



NDI 5 4x 4K P30

Reckeen 3DSPRO X8 technical specifications

Video input

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| SDI <ul style="list-style-type: none"> • SDI Video Input • 4 x 3G – 3G/HD/SD auto switching • 2 x 12G SDI | HDMI <ul style="list-style-type: none"> • HDMI • 2 x HDMI 2.0 type A connector with support for 1080p60 up to 4k 60p |
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Monitor output

- 3 x DP output for monitor
- 1 x HDMI output for monitor - - The number of HDMI/DP outputs depends on the graphics card

I/O port

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| <ul style="list-style-type: none"> • Tally Output • TL – DB26 – 4 channels • Reckeen External Keyboard port • RS – DB9 – RS 232 and RS422 • Reckeen External Audio port • RJ45 – Audio Link • Ethernet • AQUANTIA® / Marvell 10G LAN | <ul style="list-style-type: none"> • Intel® Gigabit LAN • Intel® Wi-Fi 6 802.11 ax (2.4Gbps) + BT 5.0* <p><small>*Features excluded in Asian version but will not affect any functionalities</small></p> <ul style="list-style-type: none"> • USB • 2 x USB 3.0 (front panel) • 2 x USB 3.2 Gen2 Type-C • 6 x USB 3.2 Gen1 • 2 Intel® Thunderbolt™ 3 Type-C |
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Reference input – (Genlock)

- Black Burst or Tri-Sync

Audio output – ADB 100

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| <ul style="list-style-type: none"> • Digital • embedded stereo on each SDI and HDMI • 2 x AES/EBU | <ul style="list-style-type: none"> • Analog • 4 x XLR two channels – professional balanced analogue audio stereo differential input (-10dBV, or 4dBu) • 1 x Jack 6,3mm – stereo Headphone output |
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Video standards

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| SDI <ul style="list-style-type: none"> • SDI • SMPTE2082-1 • 2160p (60/59.94/50/30/25) • SMPTE-425M • 1080p (60/59.94/50/30/25) • SMPTE-292M • 1080p (30/29.97/25) • 1080i (60/59.94/50) • SMPTE-296M • 720p (60/59.94/50) • SMPTE-259M • PAL, NTSC | HDMI <ul style="list-style-type: none"> • HDMI • Video standard – HDMI spec 1.4 • Video standard – HDMI spec 2.0 |
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NDI

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| <ul style="list-style-type: none"> • NDI input: • 4 input interchangeably as cam 1 to cam 4 with supported stream key or Reckeen chroma key • 2 input interchangeably as media 1 and 2 | <ul style="list-style-type: none"> • NDI output: • program out |
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* XR features (PTZ tracking Virtual Studio and AR) are fully available after purchasing an add-on software license - XR License. There are time-based as well as lifetime licenses available - ask your distributor or send an email to sales@reckeen.com for more information. Without purchasing the XR license, in the software version 1.9 or newer, the XR features are still available to test for free by 3D Studio users - testing mode results in a watermark being displayed on the Program Output while using the XR Features. Compatible cameras for these features are: SONY BRC-X400, BRC-X1000, BRC-H800.

Video output

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| SDI <ul style="list-style-type: none"> • SDI Video Output • 8 x SDI – 3G/HD • 3G,12G – 6x3G/HD and 2x12G 4k 60p | HDMI <ul style="list-style-type: none"> • HDMI • 2 x HDMI 2.0 type A support for 2160p60 |
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Audio input – ADB 100

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| <ul style="list-style-type: none"> • Digital • embedded stereo on each SDI and HDMI • 2 x AES/EBU | <ul style="list-style-type: none"> • Analog • 4 x XLR two channels – professional balanced analogue audio stereo differential input (-10dBV, or 4dBu) • Two types of microphones – dynamic and condenser with + 48V phantom |
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Video formats

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| SDI <ul style="list-style-type: none"> • Input - auto switching • 2 x SDI 12G • 2160p 60/59.94/50/30/29.97/25 • 6 x SDI 3G • 1080p 60/59.94/50/30/29.97/25 • 1080i 60/59.94/50 • 720p 60/59.94/50 • PAL, NTSC • Output • 2 x SDI 12G • 2160p 60/59.94/50/30/29.97/25 • 6 x SDI 3G • 1080p 60/59.94/50/30/29.97/25 • 1080i 60/59.94/50 • 720p 60/59.94/50 • PAL, NTSC | HDMI <ul style="list-style-type: none"> • Input - auto switching • 2 x HDMI 2.0 • 2160p 60/59.94/50/30/29.97/25 • 1080p 60/59.94/50/30/29.97/25 • 1080i 60/59.94/50 • 720p 60/59.94/50 • PAL, NTSC • Output • 2 x HDMI 2.0 • 2160p 60/30/29.97/25 • 1080p 60/59.94/50/30/29.97/25 • 1080i 60/59.94/50 • 720p 60/59.94/50 |
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Features

