

Case Study

Bright Smiles with HDBaseT



End Customer: The Gandini-Massironi Dental Studio
Vertical: Healthcare



About the End Customer

The Gandini-Massironi Dental Studio is a state-of-the-art dental clinic focused on aesthetics prosthesis and training courses for dentistry students. The clinic utilizes microscope magnification to guarantee minimally invasive procedures and greater precision during all stages of denture construction.

The Challenge

For the Gandini-Massironi Dental Studio, the videos recorded through a microscope during surgeries are a valuable teaching tool for the training courses it conducts weekly. For integrator Omnimedia Group, that meant that there should be no compromises regarding the quality and high-definition of images. In addition, the Omnimedia Group had to handle the distances between each individual dental office, which occupy three floors. Another challenge was the wiring: with several electric motors in each of the offices (for air compressors, suction systems, air conditioning, refrigerators etc), the level of electromagnetic interference was significant and could not be dismissed.

The Solution

To keep costs down, Omnimedia Group opted for prosumer high-definition camcorders from Sony and Panasonic to connect to the microscopes and for general recording. With at least 10 inputs and just as many outputs, an Atlona 16X16 HDBaseT matrix was selected, to allow for growth and future upgrades. Because of the positioning of each office across several floors and far distances in each floor, HDBaseT was an easy choice, as it can distribute content for up to 100 meters without degradation of image or performance. HDBaseT extenders were placed behind each display to connect them through a single Cat5e cable to the matrix.

The whole system is managed through custom software installed on 10" tablets, which allow for increased flexibility both during office hours and training courses, as all content is available independent of location.



Results

The non-invasive video distribution system adds to the clinic's ability to better serve its clients, as the monitors also provide entertainment to patients during treatment. The high-definition and all-time availability of content is critical for the training courses in the clinic. HDBaseT provided an easy solution to tackle both the distances among offices and the high electromagnetic interference natural of such environment, while also allowing for easy upgradeability of the system when the time comes.

About HDBaseT

The HDBaseT standard, powered by the Valens chipset, enables all-in-one connectivity between ultra-HD video sources and remote displays through a single cable, delivering uncompressed ultra-high definition 4K video, audio, USB, Ethernet, control signals and up to 100 watts of power.