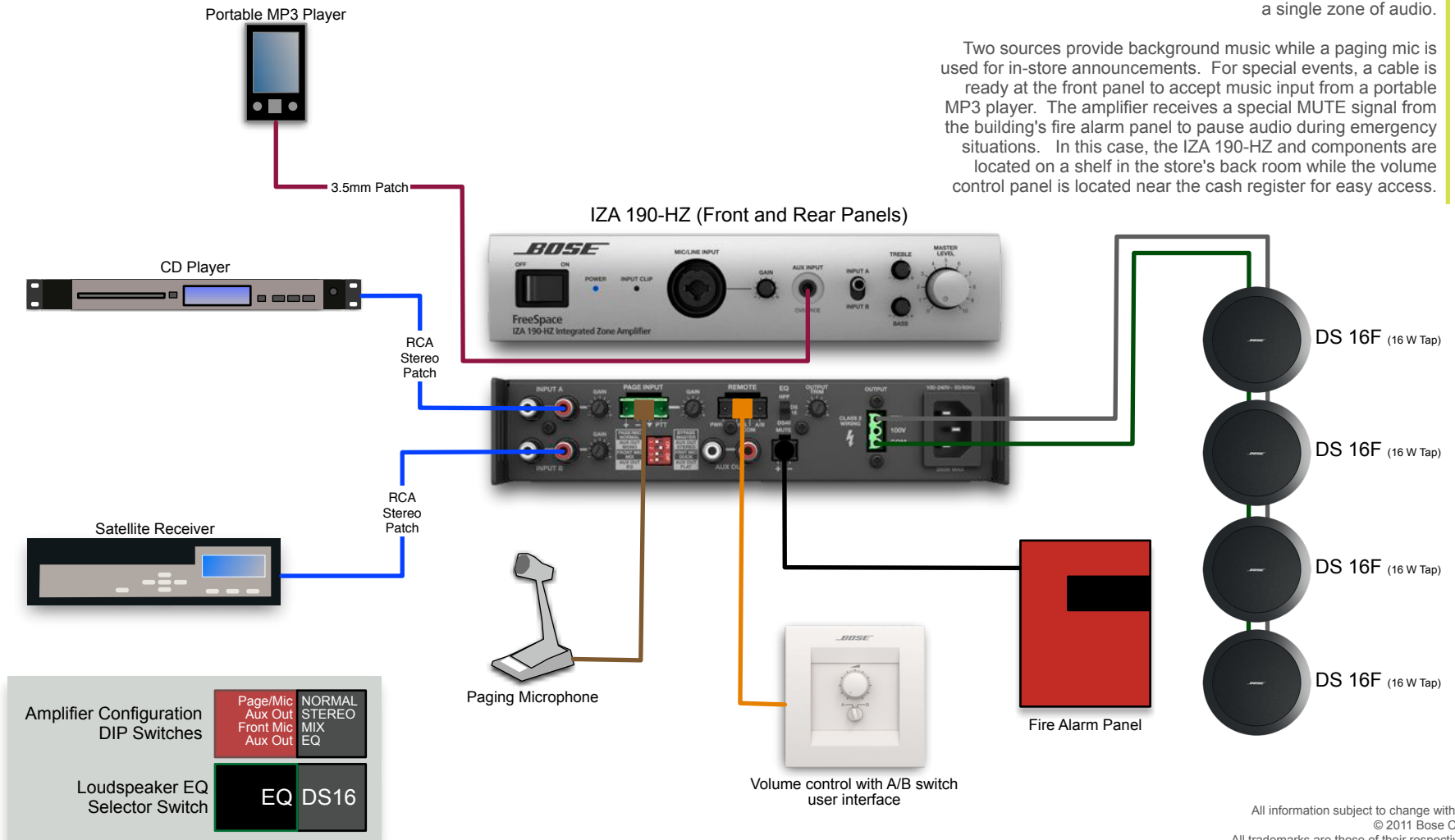




Application 1: Retail Store, Single Amplifier

In this example, a small retail store location uses an IZA 190-HZ to power four FreeSpace DS 16F loudspeakers to fill a single zone of audio.

Two sources provide background music while a paging mic is used for in-store announcements. For special events, a cable is ready at the front panel to accept music input from a portable MP3 player. The amplifier receives a special MUTE signal from the building's fire alarm panel to pause audio during emergency situations. In this case, the IZA 190-HZ and components are located on a shelf in the store's back room while the volume control panel is located near the cash register for easy access.