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| <ul style="list-style-type: none"> • Downstream Key – x2 • Media Format • MPEG2, MPEG4 and H.264 containers: (avi, mpg, mpeg, mp4, mxf, mov) • Audio: WAV, MP3 • Video Capture Format • H.264 (.mp4) MPEG-2 (.mpg) • 1080p 60/59.94/50/30/29.97/25 • 1080i 60/59.94/50 • 720p 60/59.94/50 • H.264 up to 4k 30p and 60p | <ul style="list-style-type: none"> • Still Picture – x2 • Picture Format • .png, .jpg, .bmp • Still Text – x2 • Still Editor included • Keyer – x4 • Chroma Key / Luminance Key • SmartKey with 4 SDI outputs • Streaming • Facebook • YouTube • NicoNico • NDI and Skype • and custom profiles |
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Software

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| <ul style="list-style-type: none"> • Reckeen 3D package : • 3D Production • 3D Studio Editor • 3D Wizard • MS 3D Paint • Still Editor | <ul style="list-style-type: none"> • Reckeen Lite package: • Lite Production • VSM Lite Editor (also as a standalone version) • Still Editor |
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MAKING HIGH-END INNOVATIONS MORE ACCESSIBLE

ALL-IN-ONE BROADCASTING SOLUTION FOR REAL-TIME VIRTUAL 3D STUDIO AND AUGMENTED REALITY PRODUCTIONS WITH PTZ TRACKING

3DSPRO 8 3D Studio PRO



RECKEEN 3DSPRO X8

An advanced 3D virtual studio system with PTZ tracking and AR* functionality for real-time video productions

RECKEEN 3DSPRO X8 with optional XR license* is an all-rounded product that will cover your broadcasting needs – starting from creating and designing your virtual environment, through producing your video content, to mixing and broadcasting the material in real-time.

Dedicated to creative broadcasters who value versatility, high quality and cost-effectiveness. 3DSPRO X8 allows to make trackless productions, and with the addition of RECKEEN XR to expand the possibilities by utilising PTZ tracking and Augmented Reality*.

The system is equipped with virtual cameras, which give you freedom to move around the whole virtual set at any angle without limitations, imitating a camera crane and cameraman's natural movements.

RECKEEN can work as a stand-alone workstation, but also as a supplementary module at a bigger workflow – the system is compatible with other devices such as: switchers, production systems, CG software, and more.

RECKEEN 3DSPRO X8 has been created to meet the expectations of a demanding customer. With its powerful GPU, extremely efficient motherboard, dual LAN with 10 Gigabit throughput, and more, the platform has been designed to handle all of the heavy-duty tasks of a 3D environment productions

Virtual Studio PTZ Tracking*

Create even more advanced and dynamic productions thanks to PTZ tracking. Pan-tilt-zoom functionalities gives a presenter the ability to move around a green screen more freely, whilst the image maintains its highest quality by using the camera's optical zoom.

The advanced shadow processor not only generates real-time shadows and reflections of an on-screen talent, but also analyses the depth of the talent in a green studio space, which makes it possible to walk around 3D objects located in a virtual set.

Augmented Reality

Innovative technology allows you to transform a plain view from a camera into a truly immersive space. Improve your viewers' watching experience by adding three-dimensional elements and animations to the physical surrounding. Blend the real and the virtual worlds together to create live AR productions.

Free content:

- Over 50 ready-to-use sets and scenographies of different styles
- Library of over 700 3D objects
- Library of textures & materials – wood, metal, plastic, stone, fabrics, etc. in various colours – to customise any object, wall or floor inside a 3D studio.

System's features:

- Up to 4Kp60 resolution input and output (using provided HDMI and SDI inputs a user can connect: up to 2x 4Kp60 signals, OR up to 4x 4Kp30 signals. Lower resolutions are also supported).
- Full NDI 5 support, with 6 NDI inputs and 1 output
- Integration with communicators such as Skype, Zoom or MS Teams allowing two-way communication
- Paint 3D
- 4 virtual cameras allowing movements all around a 3D set,
- Preview and Program switcher
- Premium chroma key – 4 independent channel
- Source switcher for media and inputs
- Audio mixer
- Recorder & direct streaming
- 2x DSK (downstream key) layers



CONNECT UP TO 4 INDEPENDENT CAMERAS,



RECKEEN 3DSPRO X8 has an ability to receive signals from up to four cameras, via SDI or HDMI, each in 4k30 resolution. Their signals are keyed independently in high quality, thanks to four high-end chroma keyers. NDI inputs are also available to enable a more remote workflow.



The audio is embedded in each input, but with a use of ADB-100 audio panel bundled with 3DSPRO x8 you can bring high quality audio from external sources. To utilise the functionalities of RECKEEN XR such as PTZ tracking and Augmented Reality, choose PTZ cameras with FreeD protocol*, as you will be able to control pan, tilt and zoom movements, set up and trigger presets directly from the RECKEEN's application and VKey-100 control panel.

3D Studio Editor & Wizard

With RECKEEN 3DSPRO x8 you get a package of over 50 ready-to-use virtual 3D studio designs. They can be used straight away, but also thanks to 3D Studio Editor and Wizard all of them can be customized to your own preference, by modifying the existing designs using supplied materials. You can also create your very own designs by starting the project entirely from scratch and creating a completely unique sets.



The Wizard allows you to create stage designs easily and quickly on the basis of ready-made elements in a few steps, while in the 3D Studio Editor you can personalize every detail including lights, virtual cameras' set-up and talent's position. It also enables you to easily animate 3D objects, as well as import 3D models and animations from external files.

