



REDEFINING TV BROADCASTING WITH CANON PTZS

Company Name: TV JOJ
Industry: TV broadcasting
Founded: 2002
Location: Bratislava, Slovakia
Services: Terrestrial, cable and satellite TV programming, internet streaming
Website: tvjoj.sk
Products Purchased: CR-N500 (11 units), RC-IP100 (2 units)
Canon Installation Partner: Centron

Objective

- Choose the best PTZ for TV broadcasting
- Pioneer the use of PTZ-only studios in Slovakia
- Procure cost-effective gear to enable future studio development
- Choosing agnostic PTZ cameras which can integrate with existing broadcast flow

Challenges

- Produce broadcast-quality imagery with compact and remote cameras
- Lack of studio space
- Low lighting condition
- Value for money
- Produce COVID-safe production facilities

Approach

Canon provided two sets of new PTZ cameras alongside remote controllers that together

provided the optimum price point versus tech spec required. The client had specific needs for PTZ cameras to fit in smaller studios – without compromising on TV quality.

Scope

As a 20-year-old TV station, TV JOJ is hugely popular in Slovakia. It is the first time they are using PTZs of any kind as part of studio production. They are the first channel in Slovakia to use PTZ cameras in purpose-built studios.

Results

- 4K TV-quality broadcasting image
- €40k saved per camera chain
- €200k saved in studio costs per studio
- Streamlined production workflow that integrates with third-party gear
- Efficient set-up with fewer cables
- Higher employee satisfaction thanks to usability and minimal training

Canon

“The control of the PTZ has dramatically improved our productions since we first tested it in summer 2021 and the speed is perfect for the type of content we shoot, from news presenters to static panels of speakers.”

Juraj Knosko,
Technician, TV JOJ



Setting new standards

Running a TV channel is no simple operation. A multitude of studios, some broadcasting shows live and direct, others recording podcasts for later, plus news coverage on the fly as the story unfolds in real time. Equipment in a broadcast studio can be quite complex and require multiple skilled operators who have been trained for years. In Slovakia, however, change is afoot behind the scenes and off camera.

When private channel TV JOJ built three new studios at its HQ in Bratislava, they needed to procure equipment that was most suitable to the different spaces. In fact, the studios were created specifically for sports, news and podcast productions and designed exclusively for PTZ cameras. Soon to mark its 20th anniversary, the TV station sought a set-up that would see them through the next decades of TV broadcasting.

With this in mind, their production team went through a rigorous testing process to select the most appropriate cameras in a short amount of time. There were a number of boxes to tick, starting with size and compactness.

“One of the most important reasons we opted for a PTZ solution was that we had limited space in the new studios. Compared to traditional B4 mount cameras with lens, the Canon CR-N500s are super compact with a small operational radius,” says Juraj Knosko, technician at TV JOJ.

“Another important point is that we could automate camera movement via presets, which are fantastic and a feature we use every day. No cameraman is able to shoot it as precisely with the right speed and specific zoom points, as achieved via the automatic presets,” he adds.

The station is the first in Slovakia to install and use PTZ cameras for TV use, and so far has produced strong results.

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Exceeding expectations

The next key factor in the testing process was picture quality. How did the Canon PTZ camera stand up to industry-standard broadcast cameras?

“We did a blind test between the CR-N500 PTZ and competitor broadcast cameras alongside ENG cameras. To our surprise, experienced technical experts from our TV station couldn't identify which picture was from the PTZ camera and which was from the competitor broadcast camera. That gave us the confidence in the PTZ to fulfil our TV needs,” comments Juraj.

“While colour reproduction is not 100% the same as the broadcast cameras, it's negligible to the naked, untrained eye. All in all, for the price we pay, the picture quality from the Canon PTZ cameras was perfect for our needs. It proves you don't have to get the most expensive camera to get the same result, with the latest tech of the CMOS sensor.”

The smaller studios have limited lighting, which is when the powerful



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CR-N500's 1.0-type CMOS sensor comes in handy, retaining image quality in low light, with great low-noise sensitivity. Having used the cameras for a few months, the team noted how quiet the servo motors were, while moving fast and with precision. The team plans to try other specialist movement, such as experimenting with the camera on rails.

Cost-saving set-up

Thanks to the innovative presets and the intuitive RC-IP100 controller, production is now easier than ever at TV JOJ with only one operator required per PTZ studio, compared to five before. Now five CR-N500s are managed by the single controller.

