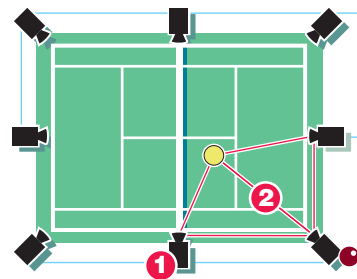


# Hawk-Eye on the watch at Wimbledon

The Hawk-Eye electronic line-calling system – successfully introduced at the most recent U.S and Australian Opens – will replace the venerable “Cyclops” at Wimbledon to help resolve controversial umpiring decisions

## HAWK-EYE OFFICIATING SYSTEM



## Cameras:

Eight high-resolution, high-speed, black-and-white cameras located around court

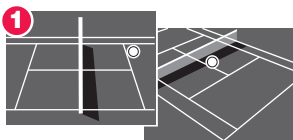
## IMAGE PROCESSING

Over 2,000 pictures per second from each camera combined in **control computer**



## BALL POSITION

**1.** Software – calibrated by lines on court – identifies ball in each camera frame



**2.** 3D position of ball calculated by triangulation from three cameras



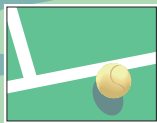
Hawk-Eye also logs ball speed, kick, and slice

## YOU CANNOT BE SERIOUS!

Umpire will review computer-generated replay when players contest line-calls

**3.** Position of ball calculated for each frame to map trajectory – and enable exact prediction of bounce point, accurate to within 3mm

Skid and ball compression included in calculation



Three incorrect challenges  
allowed per set



One extra if set goes to tie-break



If match tied at 6-6 in final set, counter reset for next 12 games

