ADVIS
Interactive Projection System

Installation Manual

Contents

Checklist

A complete ADVIS Interactive Projection System consists of the following:

Supplied by us

1. ADVIS Infrared Motion Tracking Kit
2. ADVIS Interactive Effect/s
3. USB Security Dongle

Optionally supplied by us

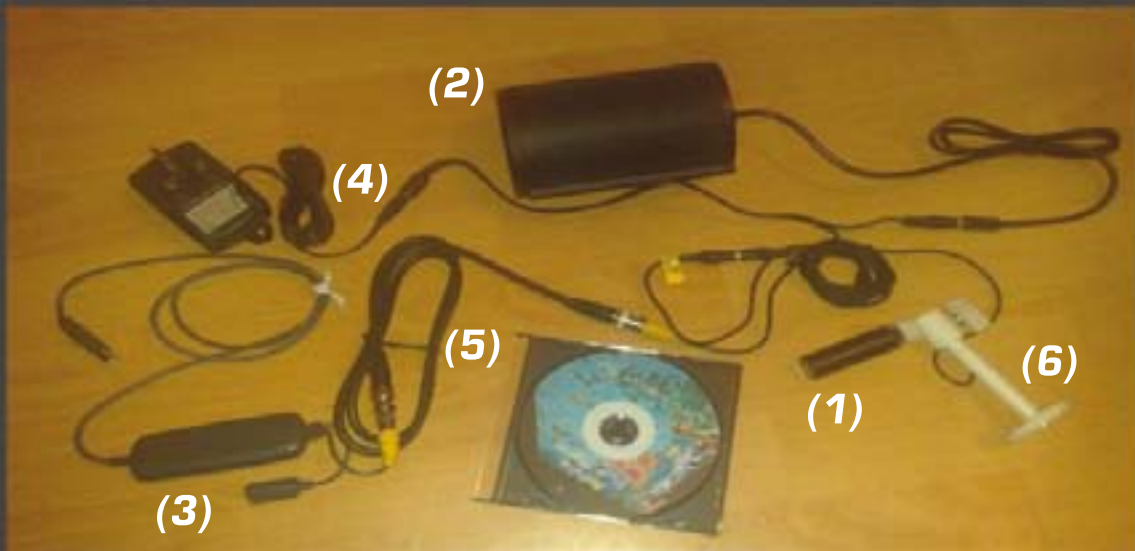4. Computer System
5. Projector
6. Rigging

ADVIS Infrared Motion Tracking Kit

The tracking kit is comprised of the following:

1. Infrared Motion Tracking Camera (1)
2. High Powered Infrared Illuminator (2)
3. USB Motion Capture Cable (3)
4, Power Supply and Y-Lead (4)
5. BNC Lead and Connector (5)
6. Camera Mount (6)

You can see from the diagram on
the right how the components
connect with each other.

ADVIS 2.0 Installation

To install the ADVIS Launcher, first insert the ADVIS Installation CD. The ADVIS Installation window should automatically open. Follow the on screen instructions to install the ADVIS Launcher. When you have completed the installation, if your system came with a USB Security Dongle, you can then insert it now. Windows should detect the new Hardware, you can click next for it to be automatically installed.

Tracking Kit Installation

Insert the USB Motion Capture cable into a free USB port. This connects to the tracking kit with the supplied BNC lead and connector. Windows will detect the new hardware and Automatically Install the Drivers.

To open AdVis 2.0 Launcher, simply double-click the shortcut on the desktop. When you first launch ADVIS you will be prompted to activate the software.
You need to provide us with the Site Code and MID Code in the two boxes at the top. Clicking 'Send Codes' will automatically e-mail the codes to us. We will then provide you with an Activation Code which you can type/paste in the bottom box and click continue. AdVis 2.0 is now activated and locked to your PC.

ADVIS 2.0 Launcher Software

AdVis 2.0 Main Screen

From here you have access to all your effects as well as access to the Sequencer and AdVis Configuration.

On the left you have a list of effect categories, you can double click a category to begin creating a new effect. In the center you have a list of all your effects put into categories, or you can click 'Sort Effects by Name' to list all of your effects alphabetically.

On the right, you have effect controls. 'Debug this effect' launches the effect in mouse mode, so you can interact with the effect using your mouse. 'Launch this effect' launches the effect as normal and uses the tracking kit as input (You can also double click the effect). 'Edit this effect' opens a new window with all the available options for customising an effect, Please see Page * for more information. 'Remove Effect from library' will permanently delete an effect you have made.

Projectors

The projector you should use depends on certain factors such as the brightness of the rooms the systems is to be installed, the size of the image required and the height the projector will be installed at.

In a very dark room, a projector of 3000 lumens or more shall suffice but brighter rooms will require a more powerful projector.

Most projectors come with a zoom lens so you can adjust the projected image size. You can also purchase different lenses for a lot of projectors; this may be required for specialist installs, for instance, you may need a Wide Angle lens to create a large image in a room where the ceiling is quite low. Please see your projectors manual for information regarding Throw Distances and the different lenses available.
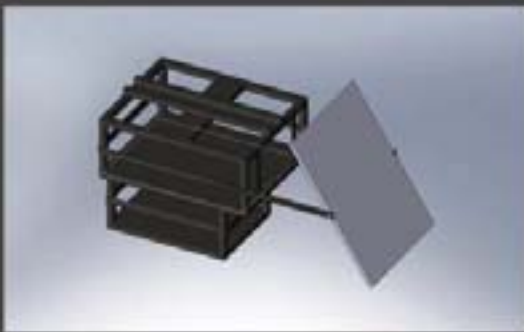
System Installation and Rigging

There are multiple ways to rig the Interactive Projection System and it differs if you want to project onto the floor or wall.

