Fusion APS Targets
Wall & Floor Mountings
Reflective Area

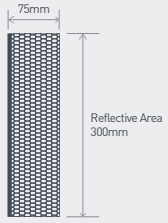
Types of Fusion APS Targets
There are two types of targets:
- flat for wall mounting
- cylindrical for floor mounting (temporary or permanent)

Both come in black as standard when pre-assembled or as a kit for colouring (colour gels are not included and need to be sourced by the user).

The reflective surface of the target can be covered with a coloured optically clear lighting gel filter which is available in a wide variety of colours. The filter must be optically clear so that the infra-red beam from the APS scanner can pass through the filter.

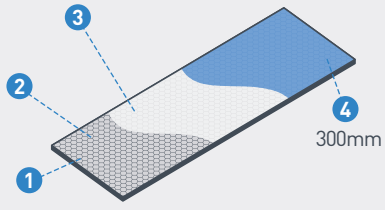
V4109-1012 Cylindrical target kit with unpainted aluminium post for painting
V4109-1013 Standard pre-assembled cylindrical target, post painted black and gel filters are black
V4109-1014 Flat target kit (for colouring)
V4109-1015 Standard pre-assembled flat target.

Flat Targets



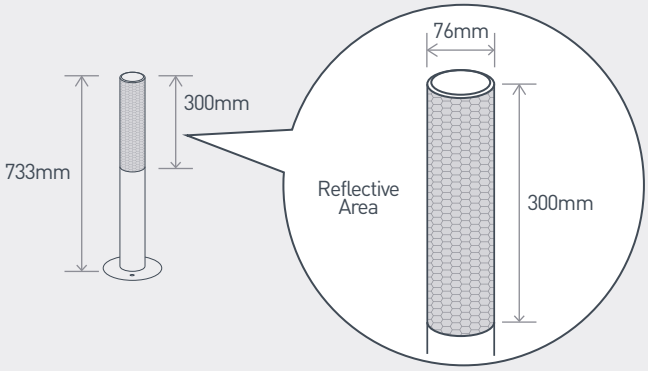
The pre-assembled flat targets are supplied ready to be placed in the studio. The entire front surface area of the flat target is reflective, visible through 120º.

Flat Target Kit (for colouring)
The flat target kit comes with the reflective material and a layer of optically clear adhesive tape already fitted to the base plate ready for the coloured gel filter applied on top.

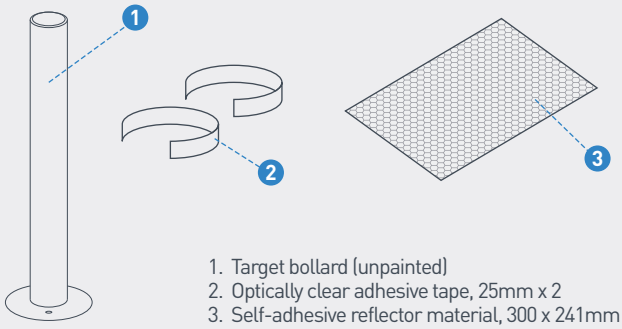


1. Base plate
2. Refective material
3. Double-sided optically clear tape
4. Coloured gel filter

Cylindrical Targets
Cylindrical targets have the advantage of being reflective at any angle.



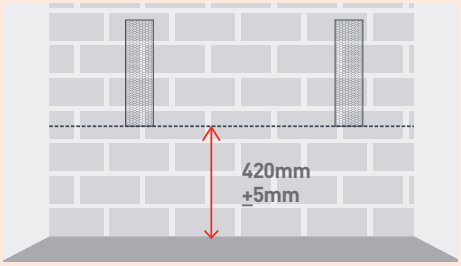
Cylindrical Target Kit (for colouring)
The target bollard can be painted as required before the reflector material is applied. This is then covered by the coloured gel filter.



1. Target bollard (unpainted)
2. Optically clear adhesive tape, 25mm x 2
3. Self-adhesive reflector material, 300 x 241mm

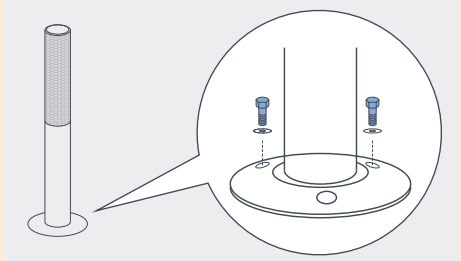
Installing Targets within a Studio Environment

Installing Flat Reflective Targets



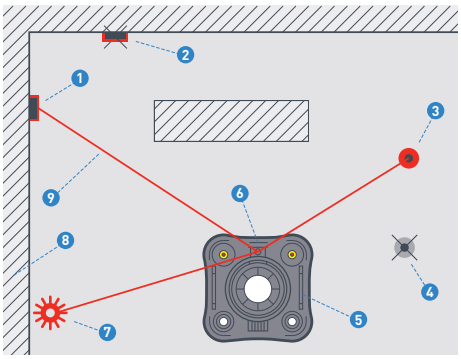
The flat targets must be installed at a height of 420 mm to the bottom edge of the target, as measured from floor level. This is so the APS scanner mounted on the robotic pedestal can have maximum coverage.

Installing Cylindrical Reflective Targets



The cylindrical targets can be positioned free standing or with self-adhesive Velcro pads.
It bolted it uses three 6 or 8 mm floor bolts to attach the base of the cylinder to the floor through the holes provided. The target must be mounted on a level surface.

