

MONARCH



VIRTUAL MAGIC™
STUDIO

Complete Broadcasting Solution



HIGHLIGHTS

- Trackless Virtual Studio System.
- Multiple Virtual Camera Display & Switching
- Advance Chroma Keying
- Real Time Hardware based 3D Rendering
- Text Crawl and Bitmap Graphics Overlay
- User friendly GUI for easy operation
- Live output recording facility in Mpeg2 or AVI format
- Motion Designer software for Virtual Sets (Optional)
- Built-in Live Streaming (Optional)
- Automation for Media Switching & Playback (Optional)
- An affordable Virtual Studio solution




MONARCH®

MONARCH



Complete Broadcasting Solution

Got a Camera, then add it to our Virtual Magic Studio virtual set system to change the way your channel looks, on air, or the way you handle video presentations.

WHAT IS VIRTUAL MAGIC STUDIO SYSTEM?

Virtual Magic Studio is a trackless Virtual Set Solution with a simple set-up and an intuitive user interface making it a very powerful tool in the hands of operators.

The simplicity of Virtual Magic Studio system belies its power to deliver sparkling and sophisticated On Air presentations, may it be News, Talk Shows, Game Shows and a myriad of other application possibilities.

Virtual Magic Studio allows you to perform Virtual Tilts, Pans and Zooms from a static camera in perfect sync with the 3D virtual set. You can create the illusion of multiple cameras with one stationary camera by coordinating multiple angles, such as wide, medium and close-up views — whether you're shooting head-and-shoulder or full-body shots.

3D sets are an integral part of the Virtual Magic Studio. Thanks to its powerful hardware engine, Virtual Magic Studio is able to render complex 3D scenes in Real Time delivering astonishing photo realistic results.

Virtual Magic Studio system has three levels of chroma key. You can key and adjust upto three different colors with individual parameters, thus facilitating the removal of shadows on backgrounds in a very efficient manner, and keeping the live images very sharp and artifact free. This technique performs extremely well, even with non-professional video equipments and in poorly lit backgrounds.

Virtual Magic Studio is designed for broadcast and professional applications and in response to market feedback, priced competitively. The Virtual Magic Studio system is an ideal Hardware and Software solution, for News Telecast, Talk Shows, Entertainment Programs, Music Videos, Web Streaming, Distance Education and many other applications.

Virtual Magic Studio system will enhance your productions, and help deliver a sophisticated look to all genres of programs with quick set-up times, at an amazingly low-cost.

DO WHAT YOU WANT, WHEN YOU WANT, HOW YOU WANT.



FEATURES

Trackless virtual studio system

- No expensive camera motion trackers required
- Seamlessly integrate live talent with 3D virtual set in real time
- Multiple virtual camera display & switching with single physical static camera
- Easily programmable 8 virtual camera positions
- Variable motion speed of virtual cameras

Advance Chroma keying

- 3 different levels of chroma key setting
- Shadows on the background removed very efficiently
- No colour spills or spatial effect
- Performs extremely well even with non-professional equipments

Real Time Hardware based 3D rendering

- No pre-rendering of 3D virtual sets required
- Render 3D Virtual Sets in real time
- Powerful hardware engine to render full anti-aliased scenes

User friendly GUI for easy operation

- Very easy-to-use Graphic User Interface reduces operator training time
- Mouse-over preview of virtual camera positions and movements
- Mouse-over preview of live & pre-recorded input sources
- Simple drag and drop operation

Live & Pre-recorded source input & output

- Upto 2 full D1 resolution live video inputs in SD
- Pre-recorded source input in AVI formats in SD
- On-line preview of incoming live video inputs
- On-line output capturing in Mpeg2 or AVI format

Text crawl and Bitmap Graphics overlay & update

- Dynamic foreground overlaying module
- Overlay 32 bit images & text instantly
- Create and display text crawls in multilingual fonts

Live Streaming (Optional)

- Single-click live streaming facility
- Take advantage of the wide audience on internet & other medium

Automation for Media Switching & Playback (Optional)

- Switch Virtual Camera position, video clips and audio input simultaneously
- Switch between Live & pre-recorded sources instantly
- Smart Fade audio facility to cross fade sound between live & media files
- No need of an external switcher

Media Gallery

- On-screen Media Gallery for organizing the bitmap files and movie clips
- Organize files scattered in different hard disks in separate categories
- Edit their content in a non-destructive way
- Preview facility for movie clips & bitmap files

An affordable virtual studio solution

- Same studio space to be used for multiple productions
- Small studio, as large as 10x10 square feet required
- No physical sets required
- Better man-power utilisation
- Saves time, space, money and energy
- Library of ready-to-use virtual sets



APPLICATION AREAS

- News, Sports and Talk Shows
- Game shows, entertainment programs, music videos
- Creation of advertisement and promotional clips
- Virtual classrooms for distant learning systems
- Corporate presentations and in-house training
- Highlighting business and political events

Technical Specifications

INPUT FORMATS

- Live analogue and digital SD resolution
- External AVI, MOV, Mpeg up to Full D1 resolution
- Pal / B/G 720 X 576 25 fps
- NTSC 720 X 480 29.97 fps

OUTPUT FORMATS

- Full D1 (SD) resolution analogue CVBS, Y/C & DV output
- Pal / B/G 720 X 576 25 fps
- NTSC 720 X 480 29.97 fps
- Real Time Mpeg 2 / AVI output capturing

INTERNAL VIDEO PROCESING

- 4:2:2 Broadcast Compliant

TIME BASE CORRECTION

- Built-in TBC for asynchronous analogue/digital video sources for real time switching without dropped frames or image distortion

VIDEO INPUTS

- Composite (CVBS - 1.0 Vp-p, 75 ohm - BNC) upto 2
- S-Video (Y/C 4 pin mini-DIN) upto 2
- DV (IEEE 1394 FireWire) 1 (For Audio/Video Capturing only)

VIDEO OUTPUTS

- Composite (CVBS - 1.0 Vp-p, 75 ohm - BNC) 2
- S-Video (Y/C 4 pin mini-DIN) 1
- DV (IEEE 1394 FireWire) 1
- All outputs can be used simultaneously

AUDIO LINE LEVEL INPUTS - ANALOGUE

- Unbalanced (RCA) Stereo – upto 2 inputs

AUDIO LINE LEVEL OUTPUT - ANALOGUE

- Unbalanced (RCA) Stereo output – 1

INTERNAL VIDEO PROCESING DELAY

- 8.5 Frames Audio Video synchronized

MODELS	VMS 100 LE	VMS 200 LE	VMS 100 RC	VMS 200 RC	VMS 100 PRO	VMS 200 PRO
FEATURES						
Virtual Magic Studio Basic – Ver. 2.0	✓	✓	✓	✓	✓	✓
Digital Recorder - Mpeg & Avi output recording	X	X	✓	✓	✓	✓
Motion Designer in the same machine with VMS application	X	X	X	X	✓	✓
Motion Designer as separate application on different machine #	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Automation for Media & Audio Playback	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Live Streaming	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Video & Audio Inputs	1	2	1	2	1	2
Video & Audio Outputs	1	1	1	1	1	1

Motion Designer as separate application will run as standalone application on standard PC. It will include ATI display card, Video Output (Composite) card and USB Dongle. Computer system has to be procured by the buyer.



• audio • Video • Imaging •

Monarch Computers Pvt. Ltd., 'Monarch House', Royal Palms, Aarey Colony, Goregaon (E), Mumbai-400065, INDIA
 • Tel: 91-22-2879 4545 • Fax: 91-22-2879 4554
 E-mail: info@monarchvision.com • Website : www.monarchvision.com