

MacFinish 2D 300



SPORT TIMING SYSTEMS



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The MacFinish 2D 300 Pro and Elite photo finish configurations are based on the MacFinish 2D 100 Advanced photo finish functionalities, but MacFinish 2D 300 photo finish cameras have extra features like internal camera memory, Ethernet connection from the camera to the PC and double photocells. Our MacFinish 2D 300 photo finish camera has an Ethernet connection between the photo finish camera and computer which allows you to place the computer at a larger distance of the photo finish cameras.

The photo finish camera itself is a complete professional photo finish system and produces photo-quality pictures billions of different colours, and a superb dynamic range in case of temporary recording of high contrast images or part of the image (shadow in some and full sun in other lanes). The MacFinish 2D 300 photo finish guarantees the race and time recording internally inside the photo finish camera, independent of what happens with the personal computer (OS crash, power down, ...).

We deliver photo finish camera with the MacFinish interface box, for easy connections of all sensors and interfaces. This MacFinish photo finish camera has standard **256MB** of **internal memory**, expandable up to **1 or 2 GB**, and is therefore the ideal choice for professional customers at any level of national or international meet. The 2 dimensional (2D) sensor known in the digital photo and digital video market is now used to give you an user-friendly **through the lens aligner**. You will have a "live video" of the finish line to align the photo finish camera at the front of the finish line in seconds.

The main advantages are:

- => Internal memory of 256MB, optional expandable to 1 or 2 GB
- => 3 way motorized lenses available
 - Auto focus - Auto iris - Motorized zoom
- => Through the lens : enhanced alignment procedure: through the lens "live video" of the finish line
- => Light sensitive and affordable lenses
- => Fully battery powered
- => Optional VideoID
- => ...

Lens calculation for Athletics

P-Number	Description	If camera height 5.5m / 11.5m Ideal range between camera & track
P592	MF2D ; Man.Zoomlens 8-48mm f1.2	distance to track: 2,5m - 22m / 1m - 29,5m
P893	MF2D ; Mot.Zoomlens 8-48mm f1.2	distance to track: 2,5m - 22m / 1m - 29,5m
P593	MF2D ; Man.Zoomlens 12.5-75mm f1.2	distance to track: 5,5m - 29m / 5,5m - 43m
P850	MF2D ; Mot.Zoomlens 12-120mm f1.8	distance to track: 5,5m - 55m / 5,5 - 55m

Optional 3-way motorized lenses to assist the operator:

For the MacFinish 2D 300 photo finish camera generation we have chosen to use **C-mount lenses** which are more affordable than the F-mount lenses. We deliver as standard an f1.2 or an f1.8 lens which needs up to 5 times less light than an f2.8 lens. As in the past, TimeTronics will ask you questions about the typical setup of the camera, so as to define the most suitable lens for your purpose.

With the MacFinish photo finish **Software 2D** you have the possibility to **remotely adjust the zoom, focus and iris**. Plus you have even more! You can **automatically control the iris and focus on the finish line**.

The **auto focus** can be done in the same photo finish camera alignment window. Once your photo finish camera is aligned at the perfect position, one click on the mouse button will be enough to auto focus.

The **auto iris** option will adjust the iris to the light intensity of the moment, sun, clouds, or sunset!

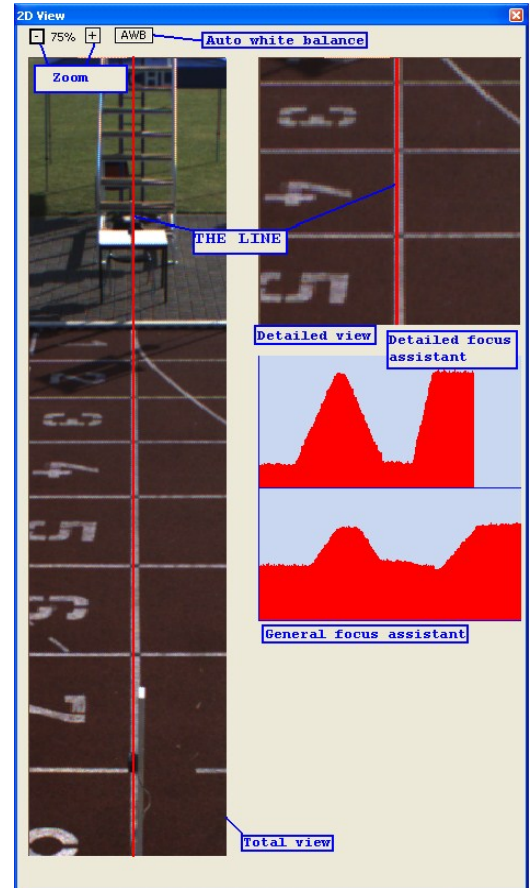
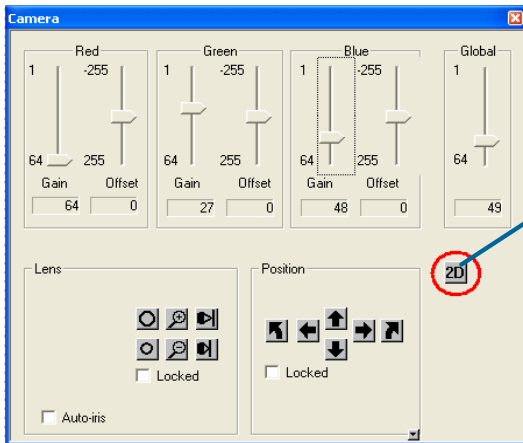
Specifications	MacFinish 2D 300
Hardware	
PC-connection	Ethernet
Sensor	2D sensor
Memory Built-in	256 MB Internal memory
Number of pixels (vertically)	Max 2000 pixels
Number of colors/pixel	16 millions
Acquisition rate	Max 4.300 frames per second
Synchronous time	1 microseconds time base
Camera:	
Optics (lens)	C-mount
Lens control (only in combination with motorized lens)	3-way motorized for zoom, focus and iris
Camera power	Powered by interface (12Vdc)
Camera Alignment	Through the lens: 2D view in software
Maximum length of camera cable	Virtual unlimited



Aligning the camera? It's a piece of cake?