For floor projection, you need to either use a projector that can project straight down (such as the Sanyo XT-35), or reflect the image onto the ground by using a first surface mirror. The tracking kit also needs to be placed above the projected image in the centre. The Computer system can either be mounted with the projector, or at a separate location (longer leads required).
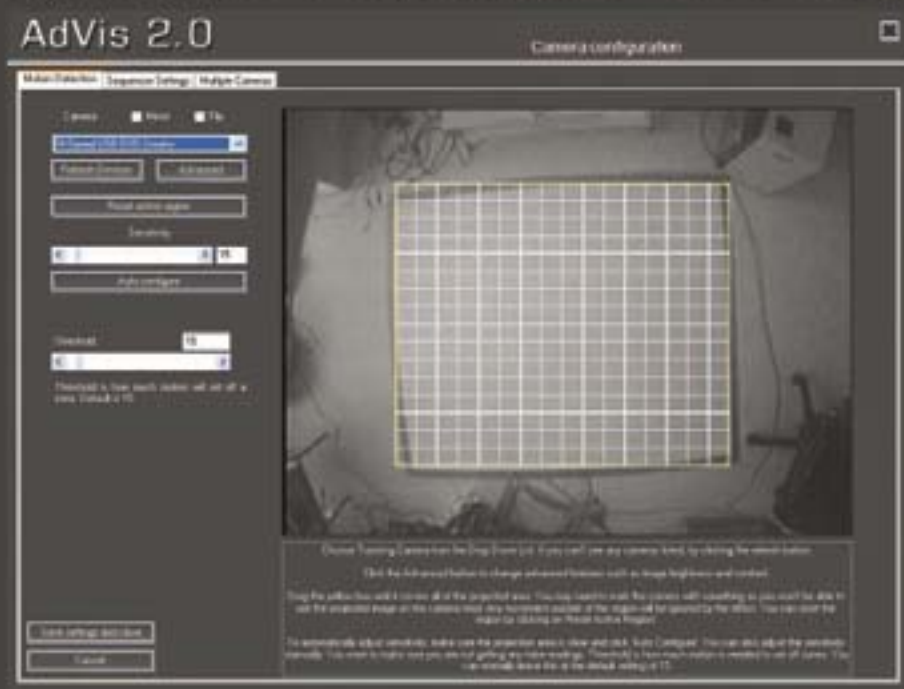
Ceiling Bracket with Mirror   System setup

ADVIS 2.0 Launcher Software

AdVis 2.0 Configuration

When you first install the interactive projection system, you will need to configure AdVis. You can click on 'Configure AdVis' from the main window. You should see something similar to above. 'Hi-Speed USB DVD Creator' should be in the first drop down, if it isn't, then you have not installed the tracking kit correctly.

The image on the right shows the real-time camera feed. You need to make sure the entire projection area is within this feed, if it isn't, you will need to move the tracking camera. As the camera feed is infrared only, you will not be able to see the projected image so you may need someone to point to the corners of the projection. You need to drag the bounding box to roughly fit the projection area like above. You can flip/mirror the camera feed if the camera is the wrong way around by ticking/unticking the boxes at the top. You also need to make sure the Infrared Illuminator covers the projection area, you will be able to see the beam produced by the IR on the camera feed.

Now press 'Auto-Configure' which will determine the best sensitivity settings. Make sure nothing is moving inside the camera feed when you do this.

'Advanced' accesses additional camera properties like brightness and contrast. 'Reset Active Region' resets the bounding box. You only need to manually adjust Sensitivity and Threshold if 'Auto-Configure' hasn't worked and the system is over/under sensitivie. Lower settings make the system more sensitive and higher settings make it less sensitive

Sequencer

The Sequencer can be accessed by clicking on the sequencer tab at the top of the AdVis main window, or by clicking 'Open Sequencer'.

You have a list of all your effects on the left, and your custom sequence on the right. You can add effects to the sequence by either double-clicking them, or selecting them and clicking 'Add'. You can remove effects from the sequence by clicking 'Remove' or change the position of the effect using 'Move Up' and 'Move Down'. Each effect can be setup to run for a certain duration before moving on to the next effect simply by changing the duration values.

You can also save and load custom sequences by using the buttons at the bottom. To launch the sequence click either 'Debug Sequence' or 'Launch Sequence'. To quit the sequence press the Escape Key.

You can change sequencer settings in the AdVis Configuration such as the background image and time between effects and whether to start the Sequence automatically when Windows Starts.

Creating/Editing Effects

To create an effect, you double-click on an effect type on the left. This will bring up a configuration window for that specific effect. Editing an effect will also bring up the same window.

From here you can easily configure the effect and create something completely new. You can change background images/videos, customise settings for the effect, add new objects, change/remove sound effects and background sounds, add logo overlays and masks and save the effect with a unique name and description. This will add the effect into your effect library.

Each configuration page has instructions at the top. To change the background for example, it's as simple as clicking 'Change' and browsing for your background image/video.

Multiple Cameras

You can run up to four tracking kits and projectors (subject to graphics card) to create large displays or walkways. This is setup from the Multiple Cameras tab in Configure AdVis.

You can configure each camera in exactly the same way as you set up a single camera, and crop the detection area so you can easily match the cameras up. You have the option to have the projectors/cameras vertically or horizontally span (to create long displays, walkways etc) or create a very large display using four projectors.

Depending on the mode and amount of cameras you have chosen, effects will run at the correct resolution and the cameras will be aligned accordingly. For example, if you have three cameras setup to run in horizontal span mode the effects will run at 3072 x 768 resolution (3 x 1024 x 768)

You must setup your graphics card settings to span the desktop over projectors.

Contact Details

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or need some more information:

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