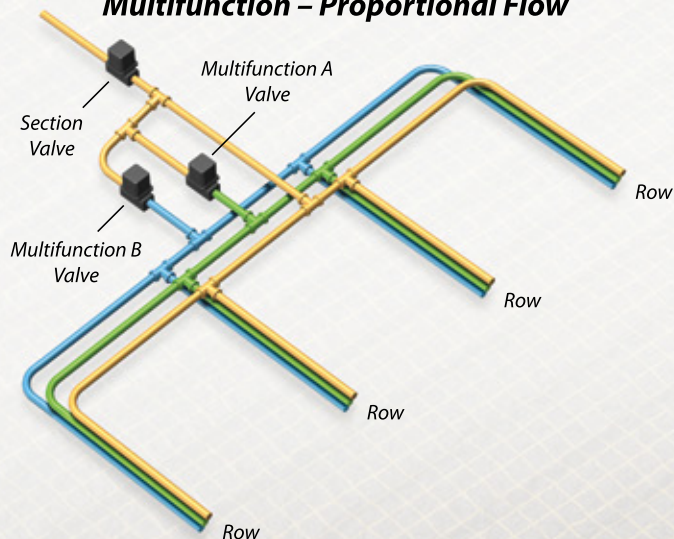
Multifunction – Fixed Flow using Electric Motor Drivers (EMDs)



Fixed Flow

Multifunction A controls an additional electric pump to increase capacity, Multifunction B could enable a third electric pump to further extend the range of your system when your application demands it.

Multifunction – Proportional Flow



Proportional Flow

Multifunction A controls a valve to add more flow capacity, Multifunction B could open a third flow path at a preset flow-rate to further increase your target rate range while reducing the pressure required to do so.



P. O. 99 • 111 E. LeRay Ave. • Eagle Lake, MN 56024-0099

800-328-9613



- facebook.com/microtrak
- twitter.com/microtrak
- youtube.com/user/microtraksystems
- micro-trak.com
- trakmail@micro-trak.com