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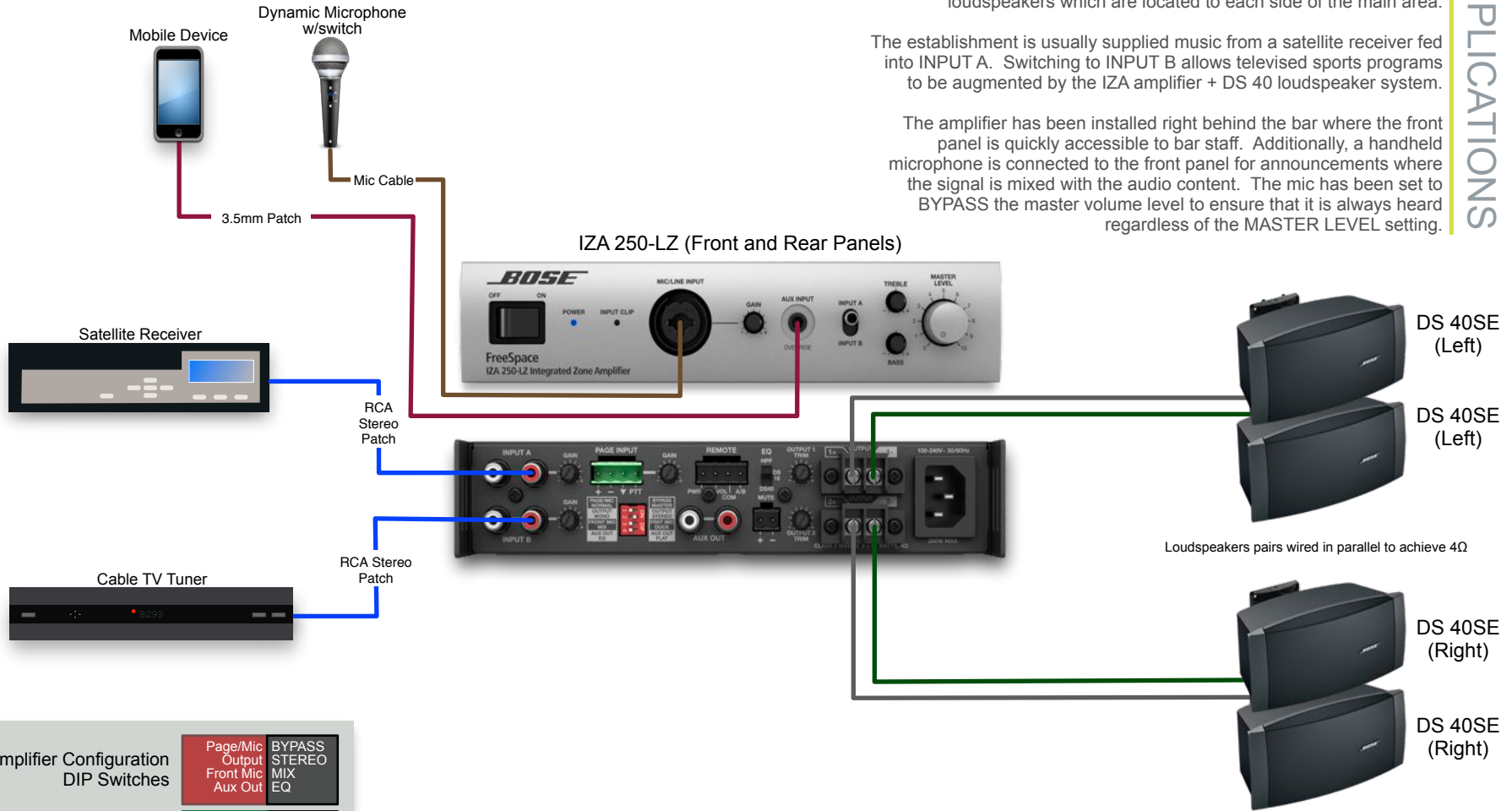


Application 2: Bar, Single Amplifier

A small bar utilizes an IZA 250-LZ to drive two pairs of DS 40SE loudspeakers which are located to each side of the main area.

The establishment is usually supplied music from a satellite receiver fed into INPUT A. Switching to INPUT B allows televised sports programs to be augmented by the IZA amplifier + DS 40 loudspeaker system.

The amplifier has been installed right behind the bar where the front panel is quickly accessible to bar staff. Additionally, a handheld microphone is connected to the front panel for announcements where the signal is mixed with the audio content. The mic has been set to BYPASS the master volume level to ensure that it is always heard regardless of the MASTER LEVEL setting.



Loudspeakers pairs wired in parallel to achieve 4Ω

Amplifier Configuration DIP Switches	Page/Mic Output	BYPASS
	Front Mic	STEREO
Loudspeaker EQ Selector Switch	Aux Out	MIX
		EQ
	EQ	DS40