“Since they are much lighter in weight, we saved plenty of money on tripods and other accessories, which are not needed, such as zoom and demand focus. Also, no other operators are needed on standby if someone is off sick because the controllers are so easy to use with the presets. It means we don't have to spend so much time training and there is a smaller margin for error.”

Initially, the cost of installation per five-camera studio was roughly €30K, as it's faster to install, according to Juraj.

“Out of the box experience is very easy and comprehensive



“The technical presales and aftersales treatment we received from the Product Management Team was absolutely spot on. They send us new firmware within two weeks of us reporting it. We have never received such fast firmware response from any manufacturer.”

Juraj Knosko,
Technician, TV JOJ

and we were surprised with the picture quality. On product, we saved approximately €40,000 per camera chain, while the operational saving is on is about €200,000 per studio.”

Because of this outstanding cost-saving, TV JOJ was able to afford the three studios, rather than just one which they had planned for. For this reason, they see PTZs as the cost-effective way forward for static shooting.

Juraj adds: “The technical presales and aftersales treatment we received from the Product Management was absolutely spot on. They send us new firmware within two weeks of us reporting it. We have never received such fast firmware response from any manufacturer.”

In terms of hardware integration, the team seamlessly connects the CR-N500 with the NewTek TriCaster Mini for streaming purposes. “It’s also great

that Tally Lights work natively in it, so it’s great for use in small studios, like we have in the podcast setup,” he says.

When time and space was of the essence, the Canon CR-N500 proved to be the perfect solution for the TV station, delivering all the essential technical parameters – without superfluous, costly features they didn’t need. TV JOJ’s first slogan was “Nuda na Slovensku skončila” – “Boredom in Slovakia has finished.” Twenty years on, and the channel is keeping its audience engaged.

Canon



The Canon Solution

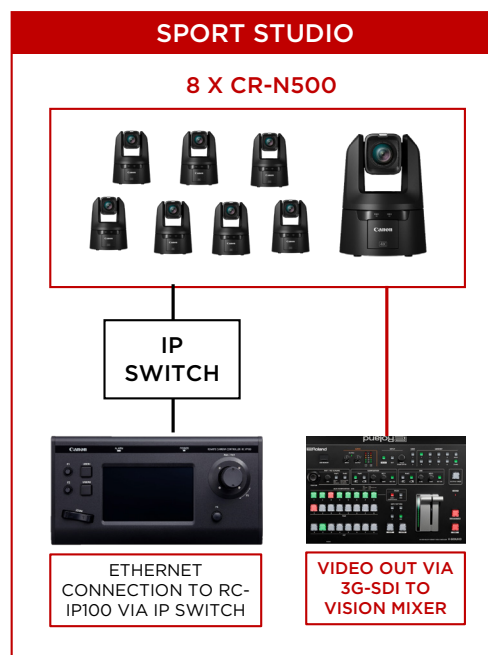
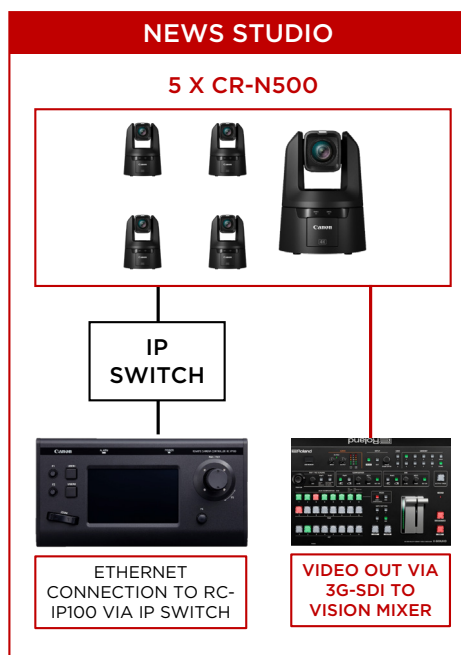
CR-N500

- 1.0-type CMOS Sensor
- 4K UHD Image Quality
- 15x Optical Zoom with Image Stabilisation
- Dual Pixel Auto Focus
- Multiple in-built protocols such as RTMP and ND|HX
- HDMI, SDI, IP and Dual XLR connectivity

RC-IP100

- 7-inch touchscreen
- Multi-function joystick
- Professional zoom rocker
- Customisable controls
- Flexible connectivity

CASE STUDY SCHEMATIC: TVJOJ



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