

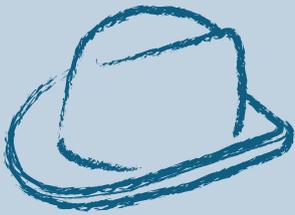


## Homburg Slowspeed pan and tilt system for long range surveillance



Long range surveillance	3 kilometres plus with 55-60x lenses
Ultra slow speed operation	Pan and tilt speeds <math><0.1^\circ/\text{sec}</math> minimum to <math&gt;10^\circ \text{sec}&lt;="" math&gt;="" maximum<="" td=""></math&gt;10^\circ>
Choice of supply voltage	Supply voltage either 110V ac or 230V ac
Choice of auxiliary output voltage	Output voltage either supply voltage or 24V ac
Easy to install	9 wire connections between receiver and housing
Exceptional accuracy	Revolutionary preset technology with 12 bit resolution
Easy to set up	Receiver mountable at base of pole
Wide choice of lenses	Compatible with lenses with iris override and x2 converters up to 60x
Flexible	Supports 14 different protocols
Active motor drive system	Ensures head stays on preset positions





## Homburg Slowspeed pan and tilt system for long range surveillance

The Homburg Slowspeed system is a complete high resolution solution for users requiring a far higher degree of accuracy than is possible with a normal pan & tilt head and receiver. Delivering the capability of long distance video tracking and people identification at up to 3 kilometres and beyond (dependent on lens), applications for the Slowspeed include airports and border control, harbours, vehicle embedded systems and other sensitive area surveillance. Quick and easy to install, the receiver and housing are connected together by just nine connections (five power, two data and two video cables) and the receiver can be controlled over a daisy chained or star wired RS422/485 network. System commissioning and diagnostics are performed via a local or remotely located display.



## Receiver



<b>Power supply</b>	230V ac or 110V ac
<b>Max load</b>	5A @ 230V (1150 W)
<b>Receiver current draw</b>	Maximum of 100VA max
<b>Fuses</b>	Auxiliary fuse F2 5A T (20mm ceramic cartridge) Total maximum of pan/tilt/lens and 24V ac auxiliary is 100VA
<b>Outputs</b>	Auxiliary outputs for wash/wipe/lights (1000W max) Driven at supply voltage or 24V ac selectable by SW2
<b>Video input</b>	1V p-p 75Ω terminated input via BNC socket
<b>Video output</b>	1V to 4V p-p 75Ω impedance via BNC socket Video launch amplifier gain locally and remotely adjustable Zoom and focus: adjustable between 6 - 12V dc Inching speed: adjustable between 0 - 12V dc. 1 second inching built in
<b>Lens drives</b> <i>(remotely adjustable)</i>	Iris output: can be set either direct drive for 3 motor lens or auto iris override voltage. In auto-iris mode, the output returns to the preset level 15 seconds after manual iris control. Preset level is adjustable Each output has red and green LEDs to indicate direction and voltage
<b>Presets</b> Lens 10 bit resolution Head 12 bit resolution	Inputs are provided for pan, tilt, zoom & focus preset feedback pots Up to 32 full scene presets can be stored within the receiver, i.e. pan, tilt, zoom and focus. (16 with BBV & Baxall up the coax protocols)
<b>Alarm facilities</b>	8 alarm inputs from volt free normally closed contacts Output is 1 normally closed volt free contact which can be set to operate either immediately or when the preset is approached after an alarm input NOTE: The output is used for iris override when using Fujinon or Pentax lens mode
<b>Additional facilities</b>	Software random pan Sequential preset patrol with individual programmable preset dwell Datum - return to preset 1, start preset patrol or random pan after menu programmable duration of inactivity
<b>Features</b>	LED readout for continual system status. Programming menu with in-built LCD display & an on screen display 12V dc/500mA un-switched output provided Colour coded outlets – live, neutral, earth and low voltage.

## Pan and tilt

With its dual process heat treated gravity die cast aluminium casing and precision turned and milled internal components with ball races on major axes, the Homburg heavy duty pan and tilt is the highly stable, robust and reliable platform for the Slowspeed system. Weatherproof and maintenance free, the head features external limit switch adjustment to avoid compromising its IP68 rating, full mechanical braking and contactless Hall-Effect sensors for greater accuracy over longer distances.