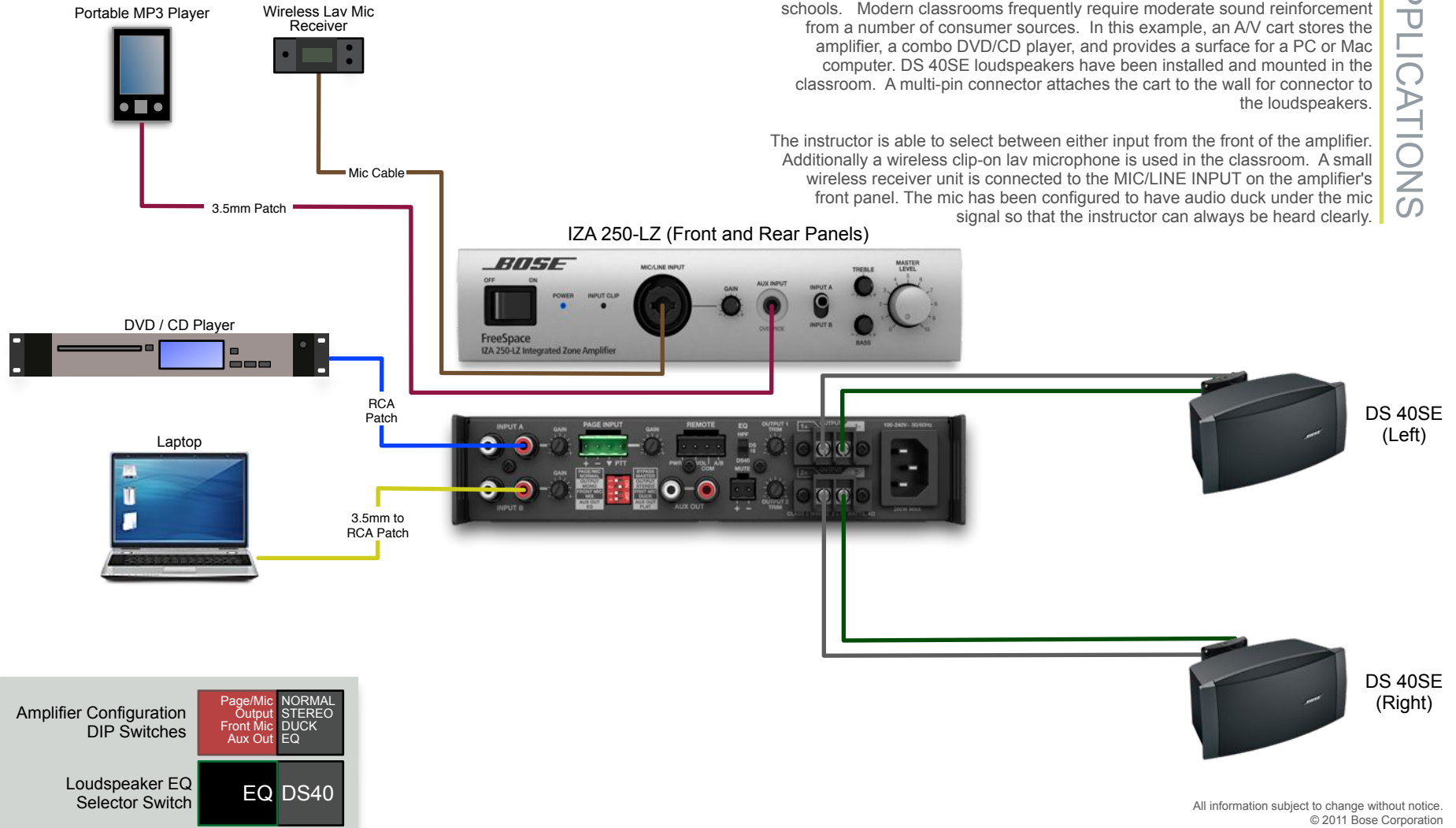
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Application 3: Classroom, Single Amplifier

The IZA 250-LZ integrated zone amplifier is the ideal mixer/amplifier for use in schools. Modern classrooms frequently require moderate sound reinforcement from a number of consumer sources. In this example, an A/V cart stores the amplifier, a combo DVD/CD player, and provides a surface for a PC or Mac computer. DS 40SE loudspeakers have been installed and mounted in the classroom. A multi-pin connector attaches the cart to the wall for connector to the loudspeakers.

The instructor is able to select between either input from the front of the amplifier. Additionally a wireless clip-on lav microphone is used in the classroom. A small wireless receiver unit is connected to the MIC/LINE INPUT on the amplifier's front panel. The mic has been configured to have audio duck under the mic signal so that the instructor can always be heard clearly.



