VOYAGER

Solution Brief

Voyager

# Unreal based rendering platform with your workflow in mind.

Voyager is Ross Video's latest graphics platform, powered by Epic Games' Unreal Engine. Voyager leverages the world's most powerful and realistic renderer, enabling its use for a variety of virtual graphics applications, ranging from virtual sets to extended reality (XR Virtual LED) including also Augmented Reality (AR) and Trackless virtual environments.

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Solution Brief

Helping the user to create stunning, complex virtual environments designed for use in broadcast television, corporate events, ESports, and Entertainment alike, **built with flexibility and speed of operation in mind.**

Voyager uses the Lucid Studio control platform as an operator-friendly front end, so operators are not required to know the Unreal Engine to use the system. Voyager supports customization, flexibility, and scalability in terms of the number of cameras and graphics engines through the integration of Lucid and Lucid Track applications.

## Real-time Reactiveness

Lucid enables complete control over the production and offers a toolset to modify and tweak assets and textures from a simple GUI with no need to package your project, real-time changes to the set and exposure of items, are easy to do even from the gallery, right to the show.

## Flexible Workflow

With Lucid Studio and Lucid Track, any combination of tracking devices, tracking protocols, camera mounts, and engines is achievable within the same environment. Whatever is right for your production, is supported by us.

## Workflow & Connectivity

Through Lucid, Voyager supports external device control, data connectivity, seamless integration with MOS based newsroom systems and enables triggering from studio automation systems.

## One Engine, Multiple Applications

Voyager supports many different virtual graphics applications, ranging from virtual sets to extended reality (XR Virtual LED) including also Augmented Reality (AR) and Trackless virtual environments.

## Unreal Engine 5.1

Leveraging Unreal 5's Nanite and Lumen features, Voyager provides the most advanced dynamic textures, reflections and shadows. And with optimal performance, there is no limitation to the scale and detail of your virtual environment.

## Advanced Data Integration

Leveraging XPression Datalinq™ advanced data capabilities, Voyager can help augment your storytelling with rich and visually appealing data.
From simple tickers to elections, no data is too complex for Voyager to manage and display.

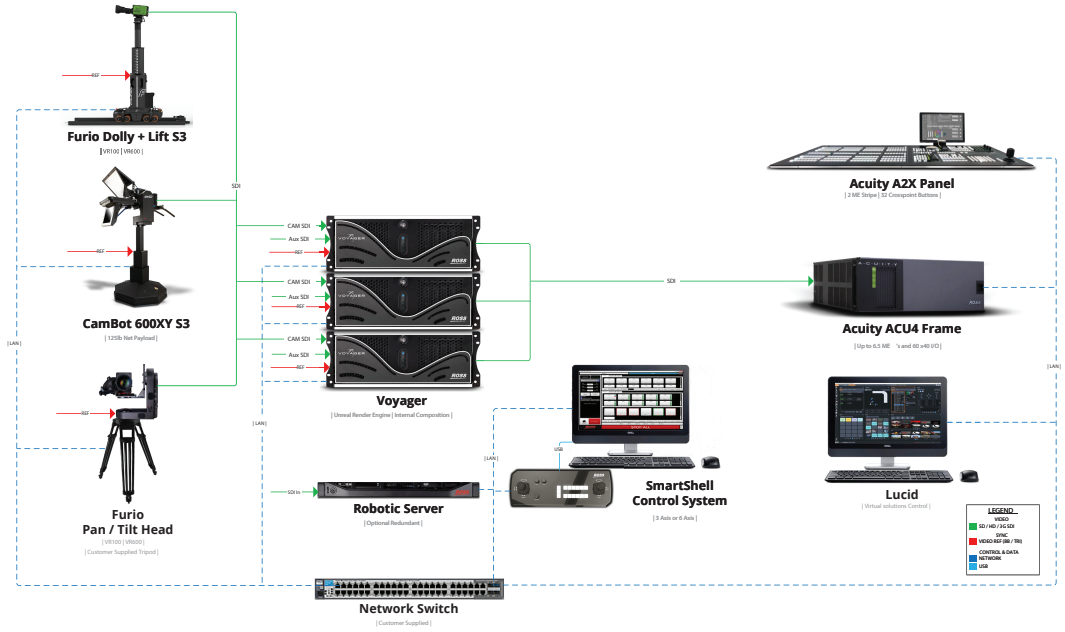
## Seamless Integration With News Environments

Leveraging XPression's MOS Gateway, Voyager integrates with most newsroom systems and through Lucid Studio, virtual graphics can be treated in your newscasts as simply as lower thirds. And moreover, with full support from Overdrive automation, generate an optimal ROI while ensuring an optimal production quality.

