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RESLO

TECHNICAL DATA
FOR
MODEL MR 1
SEMI-CARDIOID MINIATURE
RIBBON MICROPHONE

SEPTEMBER 1974

SEMI-CARDIOID MINIATURE RIBBON MICROPHONE

MODEL MR 1

Made in England

The Reslo model MR 1 microphone is an improved version of the world famous type RB with a freshly styled slim line case which retains all the important features that contributed to the success of the RB design, including the special design ribbon and magnet assembly. The front and rear shells are crisper and more shallow in appearance, with the main frame being slightly tapered towards the top. A sandwich of various acoustic resistance materials is included in the rear shell to give a semi-cardioid response of the "cottage loaf" type at the mid and upper end of the frequency response. The microphone is manufactured to consistently high standards and is very suitable for high quality speech in professional studios and for general use by the more discriminating semi-professional recordist.

The semi-cardioid field of pickup makes a pair of microphones (suitably matched for a small fee) very suitable for high quality stereo recordings. A special twin mount is available with 5 inch spacing, allowing the microphone heads to face outwards at approx. 45°. Reslo part No A 911.

The ribbon element, consisting of a moulded plastic frame in which the ribbon is mounted, is secured to a high efficiency magnet assembly which in turn is mounted in the main frame by four foam rubber pads. The ribbon is positioned just within the front shell and is protected from excessive air movement by a series of acoustically transparent layers of very fine wire gauze and woven nylon material.

A high quality line transformer is mounted in the tubular body below the hinge mounting, the bottom of which terminates in the Reslo 3 contact cable connector socket. Each microphone is supplied with the appropriate cable connector plug and stand mount, arranged for the microphone to be mounted vertically, which gives the best performance from a ribbon type. The microphone head is hinged so that it may be angled backwards slightly when required for fairly close announcement use, 12 ins (30.5 cm)

Each connector/stand mount incorporates a "stand damper" to reduce microphone stand handling noises and has attached, 5 metres of suitable flexible screened cable.

TECHNICAL SPECIFICATION

Frequency response: Smoothly maintained over the range 50Hz to 20kHz, gently sloping upwards to 3 kHz, substantially level to 12 kHz then falling away to 20 kHz.
Average Values: 50Hz - 10dB, 100 Hz - 6dB, 1kHz OdB, 5kHz + 3dB, 10kHz + 6dB, 15 kHz - 4dB.
See special note 1 for level response and normal "figure of 8" pickup.

Signal Output: The average open circuit voltage generated by a male voice, 12" (30.5 cm) from the microphone in a dead room at normal conversational level.

MR 1/L	(30-50 ohms)	50 to 100 microV
MR 1/M	(600 ohms)	350 to 450 microV
MR 1/H	(Hi-Z)	1.5 to 2.5 milliV
MR 1/H or M	(200 ohm connections)	200 to 300 microV

Polar Response:	Nominal figure of eight with rear lobe partially suppressed at the medium and higher frequencies to give a "cottage loaf" type of response. Average rear response at 500 Hz-3dB, 1 kHz - 4dB, 3kHz - 14dB, 10kHz - 14dB
Ribbon resonance:	The ribbon resonance is set at 60Hz ± 10Hz
Dimensions:	$2\frac{5}{8}$ ins (6.7 cm) top of frame $1\frac{1}{2}$ ins (3.8 cm) width of frame $2\frac{5}{8}$ ins (6.7 cm) length of tubular base
Weight:	Head only 9 oz (0.26 Kg)
Finish:	Satin chrome overall with black rear shell, alternatively matt black frame, satin chrome shells and tubular base with front frame RESLO lettering filled white.
Cable Connector Set:	Each microphone is provided with a vertical mounting 3 pin connector with side entry for the 5 metres sheathed and screened flexible cable. L and 200 ohm versions twin twisted, H and nom. 600 ohm versions co-ax low capacity cable.

