SHOTOKU
BROADCAST SYSTEMS

QuickRef

Swoop-SP and SmartPed Systems

Almost Absolute

SmartPed continues to develop and is today one of the most advanced and widely proven robotic camera pedestal available. A key feature of the system is the ability to store shots and recall them time and again with high accuracy. To do this, any free-roaming pedestal needs information about the XY floor position at every moment.

When first powered-on a robot will need to find (or be given) a navigation reference position. SmartPed, as standard, uses a reference tile positioned somewhere on the floor over which the pedestal is positioned and makes a short move to obtain the 'Home' position. From that point on, all movements are precisely measured with high resolution encoders and advanced drift-compensation algorithms to calculate the current XY position. This is called 'Relative' navigation and is very widely used every day with excellent results.

As AR/VR studios became more widespread and with them the use of advanced optical tracking systems, this technology was adopted by SmartPed to enable 'Absolute' navigation - removing the reference tile altogether and providing always-on reference information with no manual intervention. This is a powerful system, however costs can be significant as an optical tracking system needs to be installed for each SmartPed. Especially so, if no AR/VR is in use in the studio anyway.

Miniature QR code reference point

Multiple, Miniature Reference points

Shotoku's latest advancement in navigation systems the QuickRef (QR). It combines the seamless Absolute referencing of Optical tracking with the cost efficiency and simplicity of installation of a Relative reference tile. Resulting in near-absolute navigation.

In place of the single large reference tile, one or more tiny QR coded stickers are placed on the studio floor, typically in areas where the pedestal spends most time, but anywhere is OK. Every time the internal camera scans a code a new reference is made and the current XY navigation position updated internally.

No action is required by the operator, no large floor tile, and no expensive/complicated optical tracking system installation high among the light grid. Absolutely perfect!

APPLICATIONS

SMARTPED PEDESTAL SYSTEMS VR / NON-VR

SWOOP-SP JIB SYSTEMS VR / NON-VR