Dimensions (mm nominal)		Side mount	Over the top
Height		234	250
Width to platform face		220	230
Width to platform outer edge		402	N/A
Depth (without plugs)		170	170
<b>Weight (kg)</b>		< 12	< 12
<b>Fixing centres</b>	Base	4 holes tapped M6 on 4"(101.6) PCD plus 4 holes 6.35 Dia on 4"(101.6) PCD	
	Platform	Key hole slots on 4" PCD	
<b>Voltages</b>		24VDC	
<b>Speeds (°/sec)</b>		DC	
Pan		Less than 0.1 minimum to 10 maximum	
Tilt		Less than 0.1 minimum to 10 maximum	
<b>Capacity (kg)</b>		50	20
With 1 load compensator		N/A	30
With 2 load compensator		N/A	45
<small>(maximum load can only be achieved by using a balance load)</small>			
<b>Operational angles (°)</b>		Pan	Tilt
<b>Side mount</b>		350	±180
<b>Over the top</b>		350	-90 to +25
<b>Backlash</b>		Less than 0.15°	
<b>Hall effect sensors</b>		Standard	
<b>Control cable</b>		Mating connectors supplied	
<b>House colour</b>		Goose Grey, Textured, Semi Gloss (BS4800 00 A05)	
<b>Maintenance</b>		None required	
<b>Temperature range (°C)</b>		-20 to +50 (Heater available)	

## Housing

The Homburg Slowspeed's housing is a modified version of the 902 model from MAD's Mitre range. Compact, yet roomy enough to accommodate the equipment needed for the system's long distance surveillance roll, the IP66 rated unit has a casing and tray of fully welded sheet aluminium with stainless steel fastenings and fittings. Inside, there's an extended camera plate with insulated stainless steel safety strap, wiring blocks and a PTC resistor heater. An intergral self parking wiper is also available as an option.

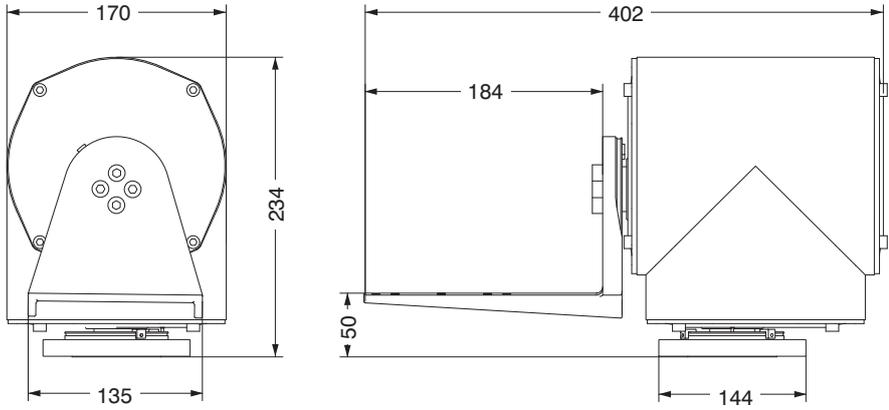
Dimensions (mm nominal)		
Height		259
Width over clips		232
Width over sunshield		233
Length over sunshield		760
Depth inside base		55
<b>Weight (kg)</b>	without wiper	<7.0
	with wiper	<7.5
<b>Fixing centres</b>	Base	4 holes tapped M6 on 101.6 PCD (4") square to base, with integral reinforcing plate
	Platform	8 slots 10 wide x 30 long in powder coated aluminium plate. Nylon insulation bushes and 3/4 x 1/4 UNC hex screws supplied
<b>Voltages</b>		24VDC (with 24VAC heater)
<b>Capacity (l x w x h mm)</b> <i>(Max. camera and lens size)</i>		650 x 180 x 170
<b>Options</b> <i>(see price list for details)</i>		Integral self parking wiper, fan cooling, washer, security option, toughened glass
<b>Heater</b>		Self regulating and progressive up to 32W
<b>Wiring and connections</b>		2 x 12 way terminal blocks 1 x 20mm cable gland 1 x 25mm blanked hole 1 x CM style connector for power, video and data
<b>Recommended cable</b>		24/0.2 (0.77mm) + RG59 coax
<b>House colour</b>		Goose Grey, textured, semi gloss (BS4800 00A 05) with white, smooth semi gloss (RAL9016) sunshield
<b>Maintenance</b>		None required
<b>Temperature range (°C)</b>		-20 to +50



