SHF 0104 & 0210

Studiomaster PROFESSIONAL

SHF 0104

SHF 0210

Studiomaster Professional Speakers Guideline

Have you ever blown a loudspeaker? Then you probably don't want to do it again. Here's how not to shred your speakers.

- There are two ways in which a moving coil drive unit may be damaged. One is to drive it at too high a level for too long. The coil will get hotter and hotter and eventually will melt at one point, breaking the circuit ('thermal damage').
- The drive unit will entirely cease to function. The other is to 'shock' the drive unit with a loud impulse. This can happen if a microphone is dropped, or placed too close to a theatrical pyrotechnic effect. The impulse won't contain enough energy to melt the coil, but it may break apart the turns of the coil, or shift it from its central position with respect to the magnet ('mechanical damage'). The drive unit will still function, but the coil will scrape against the magnet producing a very harsh distorted sound.
- Many drive units can be repaired, but of course damage is best avoided in the first place. The trick is to listen to the loudspeaker. It will tell you when it is under stress if you listen carefully enough.
- To get the best performance from a loudspeaker, the amplifier should be rated higher in terms of watts. It wouldn't be unreasonable to connect a 200 W amplifier to a 100 W speaker, and it won't blow the drive units unless you push the level too high.
- It is up to the sound engineer to control the level. Suppose, on the other hand, a 100 W amplifier was connected to a 200 W loudspeaker. The sound engineer might push the level so high that the amplifier will start clipping. ***Clipping produces high levels of high frequency distortion & will easily damage the speaker (especially the HF diaphragms).***

Features:

- High Quality HF Driver.
- Superb High & High-Mid frequency reproduction.
- Durable Titanium Voice Coil.
- High Tolerance.
- Ideal for compact 2-Way Systems, Multiple-Way Throw System & Large Format Arrays.
- **Supplied with a Screw-On type horn adapter (only for SHF0104).**

Technical Specifications:

General Specification		**SHF0104**	**SHF0210**	
Nominal Diameter		25.4/1	50/2	mm/inch
Rated Impedance		8	8	Ω
Peak Power		80	200	watts
Rms Power		40	100	watts
Sensitivity (SPL1w@1m)		107	110	dB
Frequency Range		1200~20000	500~18000	Hz
Voice Coil Diameter		44.4/1.75	72.2/2.84	mm/inch
Voice Coil Material		Titanium	Titanium	
Thiele-Small Parameters				
Resonance Frequency	Fs	141.8	729.7	Hz
DC Resistance	Re	6.0	6.0	Ω
Mechanical Q factor	Qms	7.04	2.77	-
Electrical Q factor	Qes	1.47	1.34	-
Total Q factor	Qts	1.21	0.90	-
Shipping Information				
Net Weight		1.53	5.36	Kg

Other Studiomaster Professional Transducer.

12" : SMB 1230, EMB 1225.

15" : SWF 1560, SMB 1530, SMB 1545, EMB 1530.

18" : SWF 1880, SWF 18100, SWF 18120.

HF's : SHF 0104 SHF 0210

* Design and specification are subject to change without notice.

REV00/SMSHF0210/Jan2012

Brought to you by: AUDIOPLUS

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