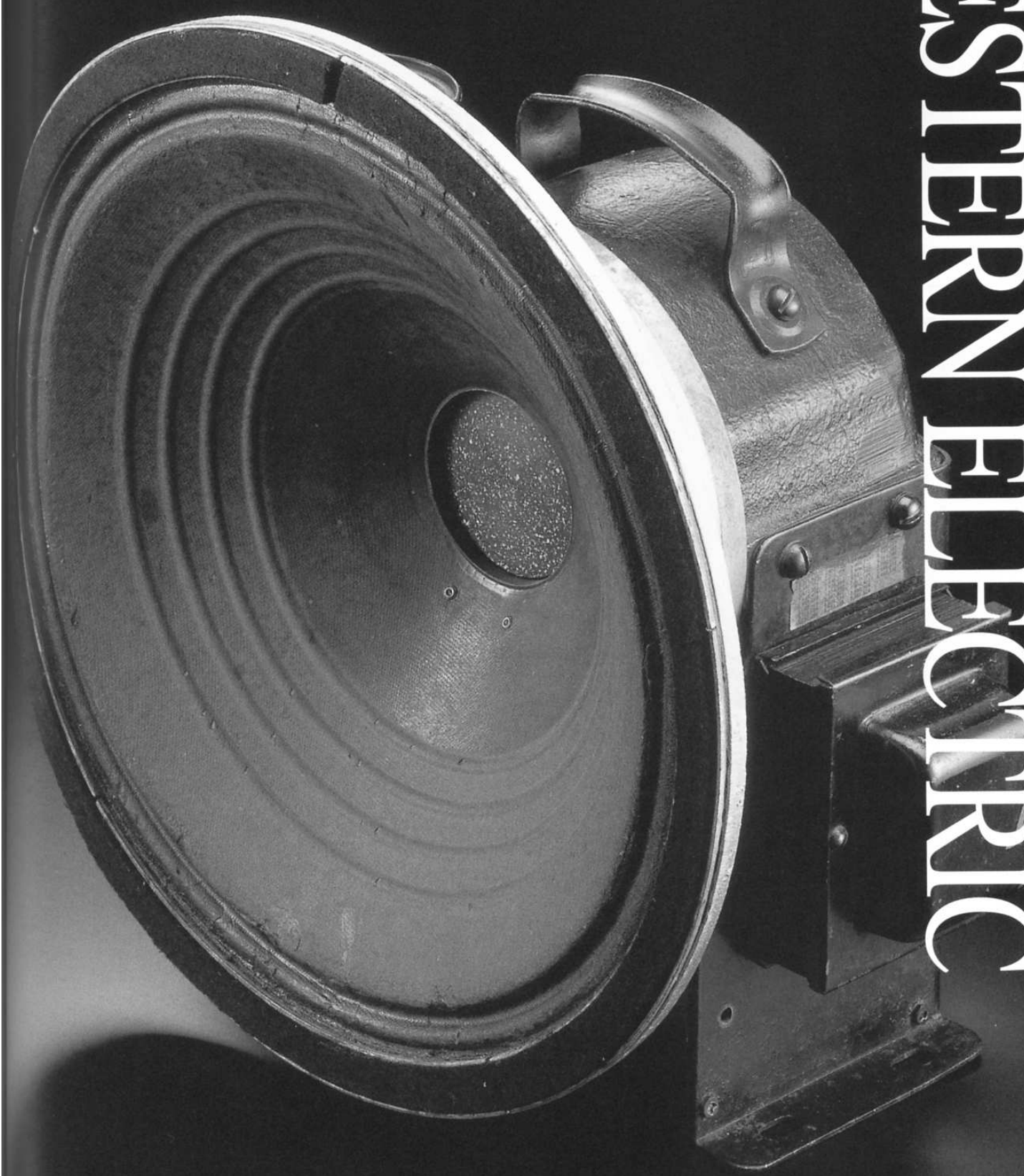


33^{cm}



WESTERN ELECTRIC

文士井雄三

往年の名ウーファーユニット

33cm径コーン型

ウェスタン・エレクトリック

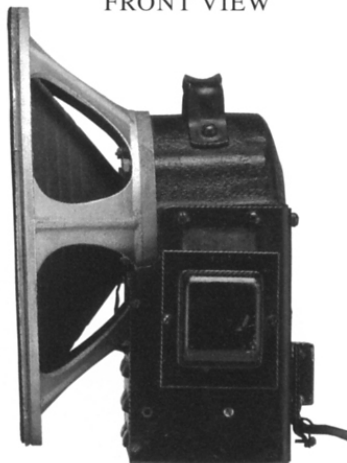
TA4151/TA4151A

Used in combination
with 555 receiver

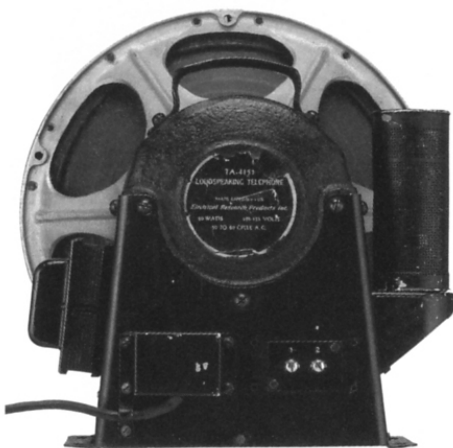
Strongest Woofers
ever built.



FRONT VIEW



SIDE VIEW



REAR VIEW

- 型式:フィールドコイル型
- 振動板口径:33cm
- ボイスコイル・インピーダンス:
10.5Ω/300Hz、6Ω (DC)
- 感度:—
- 最大入力:15W
- 再生周波数帯域:—
- 最低共振周波数:—
- バツフル開口径:—
- 外形寸法:W338×H349×D226mm
- 重量:19.4kg
- フィールド電源:AC105-125V/50-60Hz、0.5A/60W

TA4151 named "Loudspeaking telephone" or TA4153 started in 1933, are 13-inch woofer field-coil types. Eight year improvements were made on paper and TA4151A / TA4153A are presented here. However, they are nearly identical, almost indistinguishable between the two. Both are manufactured by Jensen.

These units appeared in June 1933 as low part of "the Wide Range system".

