

Williams College Theater



The '62 Center for Theater and Dance at Williams College hosts various Williams College performing groups as well as the Williamstown Theater Festival. Its three-story house seats roughly 500.

Challenges

- The existing sound system could not achieve sufficient gain before feedback.
- The tall and shallow shape of the theater creates challenges for clarity of amplified music and speech intelligibility due to general reverberation and reflections from the expansive balcony facades.

Solution

A line array of eight FL283T modules was suspended downstage center for the main coverage; it provides the necessary output and gain for amplified vocals. Two CS118 Subwoofers were placed on each side of the stage to extend the low frequency response of the system. The FL283T line arrays and the CS118 subwoofers incorporate Fulcrum Acoustic's patented Passive Cardioid Technology to reduce rearward low-frequency radiation, a common drawback of typical line arrays and subwoofers.

Supplementing the center line array are Left/Right line arrays; these are used when a stereo image is required. The aesthetics dictated a split array design since tall left/right hangs would interfere with sight lines.

Due to the architectural design of the Theater, supplemental loudspeakers were required to provide fill coverage for certain areas. Six CX896 Compact 8" Coaxial Loudspeakers were mounted near the proscenium at each level on both sides for audience side fill. The tight vertical dispersion of the CX896 provides focused coverage while avoiding reflective balcony facades. Four RX699 compact 6" coaxial systems were installed at the stage lip to provide front fill without visual obstruction. The RX699s improve the sonic imaging for the near seats so that amplified sound seems to originate from the performers rather than from the main line array loudspeakers overhead. The compact size and high output of the CX and RX series speakers maintains sight lines and overall aesthetic while providing sufficient output to keep up with the main system.

For performers, two CCX1226's, also incorporating Passive Cardioid Technology, were positioned as stage side fills. These supplement portable FA12s which are used as floor monitors.

Two CX826 loudspeakers were mounted behind the audience area at each level to provide surround sound.

Project Details

Location

Williamstown, MA

Product Category

Performing Arts

Project Type

Three floor theater 500 capacity

Fulcrum Products

- (8) FL283T Dual 8" Subcardioid Line Array Module
- (10) FL283 Dual 8" Subcardioid Line Array Module
- (6) CX826 Compact 8" Coaxial Loudspeaker 120° x 60°
- (6) CX896 Compact 8" Coaxial Loudspeaker 90° x 60°
- (2) CCX1226 12" Coaxial Cardioid Loudspeaker 120° x 60°
- (4) RX699 6" Coaxial Loudspeaker 90° x 90°
- (2) FA12 12" Coaxial Loudspeaker 90° x 45°
- (4) CS118 18" Subcardioid Subwoofer

Supporting Products

Linea 88C Series Amplifiers/DSP

Yamaha PM7 Digital Mixing Console

