# SMITHS Radiomobile for MGA (1955 to1962)



Early advertisement from October 1955

Electric and Musical Industries (EMI) had been established in 1931 in the UK as the result of a merger between The Gramophone Company and The Columbia Graphophone Company. Next to recording and playing equipment, also radar and television were the outcome of extensive research activities within EMI.

Radio manufacturing became one of their key businesses.

In 1945 EMI and Smiths Motor Accessories Ltd. established a new company named S. Smith and Sons Radiomobile Ltd. (with offices at Great Portland Street, London W1) essentially to sell car radios, initially manufactured and developed by The Gramophone Company, part of the EMI group.



In Europe (including UK) the two names (Radiomobile and His Master's Voice) were used next to each other: the His Master's Voice versions for the "high end" models only. The HMV brand name was eventually dropped in 1962 with the introduction of the 600 series, which only existed as a Radiomobile version throughout the world.

## A summary of Radiomobile types from 1955 to 1962 as fitted to MGA's

After the war the newly established Radiomobile company started the development and manufacturing of car radios. The following summary of 12 Volt Radiomobile car radios (using radio valves) should be seen as guidance only, as the precise dates of introduction of the various versions are often unknown. Remember that Radiomobile radios were supplied and installed by MG dealers after production.

- 1955 1958 200 X Long & Medium Wave for Europe
- 1955 1958 202 X Medium Wave for World excl. Europe
- 1955 1956 220 X Medium Wave for Europe
- 1955 1958 230 R Medium & Short Wave for World excl. N.A. and Europe
- 1956 1958 20 X Long & Medium Wave for Europe
- 1956 1958 22 X Medium Wave for Europe
- 1959 1961 40T Long & Medium Wave for Europe
- 1959 1961 41T Long & Medium Wave for Europe; polarity switch
- 1959 1961 42T Medium Wave for World excl. Europe; polarity switch
- 1959 1961 42TC Medium Wave for World excl. Europe; polarity switch; tone control
- 1959 1961 400T Long & Medium Wave for Europe
- 1959 1961 401T Long & Medium Wave for Europe; polarity switch
- 1959 1961 402T Medium Wave for World excl. Europe; polarity switch
- 1960 1961 50T Long & Medium Wave for Europe
- 1960 1961 51T Long & Medium Wave for Europe; polarity switch
- 1960 1961 52T Medium Wave for World excl. Europe; polarity switch
- 1960 1961 52TC Medium Wave for World excl. Europe; polarity switch; tone control
- 1960 1961 500T Long & Medium Wave for Europe
- 1960 1961 501T Long & Medium Wave for Europe; polarity switch
- 1960 1961 502T Medium Wave for World excl. Europe; polarity switch

### **Manufacturing facilities**

From the early Thirties onwards HMV radio production was centred at EMI's Sheraton Works in Hayes, 15 miles to the west of London. Radiomobile production of (HMV) car radios started in the existing Smiths Cricklewood Works, London NW2, a vast industrial site built in the 1920's and continuously extended in the decades thereafter, housing various Smiths industrial activities including "Motor Accessories".

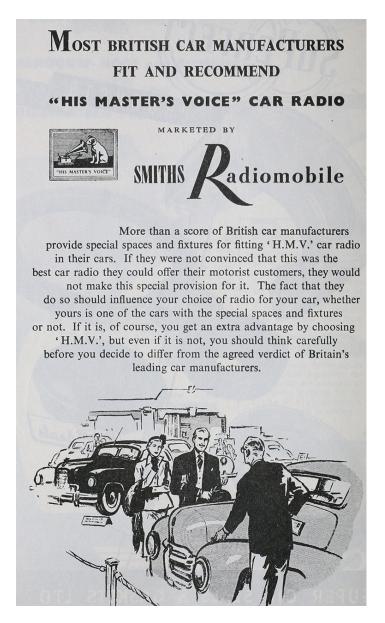
The Cricklewood Works housed next to the Motor Accessories division three other Smiths activities: Industrial Instruments, Aircraft Instruments and the (well known) English Clocks production.

From about 1952 the production of car radios gradually moved to the new Smiths Goodwood Works, North Circular Road (Staples Corner) in London NW2, not far from the Cricklewood Works. The export division of Radiomobile stayed at Cricklewood, as we may conclude from various brochures.

## Radio installations offered for the MGA

We first must take a closer look at the way Radiomobile structured their product portfolio. Before 1955 the programme was in composed of high end and low end versions within each new series of radios. From 1955/1956 onwards the portfolio was much more structured having two distinct levels:

- a "low end" Radiomobile branded "single unit" radio combining receiver and amplifier.
- a "high end" His Master's Voice branded "3-unit" radio (receiver, amplifier and speaker).



