

Premier League to select goal-line technology

FIFA has approved four systems to end the controversy of disputed goals

CAMERA SYSTEMS: GoalControl, Hawkeye

Cameras: Seven high-speed, high-resolution cameras around goal area

Position: Exact 3D location of ball continuously and automatically calculated by triangulation – even if only visible from two cameras

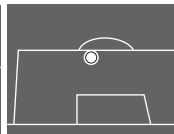
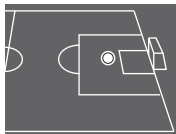
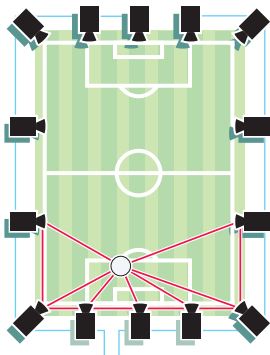


Image processing: Ball can be identified even if obscured. Position mapped to enable prediction of location within 3.6mm

Instant alert to referee and 3D TV replay if ball crosses line

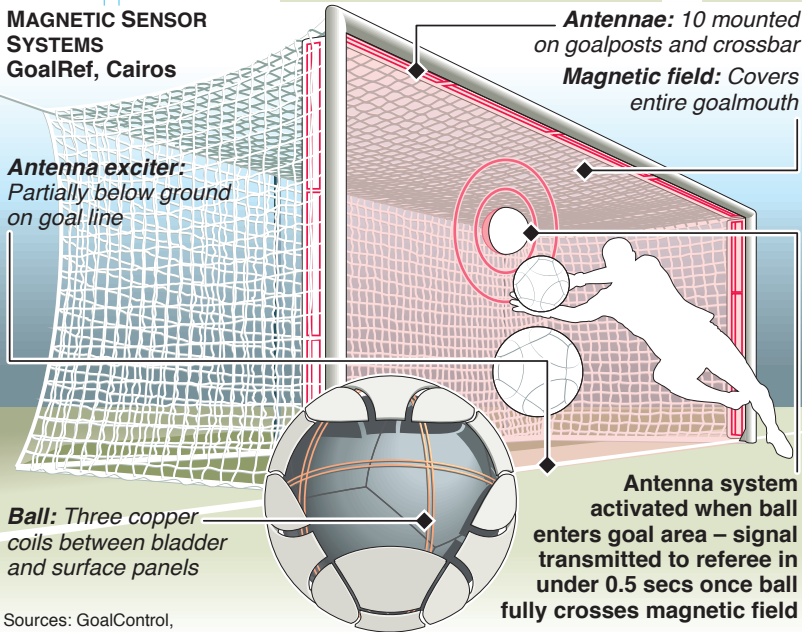


MAGNETIC SENSOR SYSTEMS GoalRef, Cairos

Antenna exciter: Partially below ground on goal line

Antennae: 10 mounted on goalposts and crossbar

Magnetic field: Covers entire goalmouth



Ball: Three copper coils between bladder and surface panels

Antenna system activated when ball enters goal area – signal transmitted to referee in under 0.5 secs once ball fully crosses magnetic field