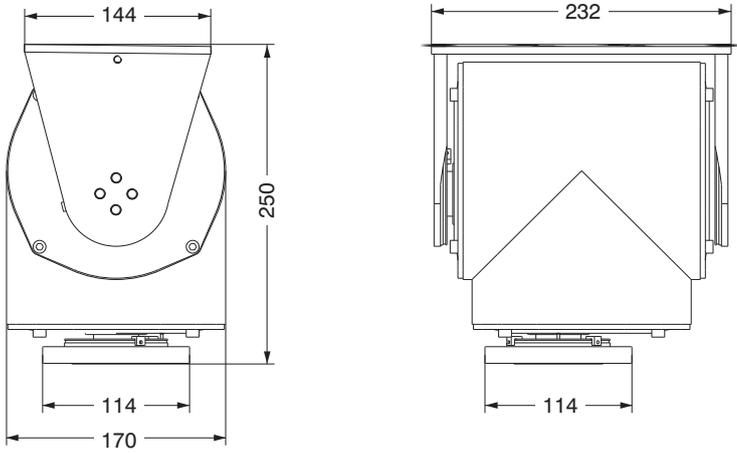
# Dimensions

## Pan and tilt (mm)

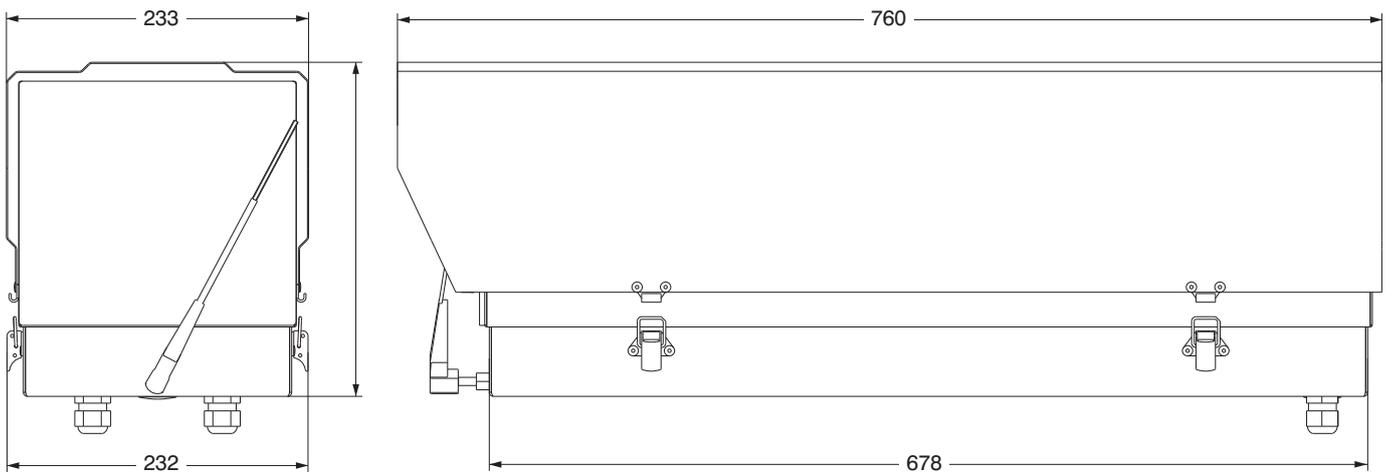
Side mount



Over the top



## Housing (mm)



Metham Aviation Design Limited  
Station Approach, Four Marks, Alton  
Hampshire GU34 5HN, UK

Tel: +44 (0)1420 565618. Fax: +44 (0)1420 565628  
Email: [info@madcctv.com](mailto:info@madcctv.com) Web: [www.madcctv.com](http://www.madcctv.com)

MAD pursues a policy of continuous development. Specifications may therefore be changed without notice.

