

# NMS800

## DIGITAL READOUT SYSTEM

The NMS800 Digital Readout (DRO) is the newest in Newall's range of premium readouts. The DRO hosts many productivity enhancing features that will increase machine tool efficiency.

The NMS800, when matched with Newall's Spherosyn Serial and Microsyn Serial encoders, provides years of maintenance free, trouble free performance. Newall's inductive encoders are simple to install and designed to provide consistent accuracy and reliability even under the harshest workshop conditions.



### Features

- Clean, crisp PMVA LCD display with wide viewing angle
- Lathe, Mill and General Purpose functions
- Self Sensing Encoder Input
- Available in 2, 3, or 4 axes
- User definable function keys
- Linear and angular readings
- Stand alone or panel mounting

### Newall Advantage

- Backed by a company with over 50 years of proven reliability in manufacturing DRO systems & linear encoders
- Encoders carry an IP67 rating – All electronic and measuring components are sealed from the environment
- Continually provides accurate readings even under the harshest shop conditions
- No cleaning or maintenance required
- Tolerant to shock and vibration
- No glass or tape to break or scratch
- Ease of installation—no backer bar or machined surface required

### Warranty: 5 year mfg, 3 year No Fault\*

*\*USA & Canada Only*

*\*Varies by Region, Terms and Conditions Apply*

<b>General Purpose Functions</b>	<ul style="list-style-type: none"> <li>• 2, 3 or 4 axes configuration</li> <li>• Inch/mm conversion</li> <li>• Four user definable function keys</li> <li>• Absolute / Incremental operation</li> <li>• Axis pre-set / zero reset</li> <li>• Zero approach warning (graphic and audio)</li> <li>• Feed-rate display</li> <li>• Newall Encoder auto-detection</li> <li>• RPM display*</li> <li>• Angular readings*</li> <li>* requires rotary encoder</li> </ul>	<ul style="list-style-type: none"> <li>• Auto resolution detection*</li> <li>• Linear and segmented error compensation</li> <li>• Digifind / reference mark</li> <li>• Centre find (establish workpiece midpoints)</li> <li>• Programmable memory for datums and tools</li> <li>• Built in calculator</li> <li>• Undo function (move back up to eight steps)</li> <li>• USB port for loading new firmware and settings</li> <li>• Sleep mode</li> <li>• Scaling factor</li> </ul>
<b>Milling Specific Functions</b>	<ul style="list-style-type: none"> <li>• Bolthole circle / PCD calculations</li> <li>• Line hole / grid array calculations</li> <li>• Arc contouring</li> <li>• Pocket / island milling</li> <li>• Summing two encoders within the same plane</li> </ul>	
<b>Lathe Specific Functions</b>	<ul style="list-style-type: none"> <li>• Radius / diameter readings</li> <li>• Tool offset library (50)</li> <li>• Taper calculation</li> <li>• Vectoring (requires 3 axes)</li> </ul>	
<b>Encoder Compatibility</b>	<p>Serial Input: Newall Spherosyn &amp; Microsyn Serial, Propriety Signal <u>not compatible with previous Newall DRO Encoders (S2G/M2G).</u></p> <p>Digital (TTL) Input: Newall TTL Encoders. Many third party TTL encoders including Rotary.</p> <p>Contact your local sales representative for advise on compatibility.</p>	

<b>Display</b>	PMVA LCD Screen — 127mm x 122mm — Membrane keypad with audible tactile feedback
<b>Construction</b>	High pressure aluminium alloy cast front and rear panel
<b>Dimensions</b>	Height: 187mm (7.36"), Width: 306mm (12.04"), Depth: 46.6mm (1.83")
<b>Electrical Requirements</b>	Voltage of 100-240 VAC (47 – 63 Hz) to external PSU included

## SPECIFICATIONS

Encoder	Spherosyn Serial	Microsyn Serial
<b>Scale Travels</b>	52mm—13,000mm	50mm—1,000mm
<b>Scale Diameter / Material</b>	15.25mm / Stainless Steel	5.75mm / Carbon Fibre
<b>Reader Head Dimension</b>	112mm x 53.5mm x 28mm	75mm x 37.5mm x 23mm
<b>Overall Scale Length</b>	Travel Length + 258mm	Travel Length + 187mm
<b>Standard Cable Length</b>	3.5 metre and/or 7.0 metre with Armour and D Style Connector	
<b>Output Type:</b>	Newall Proprietary Serial	

### Compatible with the Spherosyn and Microsyn Serial Encoders, which have a number of advantages:

- IP67 environmental rating, fully submersible
- Withstands dust, dirt, oil and other harsh environment conditions
- No mechanical wear characteristics
- No more broken or scratched glass
- Requires no cleaning or regular maintenance



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