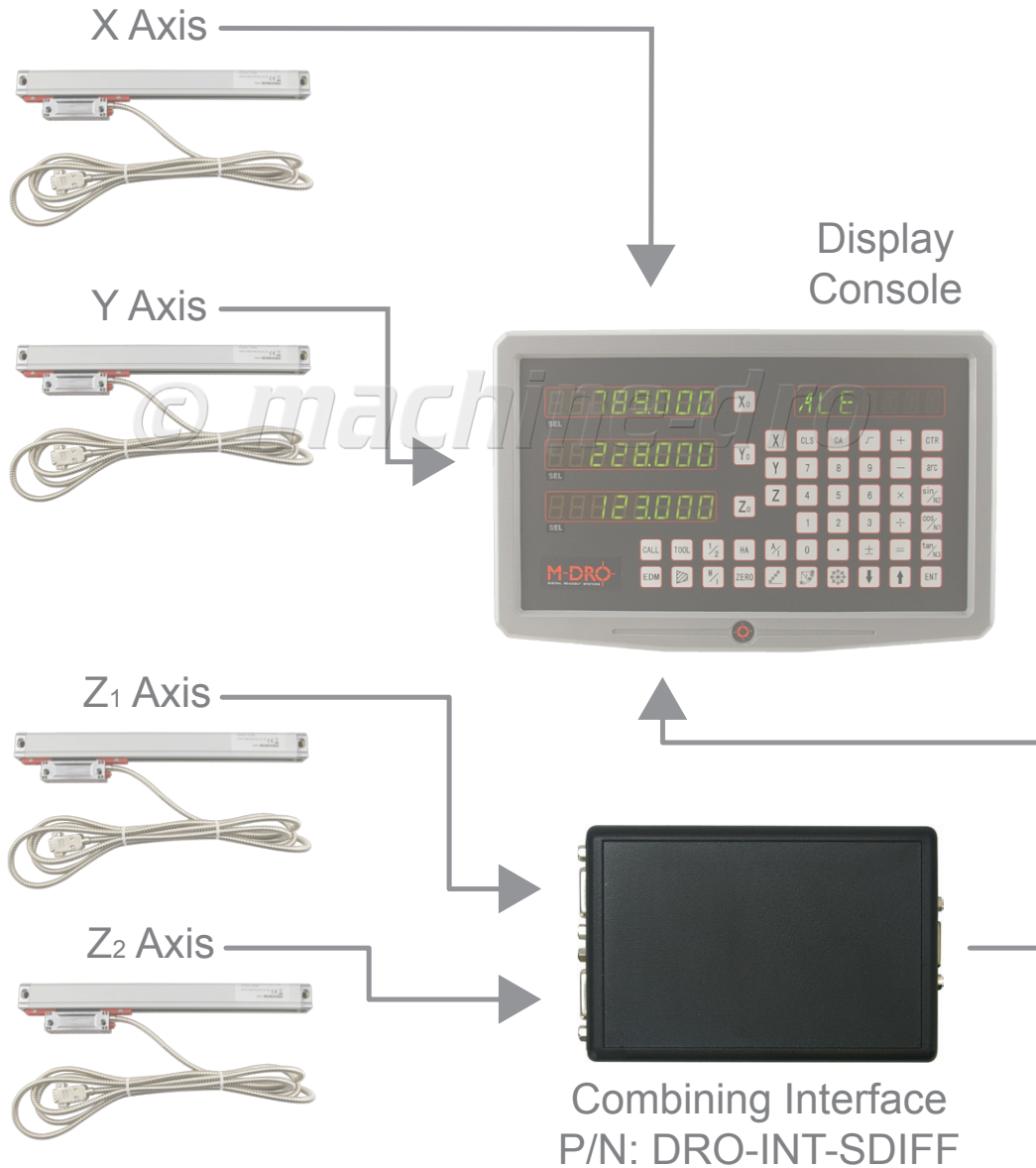




**Encoder Summing Interface**

Part No: DRO-INT-SDIFF  
Doc V: 1.1



- The DRO-INT-DIFF interface combines the output of quadrature encoders into a single quadrature output.
- The interface will add or subtract the difference of the two encoder inputs.
- Count direction of the encoder inputs can be changed by swapping the input connections over and using the DIP switch on the interface.
- No external power supply required, the interface is powered by the console encoder supply.

Applications include:

- Milling machine quill and knee/head encoder outputs combined on the Z axis console input, when lowering the quill or raising the height of the knee the console will maintain the distance from the spindle to table.
- Lathe carriage and compound slide encoder outputs combined. Carriage travel can be used as the coarse/main feed, with travel of the compound slide used as the fine feed. (compound slide must be set parallel)





## Compatibility

- The interface is directly compatible with the 5 micron M-DRO encoders.
- The encoder summing interface can be used with various brands of encoder and display consoles, in some cases adaptor cables are required.
- Encoder types and brands can be mixed, for example an Easson optical encoder can be connected to one input and a M-DRO magnetic can be used on the other input.

Please ensure compatibility before purchase. Please feel free to contact out technical staff for assistance.



Inputs to interface (5um resolution)	
Encoder Part Number	Adaptor Cable
DRO-GS200 DRO-GS300 DRO-GS500 DRO-GS600 DRO-MG-EH-05	Directly compatible.
DRO-ES-10	No adaptor required
DRO-EL-S1 DRO-EL-S2	DRO-AD-TY-10
DRO-AC-SENC-50 DRO-AC-SENC-150	DRO-AD-TY-05



Interface output to console	
Adaptor Cable	Console Part Number
Directly compatible.	DRO-MG-MDU-1X DRO-SDS3-1 DRO-SDS6-2V DRO-SDS6-3V
No adaptor required	DRO-ES-8A-2X DRO-ES-8A-3X DRO-ES-12-3LCD
Adaptor required. Please contact us.	DRO-EL302-C DRO-EL303-C DRO-EL600-3 DRO-EL-700-3
Adaptor required. Please contact us.	DRO-AC-VUE-2 DRO-AC-VUE-3

## Specifications

Specifications	
Number of inputs	2
Number of outputs	1
Input signal	5v TTL 90° quadrature phase difference
Output signal	5v TTL 90° quadrature phase difference
Encoder resolution	5 micron
Storage temperature	-20°C ~ +55°C
Operating temperature	0°C ~ +45°C
Weight	3.2 Kg

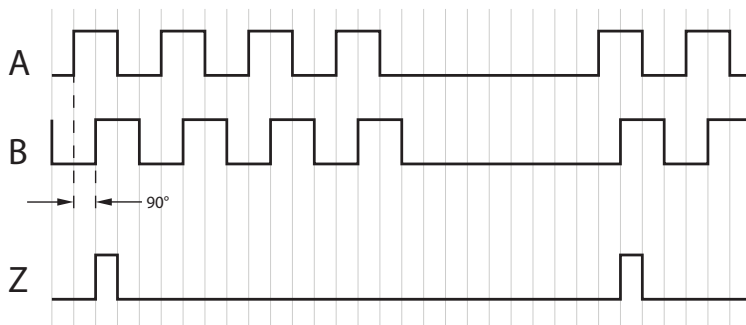




## Dimensions



## Output Signal



- Fitted with 9 pin female D type connector for encoder inputs and output to console.
- For encoder compatibility please check compatibility chart datasheet.

	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
Signal	N/C	0v	N/C	Screen	N/C	A	+5v	B	Z