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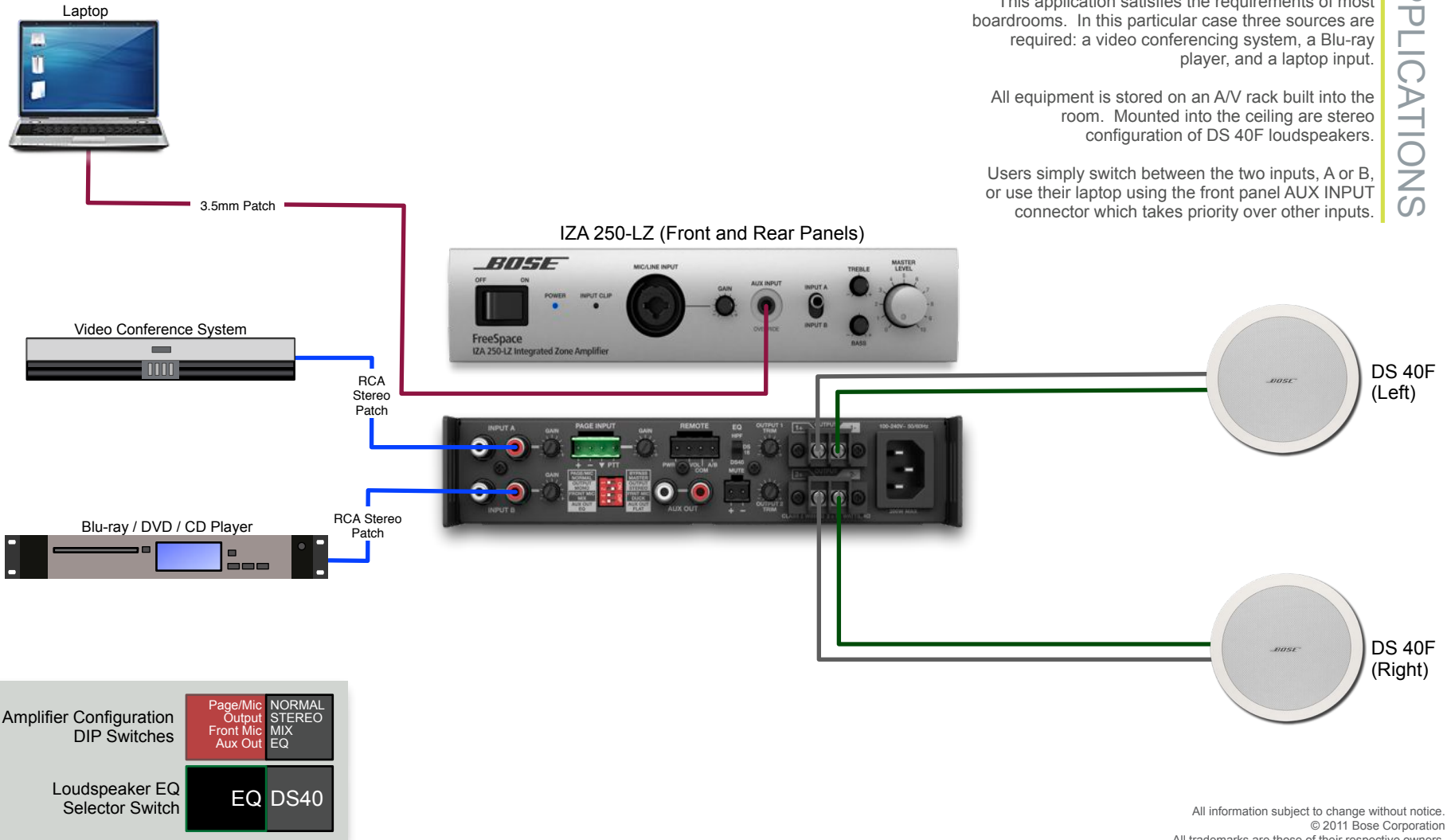


Application 4: Boardroom, Single Amplifier

This application satisfies the requirements of most boardrooms. In this particular case three sources are required: a video conferencing system, a Blu-ray player, and a laptop input.

All equipment is stored on an A/V rack built into the room. Mounted into the ceiling are stereo configuration of DS 40F loudspeakers.

Users simply switch between the two inputs, A or B, or use their laptop using the front panel AUX INPUT connector which takes priority over other inputs.



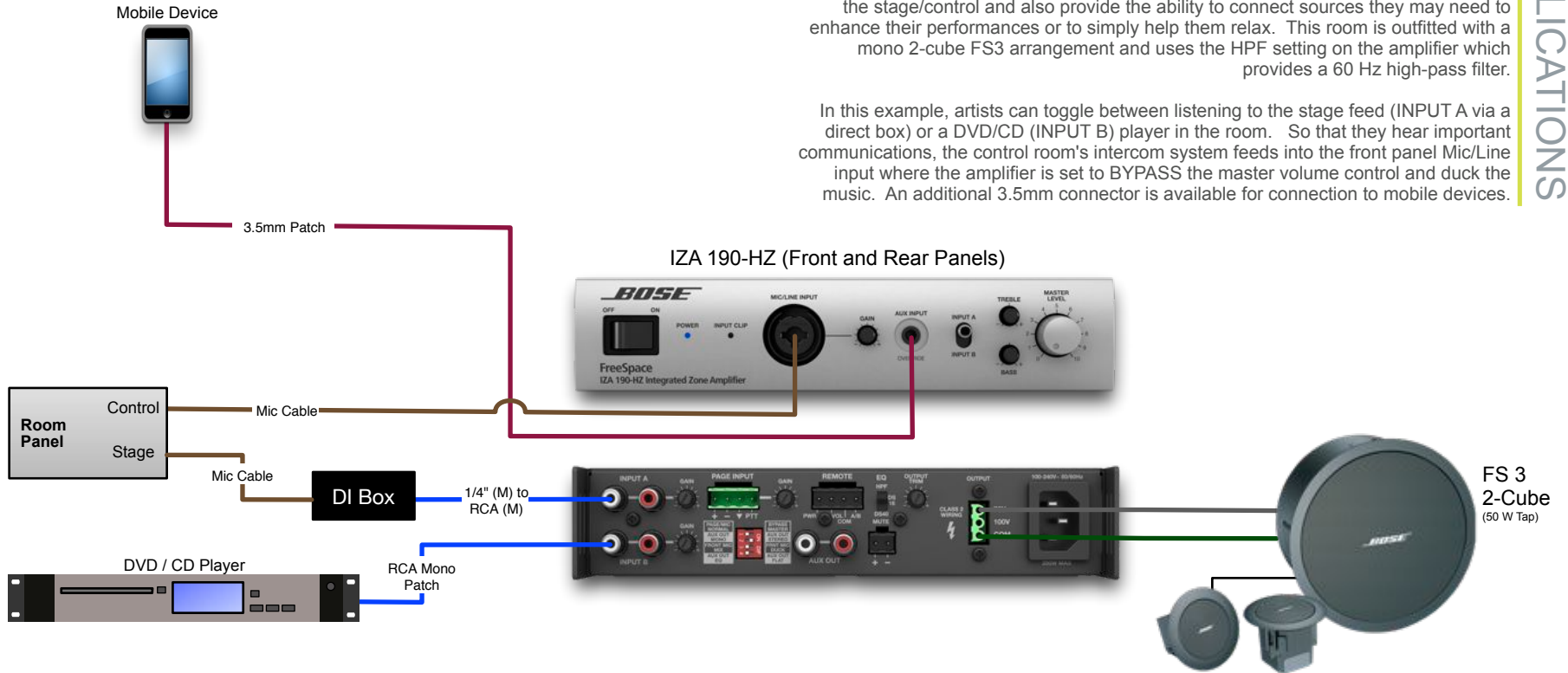
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Application 5: Green Room, Single Amplifier

