Case study

Corpus Christi College University of Oxford

Product: 4K-9000 HDBaseT Tester

Following the announcement of Smart-e's new, cutting edge HDBaseT Tester the 4K-9000, Snelling Business Systems contacted Smart-e and asked us to verify the integrity of previously installed Cat 6 cabling at Corpus Christie College, University of Oxford.

The Plan

Snelling Business Systems had been asked to provide a solution that would upgrade Corpus Christi's existing lecture theatre to be compatible with digital AV technology (information). As part of this, the projector in (name) lecture theatre needed to be able to be connected to the laptops of the various lecturers who would present in the hall. To facilitate this, existing floor access points would need to be used where both power and structured cabling were available. The idea was to use a moveable lectern with a passive plate connecting via a VGA or HDMI cable through to the floor box.

The floor box would house a HDBaseT transmitter (Smart-e's SDS-TX-911-WPA) that was capable of converting either the HDMI or VGA signals to HDBT. This signal would then be connected via Cat 6 cabling to an HDBaseT receiver (Smart-e's 4K-RX725) placed near to the projector, which would convert the signal and send it up through an HDMI cable into the projector.

The Problem

During a previous installation Cat 6 cables had been installed underneath the floor of the lecture hall, and these cables were planned to be the connection between the projector and any necessary inputs. Due to the nature of the installation it was impossible to change or alter the Cat 6 cables. As this was the case, finding out whether the pre-installed Cat 6 cable was still working was extremely important, since if they were not then another way of facilitating connection between the projector and laptops would have to be found. The only other solution was to utilise a video streaming product using the pre-existing Ethernet network, a solution that would have cost many times more than a simple HDBaseT floor plate.

The Solution

After being contacted by Snelling Business Systems, Smart-e's Managing Director Jon Lane travelled to Corpus Christi College with one of Smart-e's 4K-9000 testers in order to verify the integrity of the Cat 6 cable. The tester was able to check technical measurements of the cable including: Bit Error Rate, Mean Square Error and Maximum Error measurement for video, audio and control signals. After using the tester he was able to inform Snelling Business Systems that the Cat 6 cable was still working, thereby allowing them to proceed as planned, safe in the knowledge that they could rely on the pre-installed Cat 6 cabling to connect between the input and projector. The test itself was very quick, and it only took approximately an hour from arrival at Corpus Christi for the cable to be fully verified

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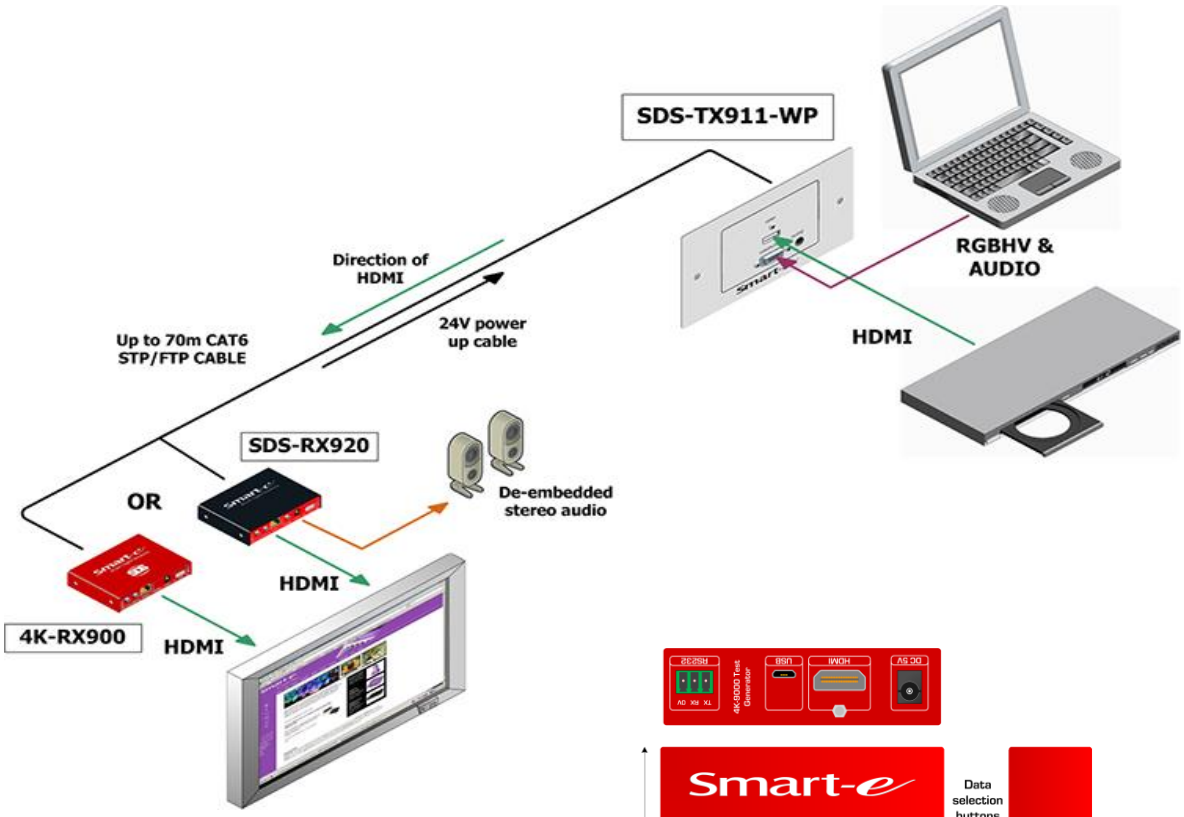
The Units