Over the period 1955 till 1961 the **Radiomobile** "low end" single units have been coded 20, 40 and 50 series, whereas the "high end" **His Master's Voice** radios were coded 200, 400 and 500 series. It looks like the US delivered "high end" radios gradually were all **Radiomobile** branded while in Europe the His Master's Voice brand was continued. After 1961 the "high end/low end" policy continued for some years but the branding became **Radiomobile** only (starting with the 600-series launched in 1962). The "low end" series remained initially based on the design of the 200 series, without the push-buttons however. The design of the "high end" series moved towards a "De Luxe" version with the His Master's Voice name prominently shown above the push-buttons.

## Model 200 with Long and Medium wave (1955-1957)

The new 200 series, introduced in January 1955, was the successor of the 4260 series and had a more "modern" design with a new HMV logo, but still with 5 pushbuttons.

The 200 series consisted of two different basic versions indicated by the letter corresponding with the Amplifier used: **X**B or **R**B.



#### Model 200X

The receiver units have the same "looks" and only the type plate will tell whether it's a X or R version. For the 200 series receivers, the 4 buttons acted as MW pre-sets and the 5th for choosing LW stations (no presets).



#### Model 200X

Radiomobile offered various choices for push buttons and turning knobs: full black and full white( cream), but also black push buttons with white fronts were an option.



#### Model 200X

Radiomobile also provided a choice of scales in white/white figures or white/red figures. Some radios had a chrome rim around the front.

Note the (plastic) cover over the push buttons; this part is "snapped" to the dial plate with only two little plastic hooks and is therefore often missing after 60 years! Some (European?) versions have "His Master's Voice" printed on the top of this cover.





#### Model 200R

In parallel to the Model 200X there was also a Model 200R to be combined with the more powerful RB amplifier unit.

#### Model 202X

The Model 202X was a popular, simpler version of the 200X with Medium Wave reception only, which was especially sold in the USA. The photos below show versions with cream fronts on the (black) pushbuttons. All 5 buttons now acted as pre-sets for MW stations.

In line with the above, there also was a Model 202R version to be combined with the more powerful RB amplifier unit.





The versions for the USA were Emitron branded to avoid potential brand issues.

## Model 200 Amplifiers

A new amplifier type had been introduced for the 200 series. In order to avoid that later amplifiers could be connected to earlier radios (and vice versa) the new generation had a 5- pin plug instead of the old 8-pin plug system. In addition the loudspeaker cable now had a 3- pin plug instead of the 4-pin system of the previous generation. The "X" range had two versions with a different power output. The new "R" range had an adjustable polarity switch and consisted of 4 types (only 12 Volts versions listed	<image/>
here). The Radiomobile code for all amplifier units was Model 92450, but followed by the amplifier type e.g. /XB or /RB.	<ul> <li>XA 12 V; two valve standard amplifier for 1 speaker; positive to earth; maximum output 2W</li> <li>XB 12 V; three valve "De Luxe" amplifier for 2 speakers ; positive to earth; maximum output 5W</li> <li>XC 6 or 12 V switch; maximum output 2W</li> <li>XD 6 or 12 V switch; maximum output 5W</li> <li>XE 12 V; adjustable polarity; maximum output 2W</li> <li>XF 6 or 12 V switch; adjustable polarity; maximum output 5W</li> <li>RA 12 V; adjustable polarity; 2 valve; maximum output 2W</li> <li>RB 12 V; adjustable polarity; 3 valve; maximum output 5W</li> <li>RC 6 or 12 V switch; adjustable polarity; 2 valve; maximum output 5W</li> </ul>
New (round) 5-pin connector type plugs on XB and RB power units. Speaker plug has 3 pins.	

## Model 230R with Medium and Short wave (1955 – 1960)

The Model 230R was a version that "survived" a number of Radiomobile radio generations as it was used for more than 5 years. The model was still of the "3-unit construction" with a separate Amplifier of the RB type. It had a receiver for MW plus 8 SW bands: 90m, 60m, 49m, 41m, 31m, 25m, 19m, and 16m therefore suitable for a number of non-European and non-NA countries.



The RM 230R was supplied required the more powerful RB amplifier with code 92450/RB. This range of amplifiers consisted of an RA type with single output and the aforementioned RB version suitable

## Radiomobile 20 series (1956 – 1958)

The "20 series", introduced June 1956, marks the beginning of the era of miniaturization, having a compact "single unit" construction. Although it still contains (3) valves it lacks a separate amplifier unit of the previous generations. For the first time this Radiomobile model had a Selenium **Rectifier replacing** the vacuum tubes that had been used sofar.



Model 20X is a MW and LW receiver suitable for both "plus" and "minus" to ground. This was the period in which all car manufacturers gradually changed over from positive ground to negative ground and this new model was suitable for both.