A "green room", a room located in a performance venue where artists wait before and after performances, must be equipped with sound to allow the performers to monitor the stage/control and also provide the ability to connect sources they may need to enhance their performances or to simply help them relax. This room is outfitted with a mono 2-cube FS3 arrangement and uses the HPF setting on the amplifier which provides a 60 Hz high-pass filter.

In this example, artists can toggle between listening to the stage feed (INPUT A via a direct box) or a DVD/CD (INPUT B) player in the room. So that they hear important communications, the control room's intercom system feeds into the front panel Mic/Line input where the amplifier is set to BYPASS the master volume control and duck the music. An additional 3.5mm connector is available for connection to mobile devices.



Amplifier Configuration DIP Switches	Page/Mic	BYPASS
	Aux Out	MONO
Loudspeaker EQ Selector Switch	Front Mic	DUCK
	Aux Out	FLAT
	EQ	HPF

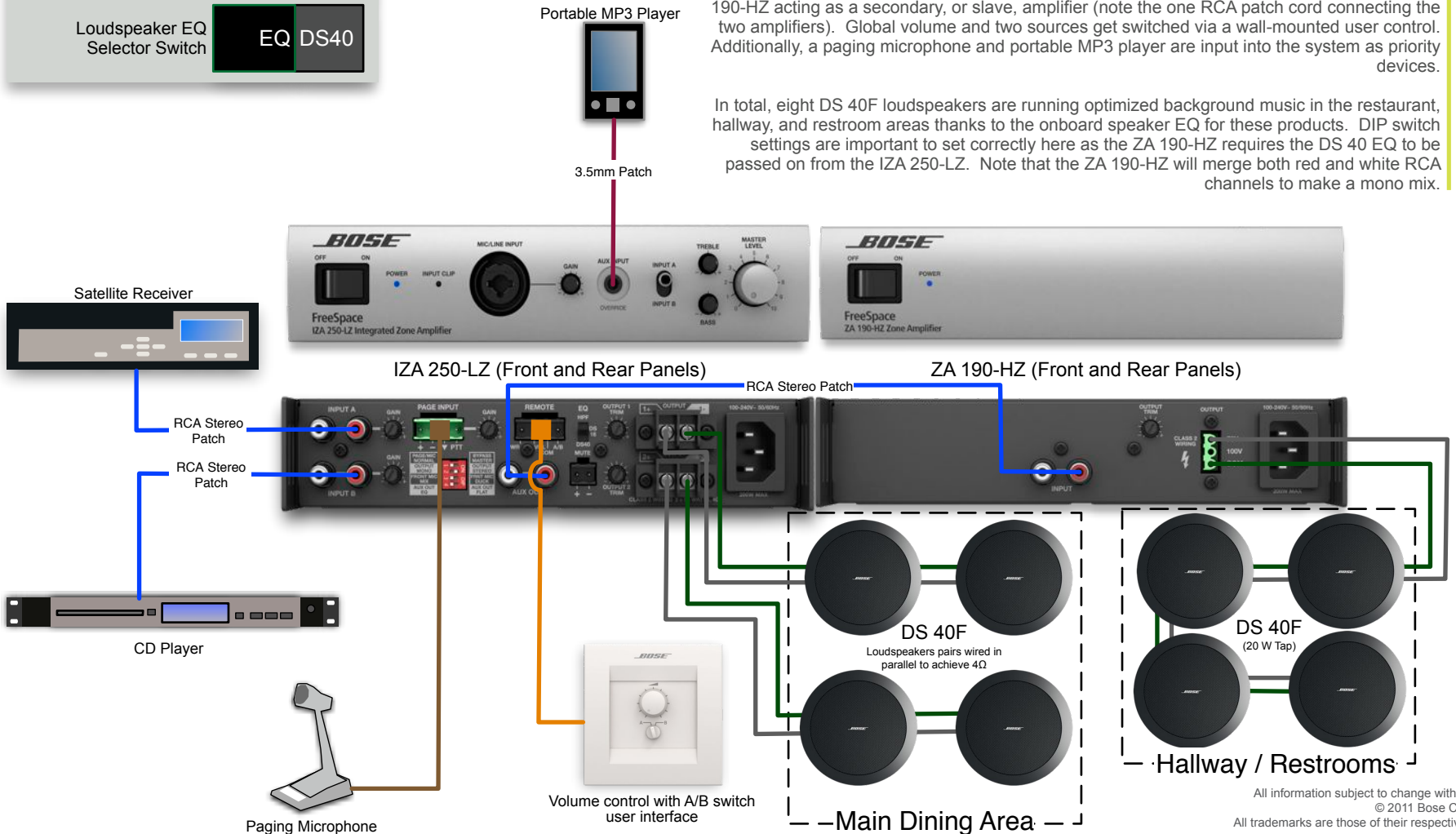
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Amplifier Configuration DIP Switches	Page/Mic Aux Out	NORMAL
	Front Mic Aux Out	STEREO
Loudspeaker EQ Selector Switch	EQ	DS40