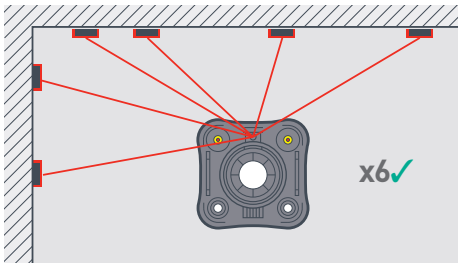
Key to the following section:



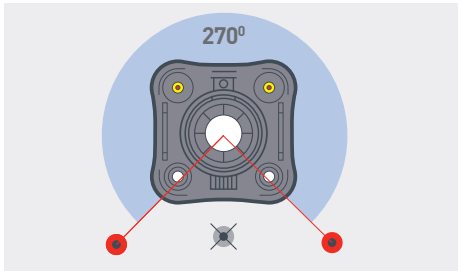
Key:

1. Detectable flat target
2. Undetectable flat target
3. Detectable cylindrical target
4. Undetectable cylindrical target
5. Fusion pedestal with APS
6. APS scanner unit
7. Reflective object or surface
8. Wall or solid object

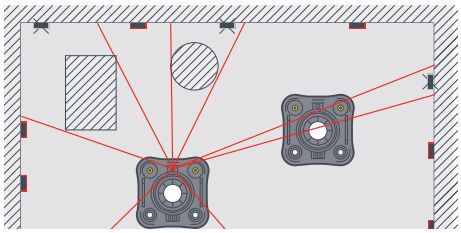
Where To Place Targets in a Studio



A minimum of three reflective targets is required. It is recommended that the Fusion pedestal with APS maintains contact with six targets at any one time to ensure reliable absolute positioning.

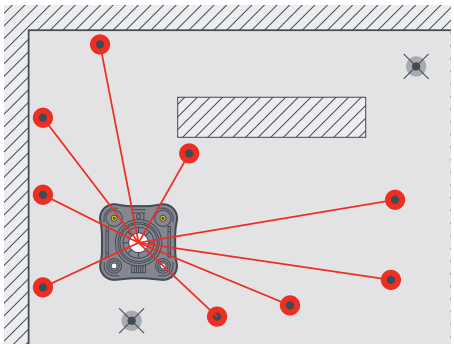


The scanner is capable of detecting targets in a large field of view of 270°. This means that targets can and should be placed to the rear of the studio.

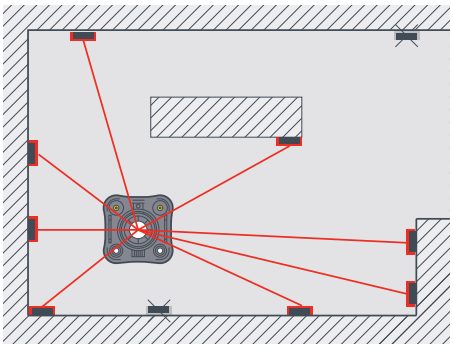


The columns of other pedestals and tall solid objects in the studio will also block the laser beam and this should be taken into account during target installation.

Example Correct Target Layouts



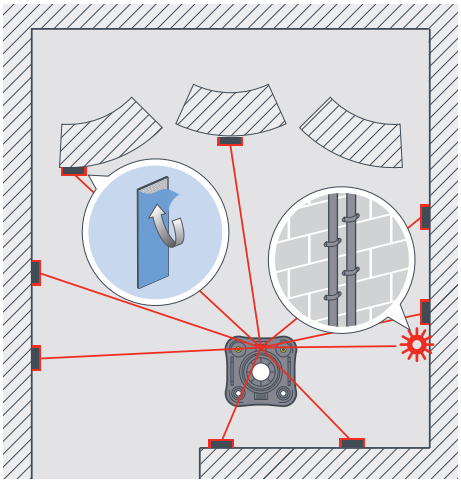
Cylindrical targets used in this installation
✓ More than 6 targets in view in any position
✓ Assymetric/random target spacing
✓ Even target numbers on each side of the studio
Cylindrical targets chosen due to the absence of suitable installation walls.

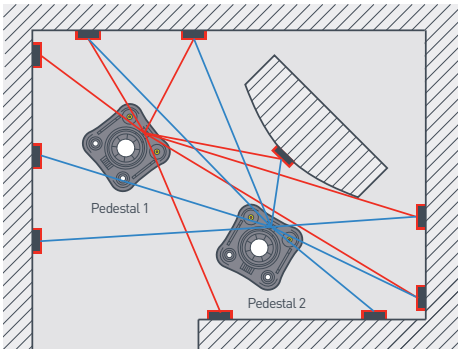


Flat targets used in this installation
✓ More than 6 targets in view in any position
✓ Assymetric/random target spacing
✓ Even target numbers on each side of the studio
Flat targets installed onto studio furniture

Multi-Pedestal Studios

Studios using multiple pedestals can use the same targets.





✓ Both pedestals can make contact with at least six targets in any position. This is despite the potential for the columns of each pedestal to mask targets.

Disguise targets on studio sets by colouring.

— Pedestal 1 laser beam
— Pedestal 2 laser beam

Vinten Radamec
William Vinten Building, Western Way, Bury St Edmunds
Suffolk IP33 3TB United Kingdom

t: +44 (0)1284 776700 t: USA (+1) 845 268 0100