

# Speaker Systems

1201  
1205  
1212  
1215



Sunn is a product line of FMIC

The 1201, 1205, 1212, and 1215 models are full range loudspeaker systems designed for professional service. They were created to provide efficient, full range 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 heavy steel frame, NINE POUND motor structure and a voice coil employing a polyimide KAPTON coil form.

1201 and 1205

The two high frequency compression drivers feature Piezoelectric transducer elements. Our custom designed horn with its dual throat construction assures accurate summation of the two drivers to provide the best possible performance while assuring accurately controlled dispersion.

1212 and 1215

The high frequency compression driver features electrodynamic design and a linen/phenolic diaphragm.

Two parallel inputs are provided so that multiple systems may be used with their inputs "DAISY CHAINED" together.

Cabinet construction employs all wood materials. The rugged carpet covering over 3/4-inch stock will withstand the rigors of "tour" service and maintain its good looks.

**Setup Procedure**

For best performance, placement is important. If the system is placed near a flat wall, bass performance will be reinforced by about six decibels. This means that for application where feedback will not be a concern (keyboard or drum synthesizer service), place the speaker systems near the rear wall of the stage, elevated above equipment that may be on stage. Where feedback is a problem, (vocal microphones

and the like) place the speakers in front of the microphones, near the front of the stage.

For multiple system operation, keep the high frequency sections near one another, and angle the systems horizontally as required. In this way, two systems can provide nearly 150 degrees of horizontal coverage (see figure 1).

Connect the amplifier to the loudspeaker with minimum 14 gauge wire, when a length of no more than 100 feet is used. Where multiple systems are to be "DAISY CHAINED" together, or where longer cable runs will be encountered consider using 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. 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.

We suggest the use of SWITCH-CRAFT Z15P plugs on the cable ends if the wire is heavier than 14 gauge (smaller number).

**Speaker Stand Warning**

Note: A heavy speaker on a speaker stand can cause serious injury if it falls on someone. Please use common sense and follow these precautions:

1. Only use speaker stands with a 1-1/2" OD pipe rated for the full weight of the speaker. Make sure pipe inserts into stand adapter fully.
2. Use stands only on a flat, level surface.
3. Keep all types of traffic away from stands at all times.
4. Before placing speakers on stands, check to see that the stand adapter is not cracked, broken or loose in the cabinet. If so, do not use.

5. Do not wrap speaker cable around base of stand. Do not route speaker wire where it can catch foot traffic. Route wires overhead or secure to floor with tape.

**Parallel Operation**

The typical application will use multiple speakers connected in parallel to one amplifier. This is best accomplished by "DAISY CHAIN" connection at the input jacks (see figure 2).

**SPECIFICATIONS**

**System Type**

1201 and 1212

Two way, vented baffle low frequency section, horn loaded high frequency section.

1205 and 1215

Two way, sealed baffle low frequency section, horn loaded high frequency section.

**Woofer**

1201 and 1212

Single 12-inch driver with 2-inch voice coil, employing polyimide KAPTON voice coil bobbin, and rigid steel frame.

1205 and 1215

Single 15-inch driver with 2.5-inch voice coil, employing polyimide KAPTON voice coil bobbin, and rigid steel frame.

**High Frequency**

1201 and 1205

SUNN designed and manufactured horn with 35 x 70 degree radiation angle and dual Piezoelectric drivers.

1212 and 1215

SUNN specified integral horn/driver with 35 x 70 degree radiation angle and electrodynamic driver.

**Crossover**

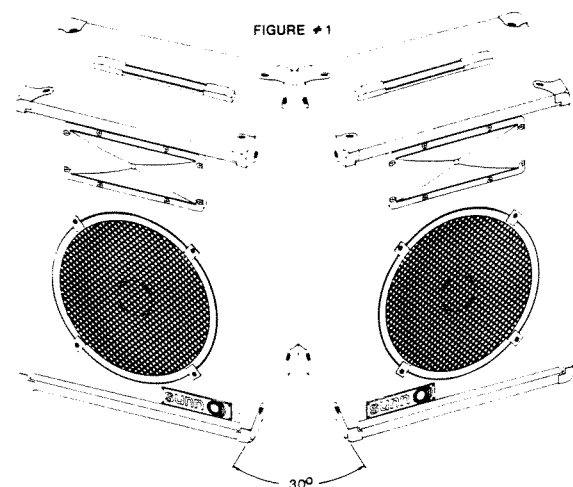
1212 and 1215

2kHz, 18dB per octave, BUTTERWORTH type.