Application 6: Restaurant, IZA expansion with ZA

For a moderately-sized restaurant, either IZA integrated zone amplifier can pair with either ZA zone amplifier to form a basic networked amplifier system, sharing sources, paging, control, and processed signals. In this case one IZA 250-LZ serves as a primary amplifier for a ZA 190-HZ acting as a secondary, or slave, amplifier (note the one RCA patch cord connecting the two amplifiers). Global volume and two sources get switched via a wall-mounted user control. Additionally, a paging microphone and portable MP3 player are input into the system as priority devices.

In total, eight DS 40F loudspeakers are running optimized background music in the restaurant, hallway, and restroom areas thanks to the onboard speaker EQ for these products. DIP switch settings are important to set correctly here as the ZA 190-HZ requires the DS 40 EQ to be passed on from the IZA 250-LZ. Note that the ZA 190-HZ will merge both red and white RCA channels to make a mono mix.

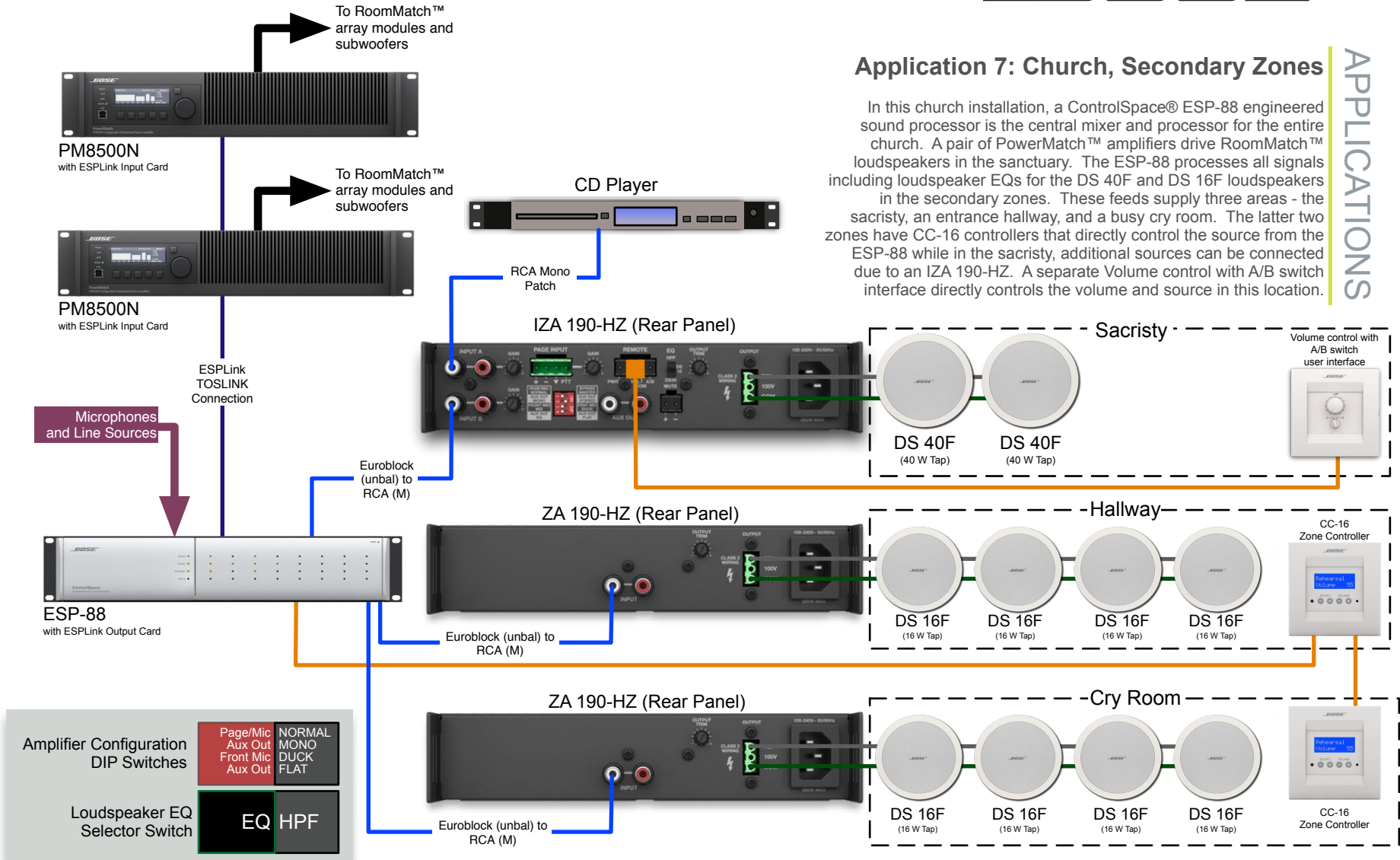


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Application 7: Church, Secondary Zones

