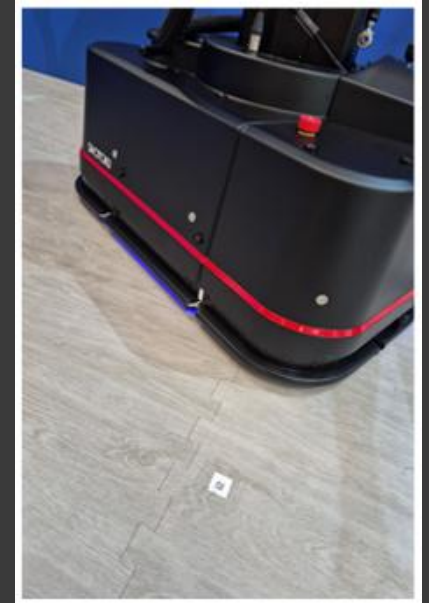




Swoop-SP and SmartPed Systems



## Almost Absolute

SmartPed continues to develop and is today one of the most advanced and widely deployed robotic camera pedestals 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 or 'home' 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.

## 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, a tiny QR coded sticker is placed on the studio floor, typically in an area where the pedestal spends most time. Every time the internal camera scans the 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 lighting grid.

'Absolutely' perfect!

## APPLICATIONS

[SMARTPED PEDESTAL SYSTEMS VR / NON-VR](#)

[SWOOP-SP JIB SYSTEMS VR / NON-VR](#)