One of the major advantages of the MacFinish 2D photo finish camera is the **through the lens viewer**. A **live video view** of the finish line will allow you to align the photo finish camera in front of the finish line in a user-friendly way. In the past a certain handiness was needed to find the finish line. Most of you will remember the operator turning his photo finish camera from side to side to align the photo finish camera. With our MacFinish 2D photo finish camera a perfect camera alignment can now be achieved much easier and much faster than in the past.

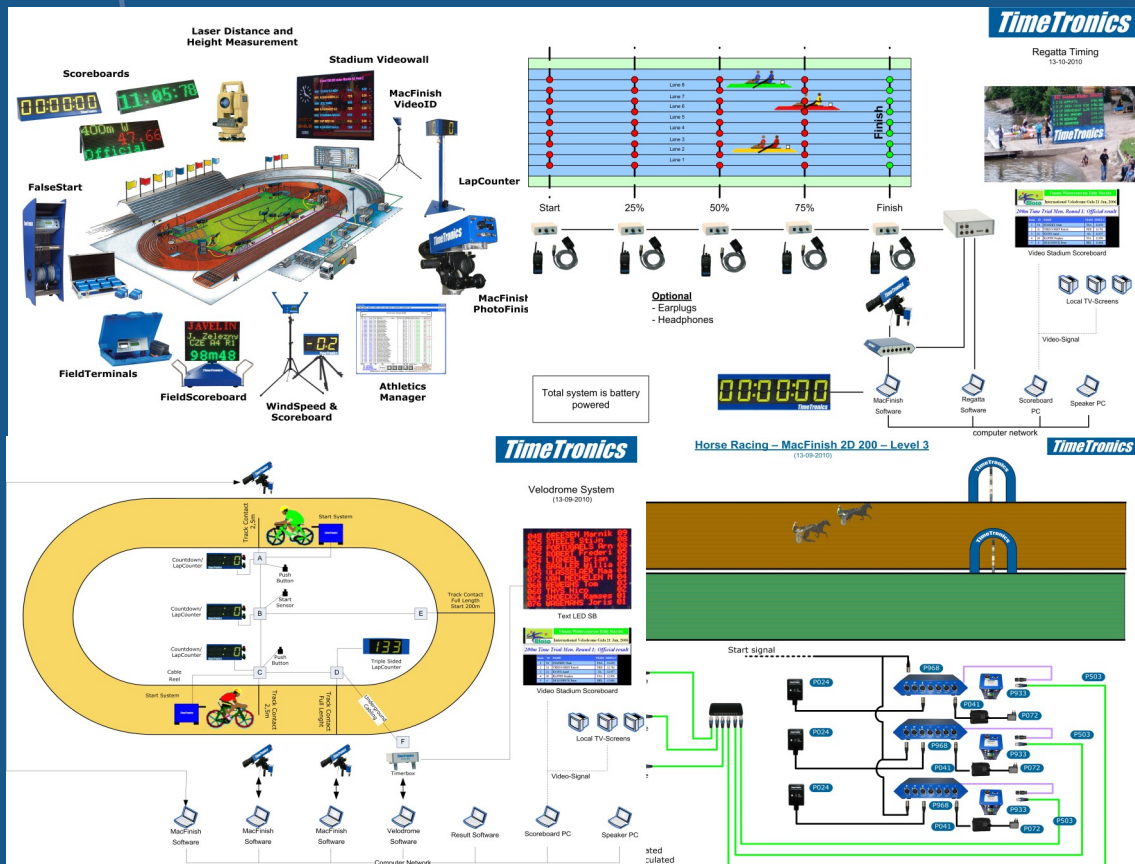
Place the photo finish camera in extension of the finish line and open the photo finish camera **control window** to start a 2-dimensional video view of the finish line, by pressing the "2D" button.



Comparison MacFinish 2D 100 and MacFinish 2D 300

Specification	MacFinish 2D 100	MacFinish 2D 300
Internal memory	No internal memory	Standard = 256 MB Expandable to 1 or 2 GB
Camera connection	Active USB or USB 2.0 (max 5m cable)	Ethernet (Distance virtually unlimited)
Aligning camera	Through the lens viewer Instant video image of finish line	Through the lens viewer Instant video image of finish line
Focus camera	Auto focus available	Auto focus available
Alignment correction AFTER race	Possible	Not Yet
Color errors	No noticeable color errors	No noticeable color errors
Timing error	No timing error	No timing error
Max vertical pix	2.000 pixels	2.000 pixels
Max recording speed	1.300 frames/sec	4.300 frames/sec
All start signals registered	Yes	Not Yet





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