

MPS-2

Monofilament Positioning Servo

SERVOREELER SYSTEMS

XEDIT Corporation

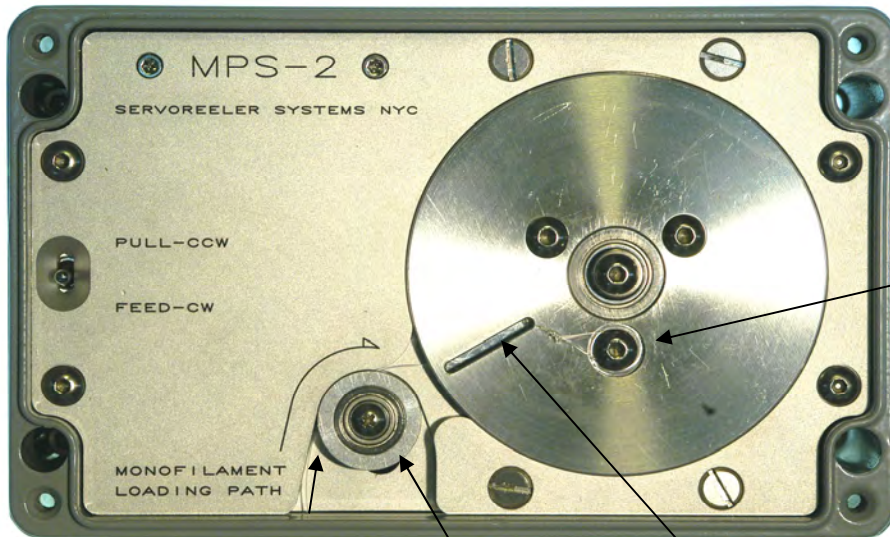
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Monofilament
Anchor screw
With milled
Recess

Mounting
Through
Holes X 4 places
for 8-32" Allen -
Head bolt.

Monofilament Input path
Roller (sensing) Guide
Input / output slit – just below housing edge
monofilament loading slot

Description of Operation

The MPS-2 Servo-mechanism is designed to Pull and Feed a fine monofilament line by remote control. These servomechanisms are employed in concert halls and auditoriums to horizontally position suspended microphones from their normal vertical drop position. MPS-2's emulates a normal Servoreeler in control and operation. The Deploy function becomes "Feed" and Retract becomes "Pull".

MOUNTING

The MPS-2 Must be securely and permanently attached to the building structure using 8-32" machine screws through the end mounting through holes into a structurally sound bracket that is in turn bolted to the building.

The preferred mounting orientation is vertical; with the Pull / Feed switch as the up and the storage reel in the down orientation. The monofilament line should be feeding with the weight of the microphone payload impinging on the ball bearing guide roller - down to the microphone. The mounting distance of the MPS-2 from the microphone line exit point in the ceiling - needs to exceed the maximum deployment of the microphone line. If the mounting distance were to be less, the monofilament line would pull the microphone from the vertical as it is retracted by the Servoreeler. When arranged in this manner, the monofilament line will be permitted to follow the microphone throughout its travel.

Setup and Operation

1. Confirm that the MPS-2 servo is safely secured to a solid structural member as described above. The MPS-2 cover is removed by loosening four captive Phillips screws. The cover is restrained by a small, safety steel cable to prevent its falling.
2. Attach the monofilament line to the suspended microphone or stereo bar. Manually rollout the monofilament line to the MPS-2
3. At the MPS-2 - Rollout several additional yards (meters) of extra line to act as reserve in the storage reel.
4. Temporarily restrain the cut line so that a 3/8" (9mm) anchoring loop can be formed and tied off with a knot at the free end.
5. Using the momentary toggle switch, align the loading slot of the storage reel (as shown above) with the input roller guide recess.
6. Insert the loop end through the entrance slit in the housing – around the top of the roller (sensing) pulley and then under the flange and through the aligned storage reel slot. A bent paper clip or tweezers can be helpful in fishing the loop up through this slot.
7. Wrap the loop around the anchor screw head that will retain the loop. This is the screw to the right of the slot that has a milled relief.
8. Maintaining a little tension on the line, activate the "Pull" toggle switch causing the storage reel to rotate counter clockwise until all of the extra monofilament line is taken-up; continue until the line begins pulling on the microphone or stereo-bar payload.
9. **Please note:** *The MPS-2 requires operator monitoring.* A sensitive tension sensing function is employed to stop the feed mode when there is less than about 10gms (1/3 ounce) of tension on the line. This is intended to automatically leave the microphone in a vertical position from the feed mode. **CAUTION:** Note that there is nothing to automatically stop the MPS-2 from the pull mode.

Payload capacity: 2.2Lbs (1Kg) 3.5Lbs (1.5Kg) maximum. Control interface: RJ45 socket the same as a standard Servoreeler.

Feed shut-off sensitivity: 7 – 10 grams (1/3 ounce) Sensing roller is balanced and will maintain sensitivity in any mounting orientation.

Monofilament gauge: .010" dia. to .014" dia.: are typical working gauges for the MPS-2 servo. .014" is rated at 12 Lb (6Kg)

For application details, questions or installation assistance, please call us at: 800-431-8900 or email:

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