As the photo above clearly shows, the 20 series is closely related to the 200 series: the same front lay-out and knobs have been used, however without the push-





buttons. The Radiomobile brand name is prominently shown below the scale, which had been started with Model 230. The HMV name or logo is no longer used on these "low end" models. Again variations in colour and shape of knobs were available from the factory.



Model 22X is identical to the 20X version, apart from the fact that this is a MW only radio. Note that there was also a Model 30X which was however a "short-wave converter" to be used in combination with any radio to facilitate SW reception using 8 bands.

## Radiomobile 400 series (1958–1960)

The new 400 series replaced the 200 series by the end of 1958 and still had the "3 unit construction". Whereas the receiver unit had 5 valves, the amplifier was now fully "transistorised", replacing the radio valves of the past. As stated before, the His Master's Voice name is prominently shown on these "high end" versions. The new 400 series consisted of three models: Models 400T, 401T and 402T.

Model 400T had LW and MW reception with 5 preset pushbuttons and had positive earth.

Model 401T was in fact identical to the 400T version, but had a polarity switch.



Model 402T also had the polarity switch of the 401T model but was Medium Wave only. Note that on the photo below of a Model 402T, the scale is only showing MC/S (or MHz) values for US customers. Metres are normally used in Europe as we can see on the Model 400T photo above. Note that the 402T shows the Radiomobile brand instead of His Master's Voice. It looks like the US delivered radios now were all branded Radiomobile while the European (including UK) delivered versions were still His Master's Voice



## Radiomobile 40 series (1958 – 1960)

The 40 series (introduced late 1958 or early 1959) was the successor of the 20 series. Whereas the 20 series had a "X" suffix the 40 series had a "T" suffix for "Transistor". The 40 series was almost identical to the 20 series but had 4 valves (instead of 3) and an amplifier with a single "power transistor" having a maximum output of 1.75 W, all packed within a single unit. The speakers should have an impedance of 3 Ohms or 1.75 Ohms, depending on the contacts chosen in the (3 pin) speaker connector.



Model 40T had LW and MW reception; no push-buttons. It was delivered suitable for positive earth. Model 41T was identical but had reversable polarity. Model 42T (photo above) also had the reversable polarity but this was a MW only radio. Finally there was the identical Model 42TC which had "Tone Control" in addition.

## His Master's Voice 500 series (mid 1959 - mid 1961)

Introduced around 1960, the 500T series was the successor of the 400T series. The amplifier units remained identical for the two series. The 500 series also offered four models: Model 500T, 501T, 502T and 530T. The 500 series had "oval" instead of "square" push buttons. It was replaced by the 600T series in September 1961.

Model 500T (positive earth polarity only), was nearly identical to its predecessor Model 400T. In line with the 400 series portfolio, Model 501T was identical to Model 500T but had a polarity switch, whereas Model 502T had MW only (and a polarity switch).



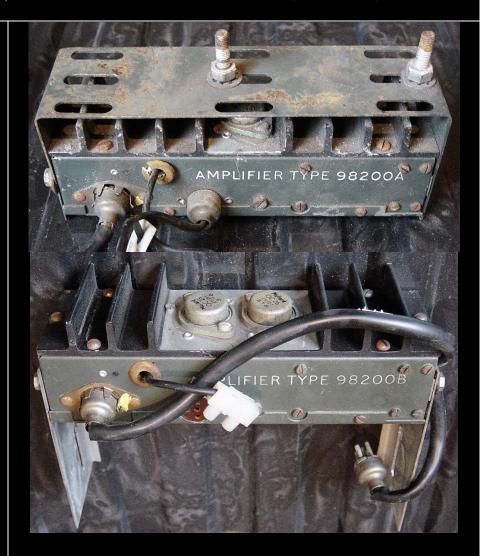


## Amplifier units for the 400 and 500 series (1958-1961)

Two Amplifier units are used: the A or B Type with 1 respectively 2 transistors.

There was also a 98200K amplifier which had an additional heat sink, probably for tropical applications.

Various brackets exist for installing these Amplifiers. The bracket below has Radiomobile code RMO 3320K. Note the large transistor(s) and aluminium cooling fins.



### Radiomobile 50 series (1960 – 1962)

The 40 series was rather short lived as the 50 series replaced the (introduced late 1958) 40 series in 1960. Same model programme as for the 40 series with respectively Model 50T, 51T, 52T and 52TC. The 50 series had 4 valves and 2 transistors, just like the 40 series.



Model 50T is a MW and LW receiver without polarity switch (positive earth only). Note the RH turn knob for band choice with L and M. Model 51T is identical to the 50T however had a polarity switch.

Model 52T and 52TC are identical to the 51T but have Medium Wave only; Model 52TC has in addition "Tone Control". Note that the scale of Model 52T is in MC/S (or MHz) as we have seen on Model 402T

