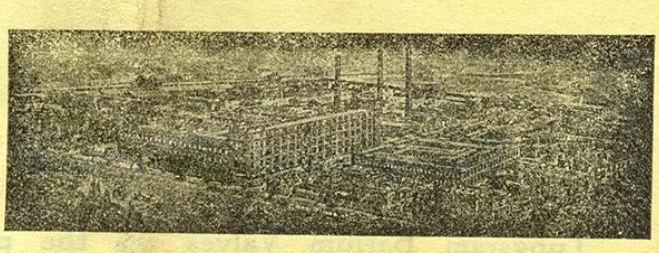
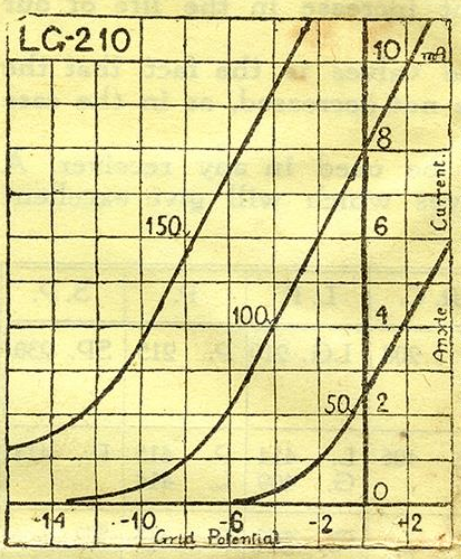


TUNGSRAM BARIUM VALVES

Type LG 210 (Detector and Low Frequency)

for use with a 2-volt accumulator

CHARACTERISTICS

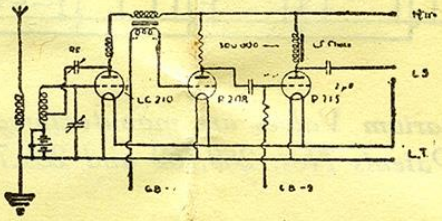


Filament Voltage	**2 Volts max.**
Filament Current	**0·1 Ampere**
Anode Voltage	**50—150 Volts**
Amplification Factor	**10**
Slope (Mutual A. C. Conductance)	**1 mA/Volt**
Impedance (Ohms)	**10,000**
Normal Anode Current	**4 mA**
Total Emission	**20 mA**
Anode Conductance	**100 Micromhos**
Maximum undistorted output at 150 Volts	**100 Milliwatts**

Average constants measured at anode volts 100, zero grid volts.

USE

The **LG 210** is a general purpose valve and is especially suitable as a detector or first stage low frequency amplifying valve. It can also be used as a high frequency valve where **absolute stability** and **freedom from microphonic noises** are essential. When used as detector it may be followed by an intervalve transformer which has a primary resistance of about 1000 to 2000 ohms and a ratio of 3 to 1.



When used as a **grid leak detector** the grid leak should have a resistance of 1 to 2 megohms, and the condenser a value of ·0002 to ·0003 mfd. Used as an **anode bend rectifier** a negative grid bias must be applied as follows: —

Anode voltage	60	90	120	150
Negative grid bias	4½	9	15	21

The values of grid bias in the position of L. F. amplifier are:

Anode voltage	50	100	120	150
Negative grid bias	1·5—2	4·5	6	9

No filament resistance is necessary with this valve, but when used with a 4 — or 6 — volt accumulator, a fixed resistance of 20 or 40 ohms respectively should be inserted in series with the filament.

P.T.O.

Tungsram Barium Valves

Tungsram Barium Valves are the product of protracted research by the scientists of one of the leading Valve, Lamp and Telephone manufacturers of Europe. As may be expected, therefore, they are of the highest possible quality and are comparable with any other valve at present on the market.

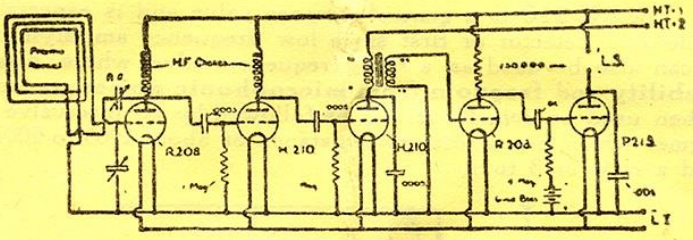
Tungsram Barium Valves are Dark Emitter Valves. The special coating of the filament enables it to be run at an exceedingly low temperature, with a consequent increase in the life of our valves above all others.

A remarkable feature of these valves is the fact that the efficiency is improved by use and is not decreased, as in the case of other makes of valves.

Tungsram Barium Valves can be used in any receiver. A table is shown giving types of valves which will give excellent results in the positions indicated.

	H. F.	Det.	R. C.	L. F.	P.	S. P.
2-Volt Range... ...	H. 210 R. 208	H. 210 LG. 210 R. 208	R. 208	LG. 210	P. 215	SP. 230
4-Volt Range... ...	R. 406 G. 405	G. 407 G. 409	R. 406	L. 414 G. 409	P. 415 L. 414	P. 414
6-Volt Range... ...	HR. 607 LG. 607	LG. 607		G. 607	P. 615	SP. 614

An example of a portable circuit utilising Tungsram Barium Valves.



Tungsram Barium Valves are manufacturea unaer British Patents Nos. 289,762 and 289,763.

NOTICE.

In the event of this valve being returned, the manufacturers are under no obligation to return or replace it, should there be any necessity to break it for the purpose of a thorough examination.

Further Technical Information can be obtained from —

RADIO DEPT.,
TUNGSRAM ELECTRIC LAMP WORKS (Great Britain) Ltd.,
72. Oxford Street London, W. I.