Monitor Systems

From Fender Pro Audio

Owner's Manual for SPL 1282 Mark Two & 1285 Mark Two



The SPL 1282 Mk.II and SPL 1285 Mk.II models are full-range stage monitor loudspeaker systems designed for professional service. They were created to provide efficient, full range monitor systems with wide response, low distortion, and controlled directivity.

Product Features

Only the finest components have been utilized to provide years of trouble-free performance. Quality features include a woofer with a die-cast alloy frame, FOURTEEN and ONE HALF POUND motor structure, and a voice coil employing a polyimide KAPTON coil form.

The high frequency compression driver has been constructed using a polyimide KAPTON voice coil former coupled to a titanium diaphragm, employing a circumferential ring "phasing plug". Our custom-designed horn with its special "vertically aligned" airfoils has been optimized to provide the best possible performance, while providing accurately controlled dispersion.

Cabinet construction allows for 30 or 60 degree tilt, or vertical orientation for side fill service. In addition, a 1-1/2-inch diameter pole mount cup for pole mounted vertical use is provided. Sound absorptive material is employed to suppress internal cabinet reflections. The rugged carpet covering over 3/4-inch Birch plywood will withstand the rigors of "tour" service and maintain its good looks. The optional removable, protective lid features sturdy, recessed latches and swivel mounted casters for ease of transport.

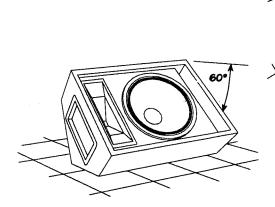
Setup Procedure

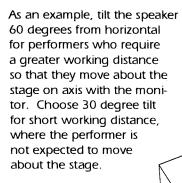
you will need.

When using a stage monitor system, feedback reduction is probably the most important criteria. The best way to reduce feedback is to use a CARDIOID PATTERN microphone with its rear aimed at the loudspeaker. Be sure that you don't cover the side or top slots of the microphone with your hands. These openings are designed to cause the microphone to be relatively insensitive to sounds arriving from the microphone's rear.

Select 30 or 60 degree tilt (see figure 1) based upon the working distance that

Figure 1





Where large movements are expected, use as side fill monitors (see figure 2) to provide wide horizontal coverage. When in the side fill position, it may be advanta-

geous to elevate the speaker from the floor to keep the high frequency horn aimed at the player's ear level.

The side fill position at about 10 to 15 feet from the performer is particularly useful for drummers and keyboardists so their nearby equipment does not block the sound from the monitor. When in the side fill position, the drummer's /keyboardist's vocal microphone can be positioned to his/her side, allowing the rear of the microphone to face the front of the monitor, thus minimizing feedback.

Connect the amplifier to the loudspeaker with minimum 14 gauge wire. The length of the speaker cable should be no more than 100 feet. Where multiple systems are to be "DAISY CHAINED" together (see figure 3 and figure 4), or where longer cable runs will be encountered, consider

using a larger gauge wire (smaller number). A rule of thumb is to subtract 3 from the wire gauge each time the number of systems doubles or where the cable length doubles.

Figure 3

Figure 2

Riser (stand)

" Daley chain connection"
Using the internal
passive crossover

Switch set to normal mode

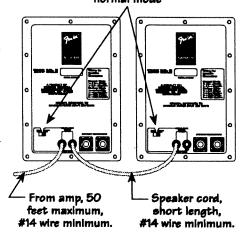
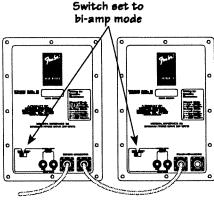


Figure 4

"Daisy chain connection" Using bi-amp mode and Neutrik Speakons™



As an example, for a 200 foot run, use 11 gauge wire. For a 100 foot run to a pair of speakers, also use 11 gauge wire. For a 200 foot run to two systems, use two separate 11 gauge cables. If too small a gauge of wire is used, no harm or hazard will result, but "sound quality" and level may be degraded, due to the wire's internal resistance.

We suggest the use of the SWITCHCRAFT Z15P plugs on the cable ends if the wire is heavier (smaller number) than 14 gauge. For quick hookup of bi-amplified systems and to minimize the chance of connection error, use the Neutrik Speakon™ connectors.

*Important: always check to be sure that the internal/external crossover switch that selects passive or bi-amp operation is in the correct position prior to use. Failure to do this may damage the speaker.

For Bi-amplified operation, the recommended crossover frequency is about 2200Hz. The high frequency level should be about 8 dB lower than the low frequency level to correctly match the response of the two drivers when bi-amplifying. You should always adjust the levels to your own personal taste.

Connection chart for Neutrik Speakon™ connectors

Normal Mode

1+ & 2+ = Positive

1- & 2- = Negative

Bi-Amp Mode

1+ = Low Positive

1- = Low Negative

2+ = High Positive

2- = High Negative

SPECIFICATIONS

System Type

- Two way, vented baffle low frequency section.
- Horn loaded high frequency section.

Woofer

SPL1282 Mk.II

- Single 12-inch driver with 2.5-inch voice coil, employing polyimide KAPTON voice coil bobbin.
- Cast alloy frame.

SPL1285 Mk.II

- Single 15-inch driver with 3-inch voice coil, employing polyimide KAPTON voice coil bobbin.
- · Cast alloy frame.

High Frequency

- Fender designed and manufactured horn with 90 x 40 degree radiation angle.
- Special Fender Designed 1-inch exit driver with a 2inch voice coil, featuring a TITANIUM diaphragm and circumferential ring phasing plug.

Crossover

- Passive, fourth order "Linkwitz-Riley" design that has been optimized through literally hundreds of hours of MLS testing, group delay measurements and empirical listening tests.
- Parallel 1/4-inch input jacks.
- 4-pole Nuetrik speakon™ jacks.
- BI-AMP ready switching capacity.

Cabinet

- All Birch plywood construction with multiple angle shape, sturdy DADO joinery.
- Rugged carpet covering.

Performance Specifications

Model	Frequency Response	Rated Impedance	Sensitivity	Vertical Radiation Angle		Crossover Frequency	Power Rating (passive crossover)		
1282 Mk. II	60Hz - 15kHz ±3dB (half space)	8ohms	100dB @ 1 Meter 1 Watt	90 Degree @ 5kHz	40 Degree 9 5kHz	2200Hz	150 Watts per E.I.A. RS426	300 Watts program	600 Watts peak
1285 Mk. II	60Hz - 15kHz ±3dB (half space)	8ohms	100dB @ 1 Meter 1 Watt	90 Degree 9 5kHz	40 Degree @ 5kHz	2200Hz	150 Watts per E.I.A. RS426	300 Watts program	600 Watts peak

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