In this church installation, a ControlSpace® ESP-88 engineered sound processor is the central mixer and processor for the entire church. A pair of PowerMatch™ amplifiers drive RoomMatch™ loudspeakers in the sanctuary. The ESP-88 processes all signals including loudspeaker EQs for the DS 40F and DS 16F loudspeakers in the secondary zones. These feeds supply three areas - the sacristy, an entrance hallway, and a busy cry room. The latter two zones have CC-16 controllers that directly control the source from the ESP-88 while in the sacristy, additional sources can be connected due to an IZA 190-HZ. A separate Volume control with A/B switch interface directly controls the volume and source in this location.

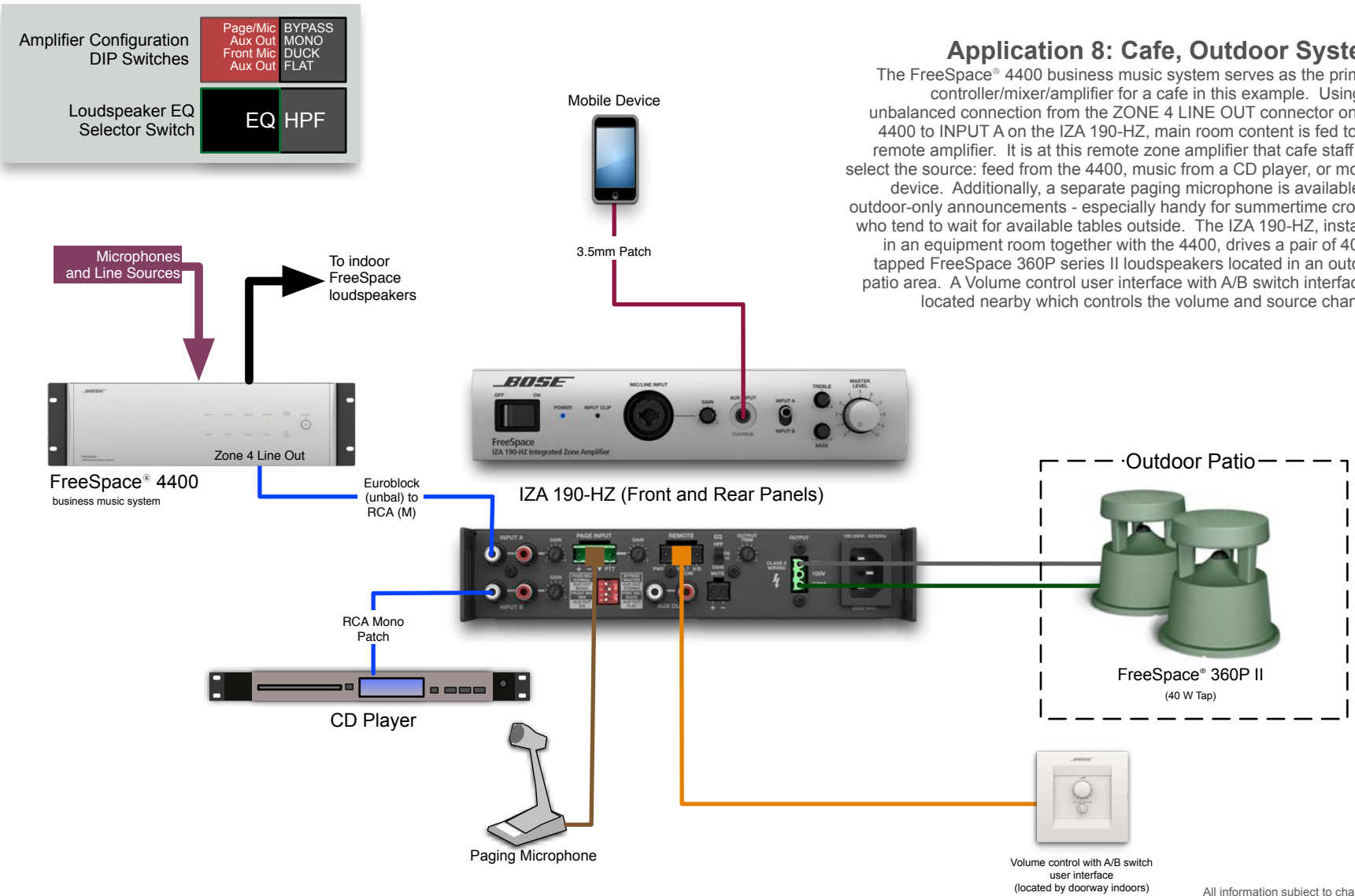


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Application 8: Cafe, Outdoor System