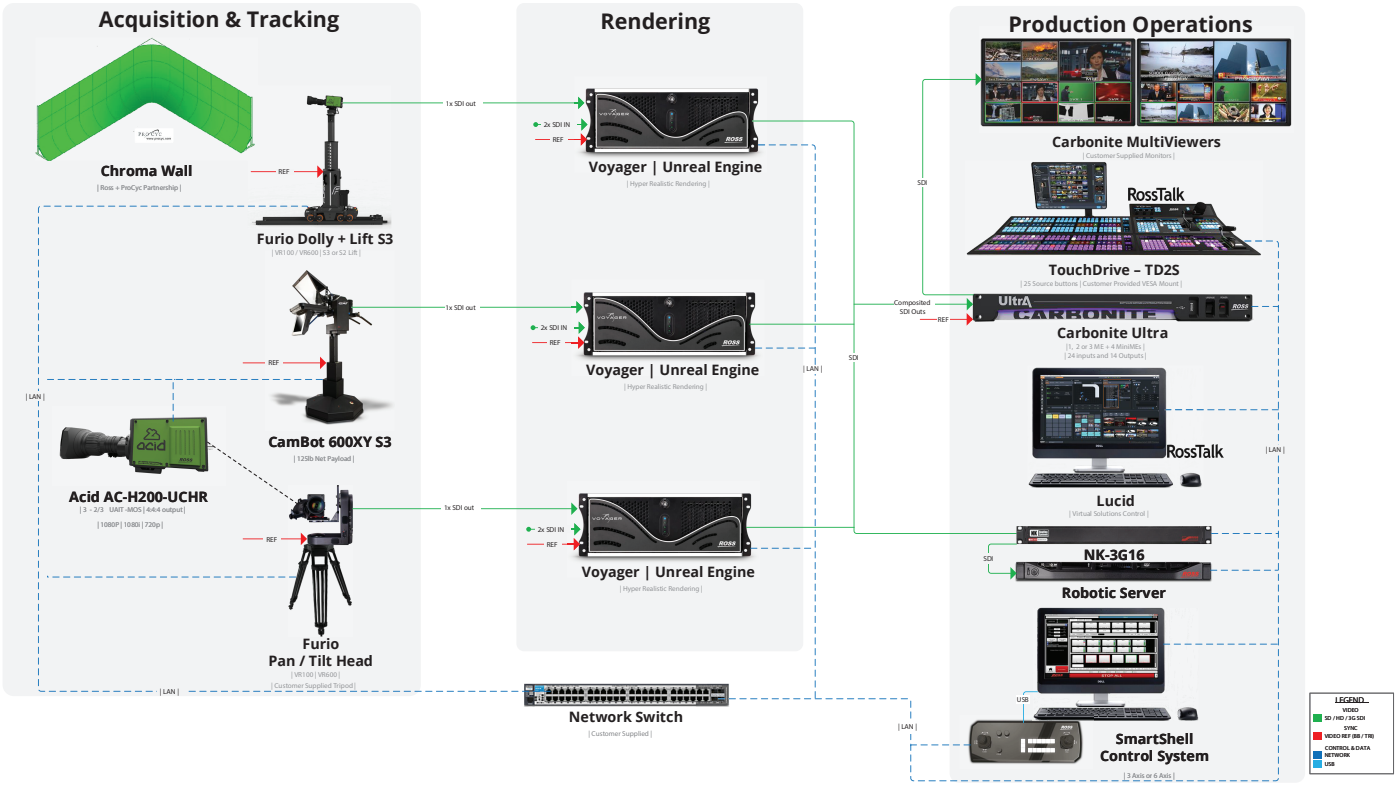
## PTZ Camera Support

We keep adding support for new tracked PTZ Cameras which can be selected from Lucid Studio's mount drop-down list. New PTZ models from Sony and Panasonic in particular are now supported. Please contact us to get the full list of supported cameras.