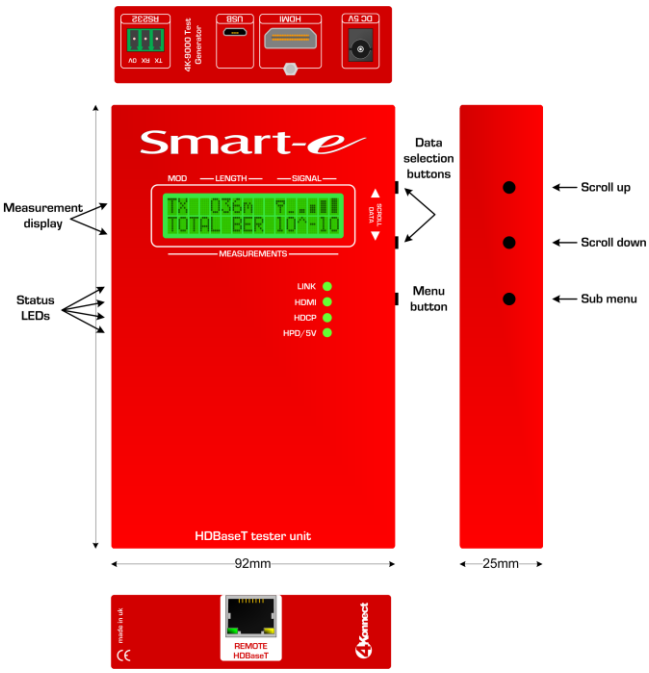
After the cabling was verified Snelling Business Systems contacted Smart-e to purchase the required video plates and receiver. As mentioned above the lectern also needed to be movable between two locations, and as a result two video plates were required, one for each location.

The video plate used in this case was Smart-e's SDS-911-WPA wall plate pair, useful in this case was because it can extend HDMI to 70m using a single Cat 6 cable, and it gets its power through the same cable from the Receiver (4K-RX725) meaning that there is no need for an external power source. Additionally, the SDS-911-WPA wall plate pair is capable of accepting both HDMI and VGA and stereo audio. The receiver used was Smart-e's 4K-RX725, able to convert the signal from the Cat 6 cable from the video plate to the projector via the HDMI cable.



The Tester

Smart-e's 4K-9000 tester is the first in the upcoming HDBaseT install tester range, designed to identify problems within HDBaseT installations. The 4K-9000 allows for quick and easy onsite diagnosis and pinpointing of possible issues; this include wiring faults, cable incompatibilities and faulty connections.



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