



MACH 10v[®] Operating Requirements

The MACH 10v[®] integrates a remote shutoff valve into the MACH 10 ultrasonic residential meter platform. Utilities can control water service by opening or closing the valve, or restricting water flow, without dispatching a crew. The MACH 10v solution requires three components working together.

① MACH 10v Meter	② R900 [®] Cellular Endpoint	③ Neptune [®] 360 [™] Software
- Sizes: 5/8", 3/4", 1" (residential) - Temperature monitoring: Standard - Pressure monitoring: Optional	- Type: Pit or Wall - Multi-Carrier FW Required: 2.5-2 or higher ⚠ No integrated radio — separate R900 endpoint required	- Send & monitor valve commands via MACH 10v grid - Configurable Comms Scheduler for transmission windows - Valve status: Ready / Pending / Failed / Not Ready

Valve Operating States

State	Flow	Description	Typical Use Case
OPEN	Full	Normal service delivery: full water flow enabled.	Standard active service.
CLOSED	None	Water flow fully stopped: complete remote shutoff.	Non-payment, vacancy, emergency.
RESTRICTED	Minimum	Minimum essential flow only: humanitarian access is maintained. Restricted flow range: 0.5 – 1.5 GPM.	Non-payment, regulatory compliance, humanitarian.

Installation Best Practices

#	Step	Key Actions
1	Confirm Endpoint Compatibility	Verify R900 cellular endpoint supports valve operation, and firmware meets minimum for your carrier. Contact your local sales rep to confirm compatibility before installation if needed.
2	Verify Signal Strength	Swipe Neptune magnet to activate endpoint. Open Neptune 360 Field Manager App > Endpoint Manager > Search Cellular Endpoint. Confirm successful connection before completing installation.
3	Import Data into Neptune 360	Prepare import file with correct meter number and endpoint ID pairing, upload to Neptune 360 and confirm successful completion. Incorrect, mismatched, or incomplete data may prevent the valve from appearing in the MACH 10v grid or result in inaccurate data.
4	Validate Status in Neptune 360	Navigate to the MACH 10v grid. Confirm correct account and installation information. Valves should display 'Ready' status. Note: Import data may take up to 24 hours to appear.
5	Communication Scheduler	Navigate to the Comms Scheduler to create a custom communication schedule and assign appropriate endpoints. Confirm the schedule is applied successfully by verifying a 'Received' status. Once complete, the assigned units will display 'Ready' status in MACH 10v grid.