



FERRIS

CHANNEL MASTER

Vu-tron

**TRANSISTORISED TV BOOSTER
AND 4 SET COUPLER**

INCORPORATING AN ATTENUATOR TUNEABLE
TO ANY ONE CHANNEL FROM 0 TO 5A

MODEL 0024

THE VU-TRON T.V. BOOSTER AND 4 SET
COUPLER WAS DEVELOPED BY FERRIS-
CHANNEL MASTER FOR INDOOR APPLICA-
TION, AND IS PARTICULARLY SUITABLE
FOR SMALL T.V. DISTRIBUTION SYSTEMS
WITH UP TO 4 T.V. RECEIVERS, WHEN
300 OHM RIBBON IS USED FOR SIGNAL
DISTRIBUTION.

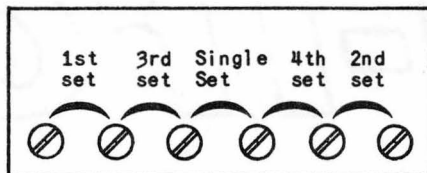


INSTRUCTION MANUAL



Vu-tron INSTALLATION INSTRUCTIONS

1. Mount Booster-Coupler Unit to wall or any convenient location.
2. Attach twin lead from antenna to terminals at top of Booster-Coupler Unit. NOTE: The terminals are insulation piercing making it unnecessary to strip twin lead.
3. USE CENTRE TERMINALS FOR TWIN LEAD TO SINGLE SET. For multiple sets connect as indicated:



4. Connect electrical power line to 240 volt 50 cycles AC outlet.

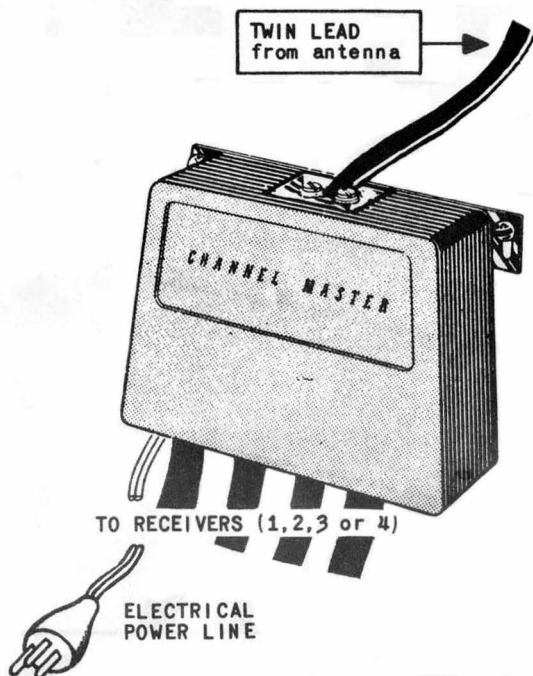
Since this is a transistorised unit, no warm-up time is required. Current drain is less than an electric clock, so unit may be left connected at all times.

5. ATTENUATOR. A single channel (selective) attenuator is incorporated in the Vu-tron to permit effective suppression of any one TV channel from 0 to 5A. The attenuator reduces the signal strength of the TV channel to which it is adjusted, thus eliminating overload and cross-modulation problems caused by local TV stations on the lower channels.

ATTENUATOR ADJUSTMENT. The attenuator consists of a resonant trap circuit, adjustable by means of a 3-30 PF air trimmer located near the 300 ohm input terminals and accessible after removal of the plastic housing.

OVERLOAD. This is caused by excessive signal input to the TV set. It shows up as a smeary, pale picture or in severe cases as a negative picture: tune TV set to overloaded channel and adjust attenuator until overload disappears.