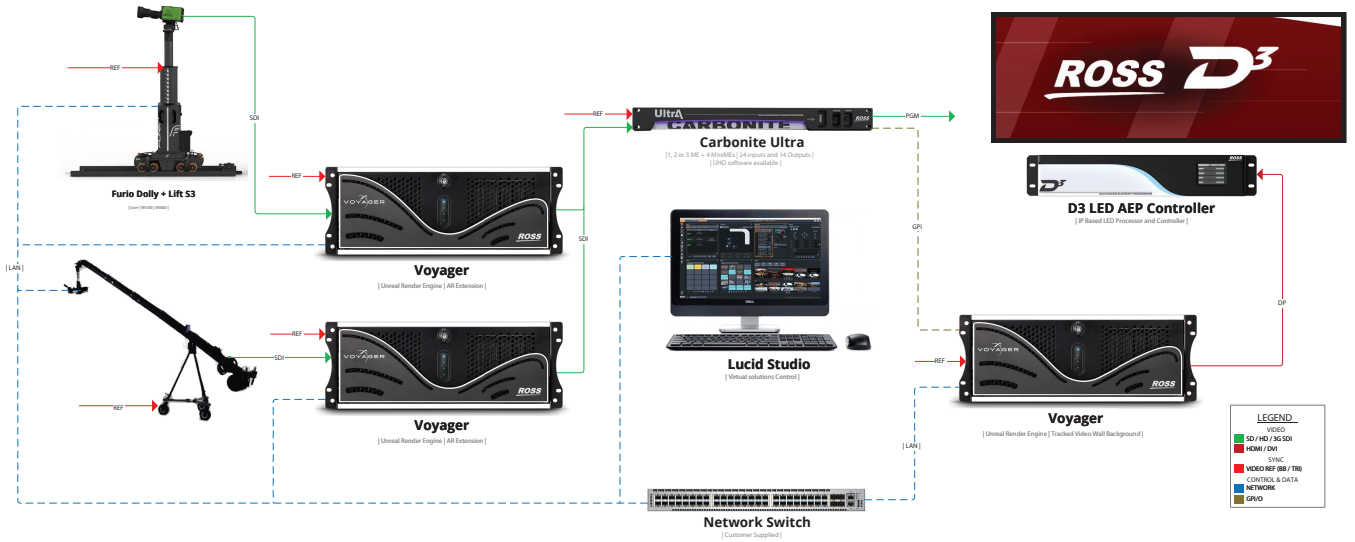
## Application | Augmented Reality Solution



## Application | Virtual Set With Internal Keying




## Application | XR Solution



| Hardware | |
|---|---|
| **Chassis** | 4RU rack frame |
| **Power Supply** | 960W EPS 12V Hot-Swappable 1+1 redundant power supply |
| **Storage Media** | 3x 1TB SSD RAID 5 |
| **System Drive** | 2x 256GB SSD RAID 1 (Mirrored) |
| **Media Drive** | 1.8TB |
| **CPU** | Intel® Core™ i9-10900X Cascade Lake 10-Core 3.7 GHz<br>LGA2066 165 W |
| **Mainboard** | ASUS WS X299 SAGE |
| **RAID Controller** | LSI® MegaRAID® SAS, 9361-8i |
| **Memory** | 64GB DDR4 |
| **GPU** | NVIDIA Quadro RTX A6000 48GB GDDR6 |
| **Q/S** | Microsoft® Windows® 7 Professional, 64-bit |
| **Output Boards** | Matrox DSXLE4/8/100F<br>OR<br>Matrox DSX LE5L/4/100LP/12G (required for UHD)<br>OR<br>Matrox DSX LE5 D25 (required for IP)<br>OR<br>AJA Corvid 88 3G |
| **Sync Card** | NVIDIA Quadro Sync II |

| Dimensions | |
|---|---|
| **Height** | 4RU 6.9” (17.6cm) |
| **Width** | 16.9” (43.0cm) |
| **Depth** | 23.3” (59.92cm) |

| Included Accessories | |
|---|---|
| **Rackmount Kit** | Slide rails, handles, and mounting hardware |
| **Keyboard** | Standard USB PC Keyboard |
| **Mouse** | USB Mouse |
| **Security Key** | USB License Key pre-installed internally to be run on Voyager Trackless Engine |
| **Software** | Voyager software on USB drive |
| **Warranty** | 12 Month System Warranty (parts / labor and software updates) |

| Video Formats | |
|---|---|
| **SD to 1080p Support** | 480i 29.97Hz (NTSC), 576i 25Hz (PAL)<br>720p 50Hz, 720p 59.94Hz<br>720p 60Hz, 1080i 25Hz<br>1080i 29.97Hz, 1080i 30Hz<br>1080p 29.97Hz, 1080p 50Hz<br>1080p 59.97Hz, 1080p 60Hz<br>1080psf 23.976Hz<br>1080psf 24Hz<br>1080psf 25Hz<br>1080psf 29.97Hz<br>1080psf 30Hz<br>Custom Formats |

| Other | |
|---|---|
| **Genlock** | Blackburst, Tri-Level Sync, Lock to Input Source of Free-Running |
| **Timecode** | LTC input supported via 3rd party PCIe board |
| **GPI** | Unlimited RossTalk Smart GPI over TCP/IP through Lucid Studio |

| Video Standards | |
|---|---|
| **SD** | SMPTE 259M |
| **HD** | SMPTE 292M, SMPTE 424M -AB |
| **IP** | SMPTE 2022-6, SMPTE 2022-7, SMPTE 2110 |
| **#of inputs supported** | 3 (1 tracked camera + 2 live inputs) |
| **#of outputs supported** | 1 |