



CASE STUDY

## **Murmansk Regional Philharmonic's Virtual Concert Hall**



#### **Integrator: Okno-TV Severo-Zapad**

A multimedia complex for live video streaming from the Murmansk Regional Philharmonic Hall was completed in September 2020. Since 2017, Murmansk residents have been able to watch Moscow Philharmonic concerts, thanks to the virtual concert hall that was created as part of the national "Culture" project. However, the Murmansk Regional Philharmonic had not previously been able to broadcast from its own hall. The new complex with Panasonic PTZ cameras allows for professional recording and broadcasting of cultural events, complete with close-ups and a variety of camera angles. This innovation significantly expands the Philharmonic's audience, which can now include area residents who are unable to regularly attend concerts in the region's capital.

The installation includes four [Panasonic AW-HE130](#) PTZ cameras located on the stage on both the left and right sides of the hall, and at the sound engineer's workstation, as well as broadcast platforms, control panels, a matrix switcher, a mixing console, converters, and audio and video monitors.

The remote-controlled [Panasonic AW-HE130](#) cameras enable recording in the hall without operators, thus avoiding distractions for the performers and the audience. The excellent characteristics, compact size, and unobtrusive design of the [Panasonic AW-HE130](#) have made them very popular in cultural facilities. They have been successfully used in the broadcast complexes of the Bolshoi Theatre, Mariinsky Theatre, Oleg Tabakov Theatre in Moscow, and Mikhailovsky Theatre amongst others. The POE+ power transmission over an ethernet cable reduces the number of wires and simplifies the installation process.

The cameras can be controlled both from the remote camera controller and from the Multicam Systems broadcast server in the operator room. Presets of positions and settings of the PTZ cameras are created on the server and form a programmed sequence of switches, providing convenience and automation. The complex can be used for high-quality recording of concerts, editing, captioning, and simultaneous broadcasting to connected social network accounts and up to five video hosting sites. The system can also be expanded with additional equipment. For example, live interviews filmed from the lobby with mobile cameras can be integrated into the broadcast. With the new multimedia complex, the Murmansk Philharmonic will be able to create a high-quality archive of its best concerts and programs.

The Ministry of Culture of Russia, together with the subjects of the Russian Federation, is implementing the creation of virtual concert halls in Russian cities in 2019–2024 as part of the national “Culture” project.

#### Equipment used:

- [Panasonic AW-HE130 robotic cameras](#) - 4 pcs
- [Wall mounts KST-WM-HEA10/130-W](#) - 2 pcs