The FreeSpace® 4400 business music system serves as the primary controller/mixer/amplifier for a cafe in this example. Using an unbalanced connection from the ZONE 4 LINE OUT connector on the 4400 to INPUT A on the IZA 190-HZ, main room content is fed to the remote amplifier. It is at this remote zone amplifier that cafe staff can select the source: feed from the 4400, music from a CD player, or mobile device. Additionally, a separate paging microphone is available for outdoor-only announcements - especially handy for summertime crowds who tend to wait for available tables outside. The IZA 190-HZ, installed in an equipment room together with the 4400, drives a pair of 40 W-tapped FreeSpace 360P series II loudspeakers located in an outdoor patio area. A Volume control user interface with A/B switch interface is located nearby which controls the volume and source channel.

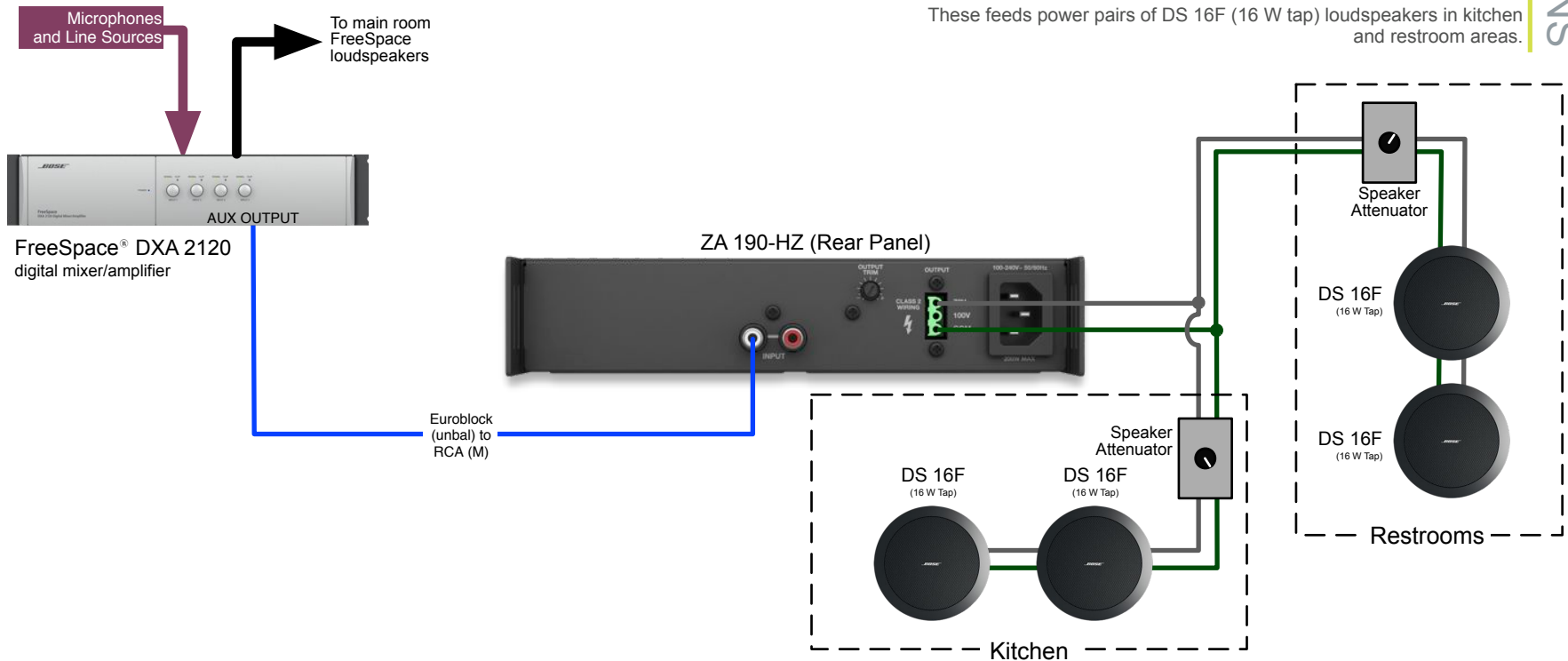


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Application 9: Large Restaurant, Secondary Zones

In this simplified example, a FreeSpace DXA 2120 digital mixer/amplifier and ZA 190-HZ work together to provide sound to a large restaurant. The DXA 2120 receives signals from multiple sources and supplies power to loudspeakers located in the main dining and bar areas. A ZA 190-HZ zone amplifier connects to the DXA 2120 via the fixed-signal AUX OUTPUT connection. Both components are located in an equipment room inside the restaurant. The ZA 190-HZ runs a split constant-voltage distribution line to two zones, each with their own 70V wall-mounted variable control speaker attenuator (not a Bose part). The ZA 190-HZ runs a split constant-voltage distribution line to two zones, each with their own 70V wall-mounted variable control speaker attenuator (not a Bose part).

These feeds power pairs of DS 16F (16 W tap) loudspeakers in kitchen and restroom areas.



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