In this system, the high frequency are 596/597 (Bostwick tweeter), and below 555 receiver, all put together in a three-way configuration (sometimes two-way configurations).

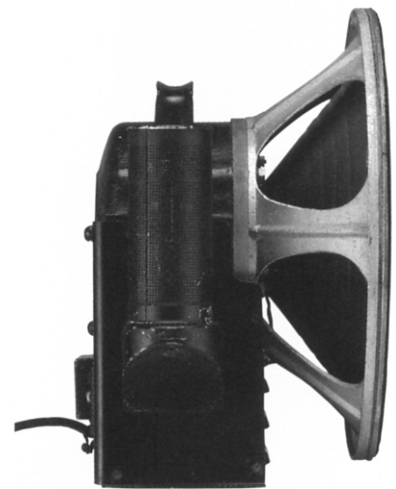
Large baffles were used, for example # 1 in 1935 system, six speakers like those ones, were installed on this AS06436 baffle.

In the system # 2 and # 3, AS06435 baffle were selected, with 4 units offers together.

Next leasing system # 6 started in 1936, the speaker were installed in a TA7331 box with 555 receiver and a WE22A horn in a 2 way combination system for a small system for theatre.

33cm径ウーファーユニット
ウェスタン・エレクトリック
TA4151/TA4151A

●フィールドコイル用電源回路



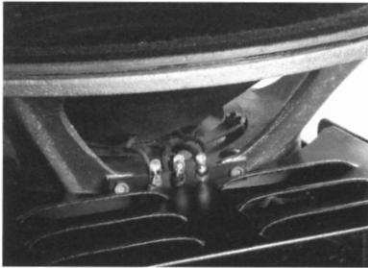
TA4151/TA4151Aはフィールドコイル用電源を搭載している。

The base T5797 is placed in order to supply power to the field coil. The rectification circuit unit is directly attached to the speaker, with WE 274A rectifier tube. Thus, it can be used directly plugged into the AC outlet.

