

# Case Study

## Endicott College - Beverly, MA



### The Challenge

The project required a robust exterior RGBW lighting control solution utilizing BubblyNet's 4-channel D-F70 drivers, with all control hardware remotely installed within the building across multiple interior locations. This introduced significant wireless communication challenges, as dense structural elements—including steel and rebar between floors—created substantial interference for Bluetooth mesh connectivity. In addition to overcoming these physical barriers, the system needed to support multiple RGBW scenes and time-clock-based scheduling to enable dynamic architectural lighting control with reliable performance.

### The Solution

A BubblyNet Bluetooth Mesh network was engineered using a combination of strategically placed SuperFriend signal amplifiers and internet-based gateways to overcome structural signal obstructions and ensure consistent communication across the system. The SuperFriend devices extended and reinforced mesh connectivity through steel-reinforced floors, while the gateways provided centralized control, remote access, and reliable scheduling functionality. The D-F70 drivers were programmed to support multiple RGBW scenes and automated time-clock schedules, delivering flexible, precise exterior lighting control.

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