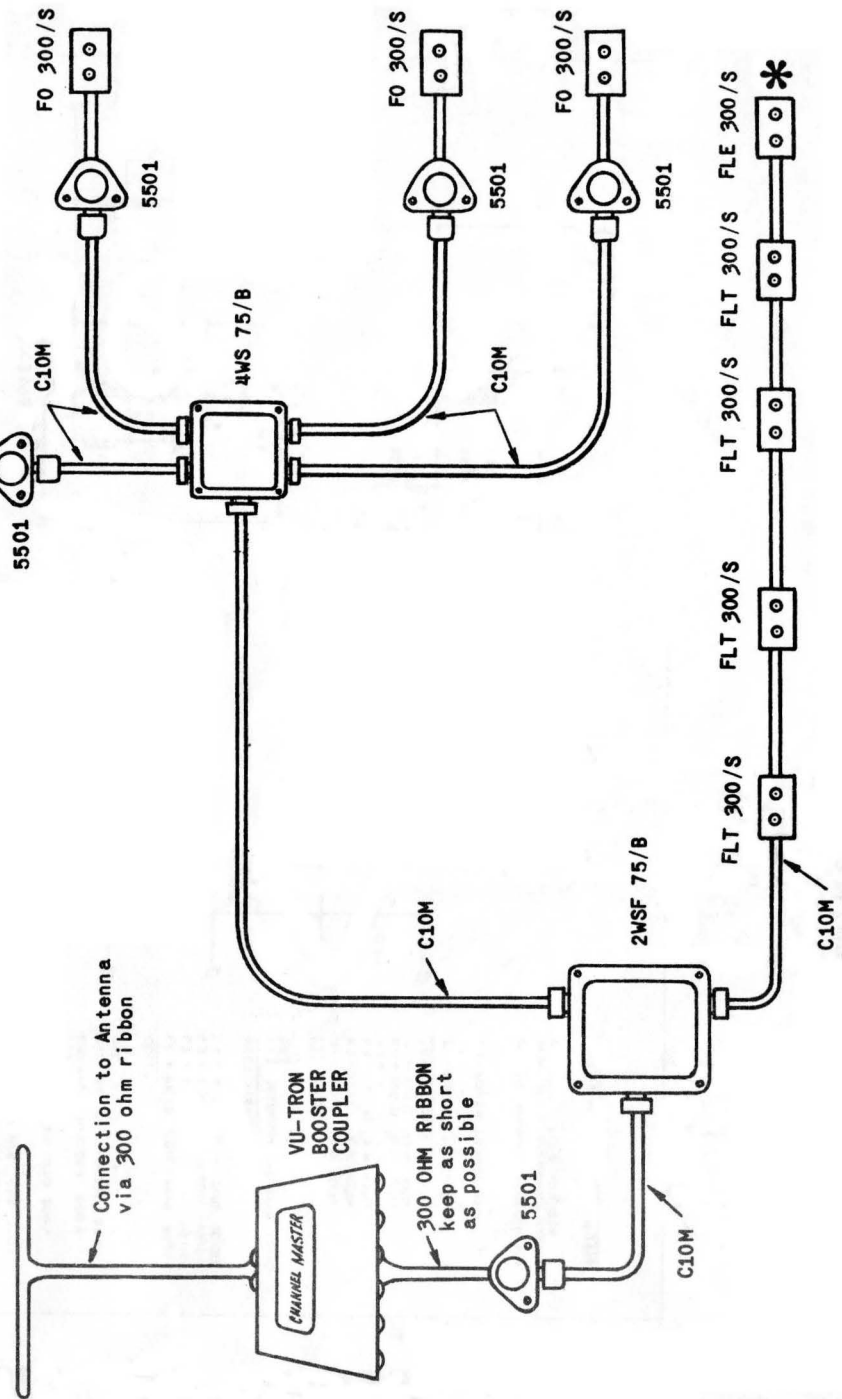
CROSS MODULATION. Generally shows up as "wind-screen wiper" effect on a high band channel caused by second or third harmonic of a low band channel: tune TV set to high band channel showing cross modulation and adjust attenuator to eliminate the effect. The attenuator offers a signal reduction of 20 db, which is normally more than adequate. Under extremely high signal conditions additional attenuation is available with the Ferris-Channel Master low band Local Channel Suppressor LCS/20, or the high band Local Channel Suppressor HCS/20 inserted in the input lead of the Vu-tron.



NOTE: It is of utmost importance to keep the input and output lead of the Vu-tron well separated, otherwise instability of the booster may occur.