SPECIAL NOTES

1. Should the usual "figure of 8" response associated with ribbon microphones be required, remove the set of acoustic pads in the rear shell only, leaving the pads between the magnets and the various gauzes in front of the ribbon. The average frequency response then becomes virtually level from 50Hz to just over 12 kHz.

2. The special acoustic resistance sandwich in the rear shell consists of 5 layers from the magnets outwards as follows: Black felt, fibre glass, black felt, fibre glass and thin polythene. Should these be removed to give the normal figure of 8 pick up and virtually level frequency response they must be replaced in the same order to restore the original performance.

3. The strong permanent magnets incorporated in the MR 1 microphone attract all iron and steel dust particles. Every care must be taken therefore to avoid exposure to magnetic dust, filings, swarf etc. or the performance of the microphone may rapidly deteriorate.

4. Do not blow into the microphone shells, handle carefully and avoid knocks and jolts. Avoid testing the MR 1 microphone with a low resistance ohm meter and employ caution when connecting to transistorised mixers or recorders which have not been in use for some time, so that the surge of current into a discharged first transistor coupling capacitor is avoided and does not stretch or distort the ribbon.

Reslosound Limited reserve the right to vary and improve the technical specification without notice.

IMPEDANCE AND CABLE CONNECTIONS

Each plug connector has colour code dots between the pins.

White =	30-50 ohms	Blue =	500-600 ohms
Green =	200-300 ohms	Red =	Hi-Z (50K ohms)

The Reslo connectors have 3 contacts, that beside the locating tongue is A, that close to it is B, that at a distance is C.

Low and medium impedance microphones are supplied with a twin twisted and screened flexible cable.

High impedance microphones have a co-ax low capacity flexible cable terminated in a tip and sleeve jack plug.

MR 1/L single impedance, 30-50 ohm microphone, has Red to A and Black to B. No connection to C, screening to connector body.

MR 1/M dual impedance microphone, 200 to 600 ohms.
200 ohms impedance has Red to A and Black to B.
No connection to C, screening to connector body.
600 ohms impedance ("floating") is similar to the above except that Black is to C and no connection to B.
To special order a "high impedance" cable set can be supplied making the microphone suitable for certain recorders having 600 ohm but unbalanced and jack plug inputs.

MR 1/H dual impedance microphone, 200 ohms and Hi-Z (50K ohms)
200 ohm impedance has Red to A and Black to B.
No connection to C, screening to connector body.
Hi-Z (50K ohms) has the centre conductor of the co-ax cable to A, no connection to B and the screening split to C and to the connector body.

The cable connector and stand mount is formed from an A.903 side entry connector screwed into an A.940 stand damper at the lower end of which is an AR.225 $\frac{5}{8}$" to $\frac{1}{2}$" thread reducer. This allows fitting to microphones stands having $\frac{5}{8}$" 27 tpi or $\frac{1}{2}$" 26 tpi threads. For E.C.C. countries, a triple thread reducer is provided, allowing stands with "camera" threads to be used if required, AR219.

PERFORMANCE AND WORKMANSHIP

Reslosound Limited have taken every possible care to make a satisfactory and reliable product and each microphone is carefully examined, tested and packed to ensure that it reaches the user in the best possible condition. Should, however, the microphone fail to work properly, it should be returned to the Reslo Works for examination with a label attached, giving details of the unsatisfactory performance date of purchase and name and address of the supplier, user or purchaser. Reslosound then reserve the right to consider on its merits each individual case and to decide what repair or handling charge should be made, if any. In all cases, Reslosound Limited undertake to give the maximum possible assistance to users of their equipment.

MICROPHONE FRONT FACE AND THE SOUND SOURCE

MR 1 microphones with the matt black top frame and both shells finished satin chrome, have the letters RESLO filled white on the front face which should face in the direction of the sound source.
Microphones with satin chrome top frame have the rear shell finished matt black, so the satin chrome FRONT shell should face towards the sound source.
For sounds originating more than 3 ft (1m) from the microphone, the head in the vertical position will usually give the best results.

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