**Cabinet**

ALL WOOD construction with rectangular shape and rugged carpet covering.

Performance	1201	1205	1212	1215
Frequency Response	60Hz - 20kHz ± 6dB (half space)	60Hz - 20kHz ± 6dB (half space)	60Hz - 20kHz ± 4dB (half space)	60Hz - 20kHz ± 4dB (half space)
Rated Impedance	8 ohms	8 ohms	8 ohms	8 ohms
Sensitivity	95 dB, 1 Meter, 1 Watt	95 dB, 1 Meter, 1 Watt	95 dB, 1 Meter, 1 Watt	95 dB, 1 Meter, 1 Watt
Vertical Radiation Angle	35 Degree @ 5kHz	35 Degree @ 5kHz	35 Degree @ 5kHz	35 Degree @ 5kHz
Horizontal Radiation Angle	70 Degree, @ 5kHz	70 Degree, @ 5kHz	70 Degree, @ 5kHz	70 Degree, @ 5kHz
Crossover Frequency	2000Hz	2000Hz	2000Hz	2000Hz
Power Rating	100 Watts per E.I.A. RS426	150 Watts per E.I.A. RS426	100 Watts per E.I.A. RS426	150 Watts per E.I.A. RS426



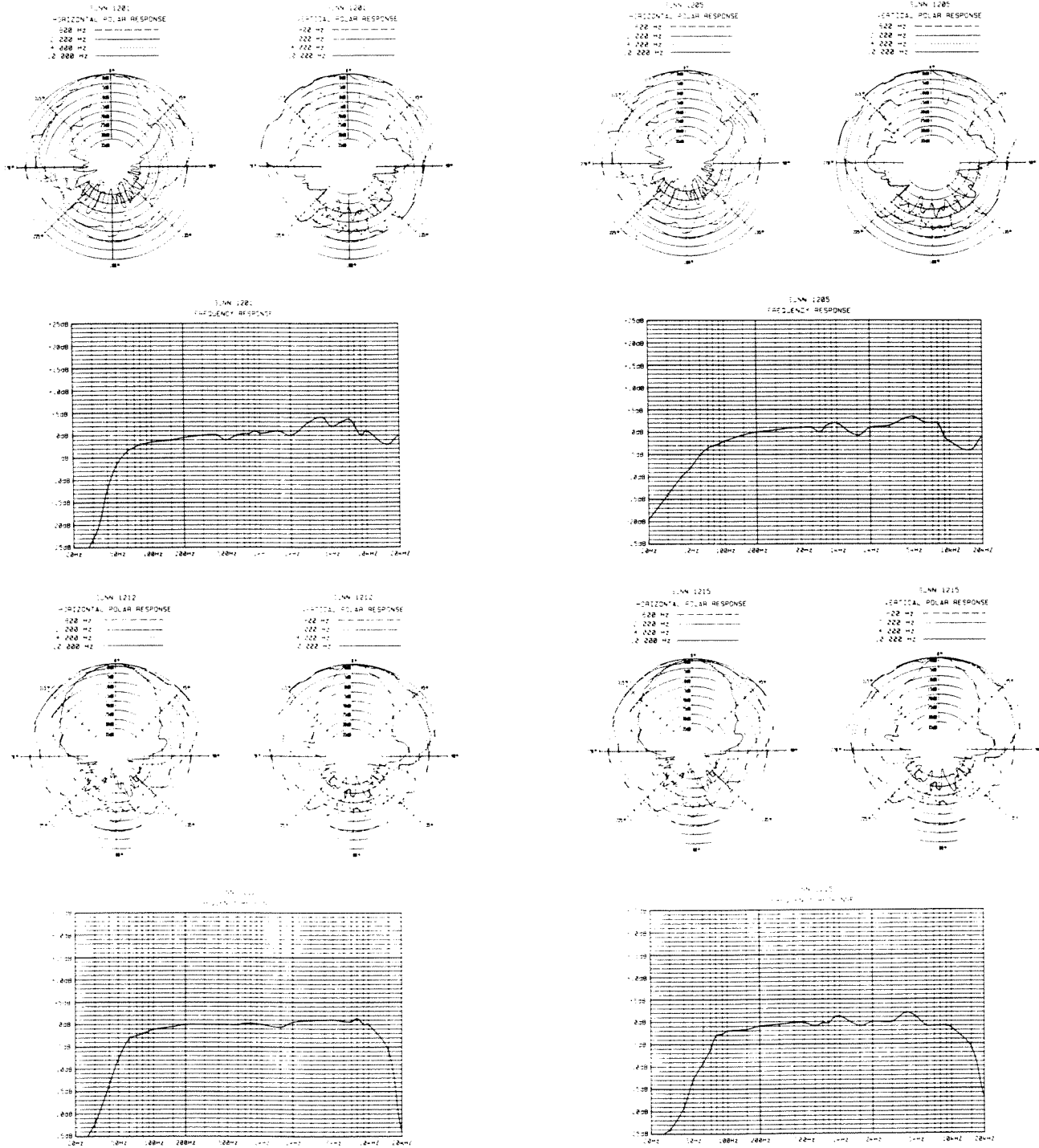
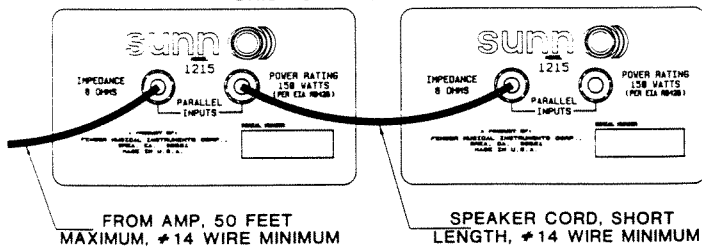


FIGURE #2  
 'DAISY CHAIN CONNECTION'



# SUNN ELECTRONIC PRODUCTS LIMITED WARRANTY

This limited warranty against defects in material and workmanship applies only to the original purchaser when purchased from an Authorized SUNN Dealer. IMPORTANT: PLEASE RETAIN YOUR SALES RECEIPT AS IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH SALES RECEIPT.

Defective parts presented during the applicable warranty period with proof of purchase will be repaired or replaced without charge if the product is returned to any Authorized SUNN Dealer or SUNN Service Center. All SUNN Electronic Products carry a Three Year Limited Warranty from date of purchase, except that light bulbs, vacuum tubes and meters carry only a Ninety Day Warranty from date of purchase, and Speakers carry only a One Year Warranty from date of purchase. Any repair or service performed by any person or entity other than an Authorized SUNN Dealer or SUNN Service Center is not covered by this limited warranty. Transportation costs are not included in this limited warranty.

This limited warranty becomes void if the serial number on any product is defaced or removed, or the product has been damaged by alteration, misuse, rental, accident, or neglect; or the product has been repaired or serviced by persons not authorized by SUNN Musical Instruments Corporation. SUNN assumes no liability for property damage of any sort, whether to a SUNN product or any other property, which may result from the failure of any SUNN Electronic Product. Any warranties implied by law are limited to the duration of this express limited warranty. There are no warranties which extend beyond the description on the face hereof.

This limited warranty does not cover any SUNN lighting products or any parts or accessories to any such lighting products.

Some states do not allow limitations on how long an implied warranty lasts, so the above time limitations may not apply to you. Some states do not allow exclusions or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Have service performed by any Authorized SUNN Dealer or contact:

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