

- Camera Tilt/Pan for professional use
- Smooth servo-motion mechanism
- Variable speed, from very slow to very fast ( $\sim 100^\circ/\text{sec}$ ), accuracy  $0.03^\circ$
- State of the Art lens control
- Extruded aluminum enclosure, stainless steel socket
- Triple Video-Insert functions
- Up to 64 programmable prepos settings
- Versatile I/O possibilities
- **Allegiant, Erna, Pelco and DSiPS** protocols
- Overvoltage protected video and control signals
- Optional galvanically isolated videosignal



## M08 Tilt/Pan-unit: State of the Art for Surveillance Applications

**The M08 tilt pan unit** represents State of the Art technology being much more than a regular turning mechanism for surveillance cameras

The robust, high technology design and versatility of the M06 makes it an ideal component in modern remotely controlled surveillance systems.

### Precision Servo-controlled positioning

The accurate servo-controlled positioning system allows the M08 to turn very rapidly towards the surveillance target. In addition to accurate, fast positioning, the M06 is capable of very slow motion which is needed especially with large focal length lenses. The positioning accuracy is up to  $0.03$  degrees and the unit supports 64 preprogrammed prepos positions. An unique feature that controls the maximum turning speed according to the zoom position of the lens, helps the user to maintain the surveillance target always in sight. The more far the zoom is, the slower the maximum speed is – user configurable.

### Special Optics Control

The M08 tilt/pan-unit features unique control electronics for a motorized lens. The speed of the zoom and focus motors can be adjusted which makes the optics much more easier to use. A slow zoom speed is very useful especially with large focal length optics.

### Versatile, protected interface signals

The M08 tilt pan unit is compatible with many major surveillance systems manufacturer communications protocols. The M06 has the **Bosch (Philips) Allegiant Bi-phase, Pelco-D, Ernitec ERNA and Ajeco DSiP** communication capabilities. The communication protocol is selected from the tilt-pan units user interface menus.

The interface signaling is RS/232/422/485 and Bi-Phase. Ethernet is available upon special request.

### Overvoltage protection and galvanic isolation

The M08 design is based on more than 10 year experiences of Ajeco's electronics used in harsh environments. The experiences of cold and warm climates, difficult coastal and naval installation sites with salt fumes and outdoor lightning protection are all incorporated in the M06 design. Ajeco's electronic designs are used worldwide and have also been integrated into many space applications.

All interface signals, including the video signal, are overvoltage protected and galvanically isolated (option on the video signal).

### Interfaces, Relay-outputs, Opto-Inputs

The M08 features versatile interfaces for communications equipment and general purpose I/O. The unit has two remotely controllable relay outputs and two opto-inputs in addition to various serial communication interfaces to be used with the camera unit. The M08 has RS232/422 and I2C interfaces for camera control.

### Optional wiper mechanism

The M08 unit can be fitted with an optional wiper mechanism.

### Intelligent messaging and health signaling

The M08 video-processing electronics is capable of reporting loss of video when using Ajeco's protected, encrypted and secure DSiP communications protocol. The DSiP system adds a multitude of other capabilities, such as networked operation, data security and integrity and many more features making it easier to maintain large scale installations.

### Measures and Weight

The M08 unit height is 414 mm, width 185 mm and depth 150 mm. The weight is approx 12.5 kg. The unit has a lifting hook mount

### The Video-insert functionality

The M08 unit has three separately controllable video insert functions which can insert several different objects in the video signal.

Typically the user selects to insert the name of the installation site, date and time stamps and/or a compass in the video signal. The compass option of the M06 displays a true compass direction expressed in degrees. The compass can tell the angle into which the camera looks towards in addition to reporting the name of the place (if prepos positions have been set).

Two of the insert windows are 256x32 pixels and one is 64 x 64 pixels. The user may select if a insert window has a background color or not. The color of the drawn inserted video image can also be set. The user may also specify the position where the inserted images shall appear in the original image – all these features add flexibility and saves video display screen real estate.

### Language Support

The M08 menu structures can be in English, Finnish or Swedish – user selectable.

### The mounting socket

The M08 tilt pan units mounting socket is 200 mm wide, made of stainless steel and meets the measures of many commonly used tilt pan units.

Measures	Height 414 mm, Width 185 mm and Depth 150 mm
Weight	~12.5Kg
Power	24VDC or AC, typ < 1A, up to 3A peak, 300mA standby, 1.6A stdby w/ heater on
Environmental temp.	-40C..+50C
Speed	Max approx ~100 degrees / sec. Min: very slow
Accuracy	0.03 degrees
Interfaces	isolated RS232/422 ports, RS422 and I2C ports for camera parametrizing Isolated BiPhase-input for Bosch Allegiant video matrixes
Suipported protocols	Allegiant, Ernitec/ERNA, Pelco and DSiPs
Video-isolation	Optional galvanic isolation on the video signal
Video Inserts	3 pcs separately controllable, versatile graphical video inserts, remotely controllable.
Overvoltage protection	Yes, As standard
Mounting Socket	Stainless Steel socket
Material	Extruded anodized Aluminium profile
Enclosure	IP66, optionally IP67
Connectors	AMP C-16 series for control and power, TNC for video
Opto-inputs	Optional 2 pcs (depending on the configuration of the T/P unit)
Relay-outputs	Optional 1 pcs (depending on the configuration of T/P unit)
Real Time Clock	Yes, date and time can be seen in the video insert if selected.

For more information Contact your representative or Ajeco Oy – [www.ajeco.fi](http://www.ajeco.fi)