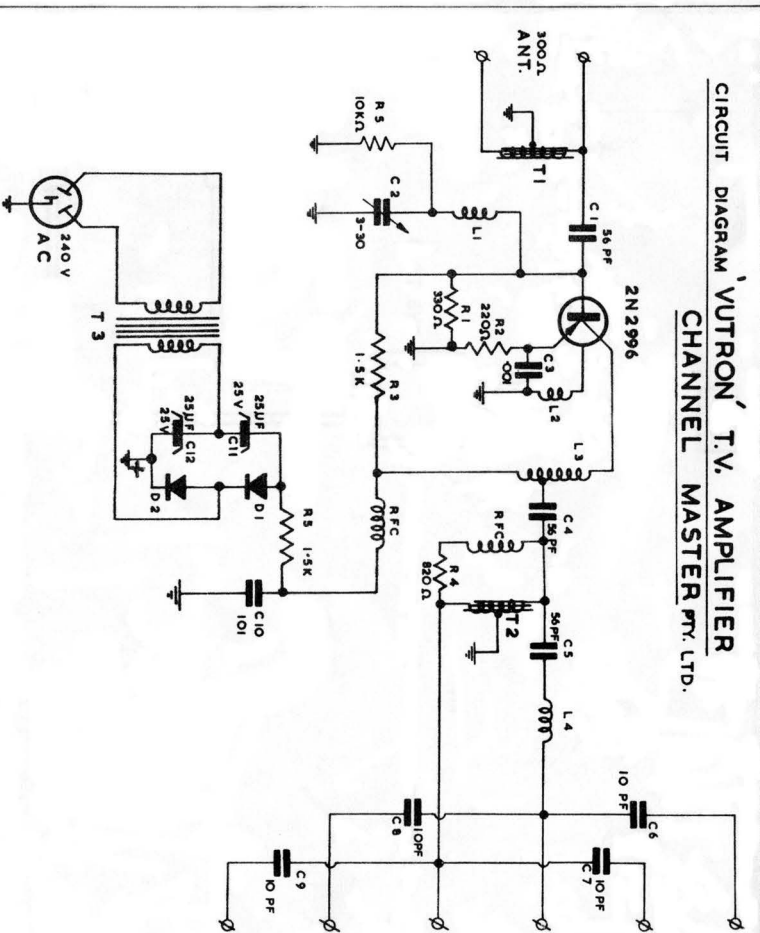
- C10 M ... 75 ohm co-axial cable
- 5501 ... 300 ohm - 75 ohm balun
- FLT 300/S ... flush plate line tap with 300 ohm outlet

- * FLE 300/S ... Line terminating tap with 300 ohm outlet
- 2WSF 75/B ... Reactive 2 way splitter
- 4WS 75/B ... Reactive 4 way splitter
- FO 300/S ... Flush plate outlet



Under favourable conditions the Vu-tron Booster can equally well be employed as distribution amplifier for small multiple TV installations feeding up to 12 TV receivers. However, it is recommended that the installation is constructed with co-axial cable such as the Ferris-Channel Master Low Loss Polythene Foam Cable, Type C10M. A typical example is shown above where correct application of Ferris-Channel Master multiple installation accessories is demonstrated.

CIRCUIT DIAGRAM 'VUTRON' T.V. AMPLIFIER
CHANNEL MASTER PTY. LTD.



CAPACITORS

C1 } -56 PF CER. N 220 500 V
C4 }
C5 }

C2 - 3-30 PF AIR TRIMMER
C3 - .001 UJF HIK CER. 500V
C6 } -10 PF CER. NPO 500V
C8 }
C9 }

C10 -.01 HIK CER. 500V
C11 25 UJF ELECTRO 25V
C12 " " "

COILS

L1 - TRAP COIL - TYPE 8323
L2 - 6 T COIL - " 10,061
L3 - 6 3/4 + 7 1/4 T COIL. 10,129
L4 - 4 T COIL - TYPE 10,073

RECTIFIERS:

D1 } SELENIUM REC. TYPE 10,140
D2 }

RESISTORS

R1 - 330 Ω 1/2 W 10⁷/6
R2 - 220 Ω 1/2 W 10⁷/6
R3 - 1.5 KΩ 1/2 W 10⁷/6
R4 - 820 Ω 1/2 W 10⁷/6
R5 - 1.0 K Ω 1/2 W 10⁷/6

TRANSFORMERS

T1 - BALUN TYPE - 10,120
T2 - " " " " "
T3 - POWER TRANS - 3246

PLASTIC HOUSING TYPE - 02-504
INSULATION PIERCING WASHER
& SCREW TYPE - 03-054

TRANSISTOR TYPE - 2N2996

CHANNEL MASTER PTY. LIMITED

(A Division of Ferris Industries Limited)