No filter choke is used in the power supply circuit. Power supply is quite simple with only a capacitor filter. This kind of simple circuit was intended.

Also, the mounting method of speaker and pedestal on baffle is simple. The metal pedestal holds speaker weight. Bolts and nuts attach speaker and pedestal on baffle

●ボイスコイル・リードの引出し方



Voice coil. Lead wire is included in the paper cone. Wires are cotton coated wire. A Bakelite solder lug makes relay for wires with 3 lugs. One lug is for the bucking coil. As often said, it has to have a proper amplifier. Units has a paper damper, this is a strong speaker. There is need to select a suitable amplifier. TA4151A requires a high-power amplifier driving

●整流管274A



TA4151A have the 274A rectifier tube vertical. UX4 Socket is stamped with tube type. Jensen has roughly the same 13-inch speaker unit [M10] but tube making is 80. A cylindrical shield tube is used to protect tube. TA4151A tube is high. Tube for M10 is lower than the one used here.

●入力ターミナル

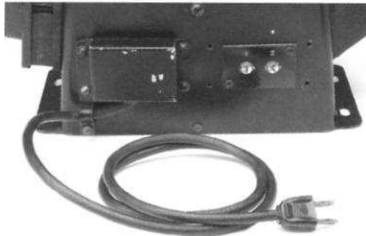
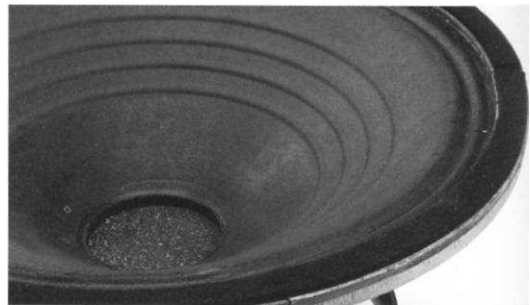


Photo shows on the right, the 1 / 2 voice coil terminals. Polarity 1 =positive, 2=negative There are 4 terminals, 3 and 4 are for the power cord (AC terminal) with a metal case to avoid electrical shock.

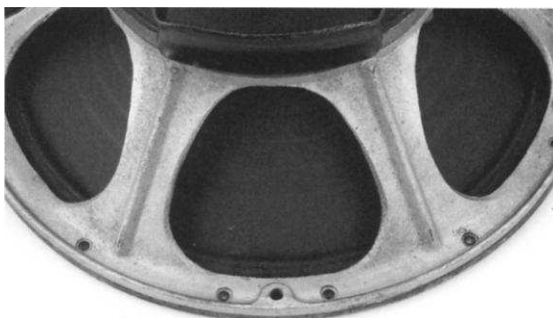
Only one cable clamp, screwed together with metal case Each terminal has threaded holes to mount metal case.

● Cone



Near the center of, the effective diameter of 11.5-inch cone, there are 4 corrugations. Voice coil is 2.5 inch diameter mounted on paper, with impedance of 10.5 Ohms/300Hz, DCR is 6Ohms. Spider is made of Bakelite. Installation of paper cone on metal basket is done with eyelet rivet.

● Frame



Thick, solid aluminum die-cast frame with also strengthening ribs included. Withstand harsh use, but very heavy duty specifications.

● Center of paper cone



In the center of paper cone, coil is visible. Voice coil is mounted on paper. The method of attaching the voice coil and the cone paper is the same as TA4181A. In addition, I can say that in general TA4151A have black stain on cone between center and corrugations. On many units, an adhesive for bonding the paper cone and voice coil, seem to come out on paper cone.

46^{cm}

WESTERN ELECTRIC



文士井雄三

