TRIPLE AXES PROPORTIONAL JOYSTICK - STOCK NO. 506-3589

APEM - 9000 SERIES

A P E M

The triple axes **RS** joystick combines unparalleled levels of robustness with an enhanced style to deliver a low cost, ergonomic solution which is ideally suited for such applications as control of CCTV, microscopy, or C.M.M. products. Designed specifically for maximum robustness, the new triple axes joystick utilises a precision metal mechanism, with reinforced Z axis end stops to give truly class leading durability and service life. Optimum above panel height and an ergonomic 'feel', provide for the most comfortable user experience even over many hours of continual operation.

The joystick provides an analogue, proportional output for all three axes, that is nominally set to be rail to rail, i.e +/- 50% of Vss.

Do not exceed specified voltage.

ELECTRONIC SPECIFICATION

Supply voltage (Vs)	4.75V min - 15V max
Signal swing (from centre)	+/- 50% Vs
Output signal tolerance	+/- 10% of specified output
Output impedance	1.8kΩ +/- 1%
Signal ripple	<1% of output
Supply current	Typically <15 mA
Operating temperature	-20°C - +55°C
RFI rejection - (Base specification)	> 20V/m - (Bare joystick)
RFI rejection - (typical)	> 40V/m - (Installed)
Preferred load	>10K

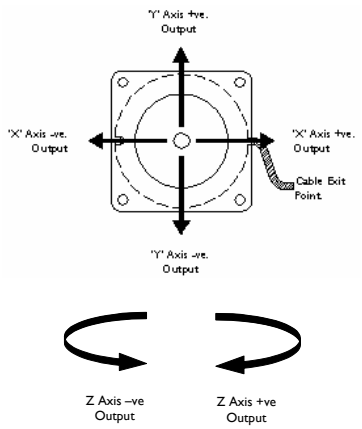
WIRING SPECIFICATION

Red	+Vcc
Blue	X Axis wiper
Yellow	Y Axis wiper
Purple	Z Axis wiper
Black	0V
Green	Centre tap reference (50% * Vcc)

MECHANICAL SPECIFICATION

Body	Glass re-enforced ABS
Shaft - Material	A303 Stainless steel
Shaft diameter	5mm nominal
Washer plate	Brass
Gimbal pivot	Acetal
Centering cone	Brass
Spring	Stainless steel
Pivot pins	Hardened steel
Limiter plate	Glass re-enforced Nylon
Bezel	Glass re-enforced Nylon
Gaiter (Boot)	Santoprene
Knob	Aluminium
Operating lever deflection	+/- 18° (@ N/E/S/W points on X & Y axes)
Z axis rotation	+/- 27°
Output leads insulation	Soft PVC
Output leads	14/0076 tinned copper
Weight	130g typical
Service life, mechanical	10,000,000 cycles typical

ORIENTATION



DIMENSIONS

