

INTRODUCTION

The McKAY DYMEK Tuner bears testimony to the painstaking research and development of the AM3 design and production engineers. New standards of performance have been achieved with top quality components from the world's best suppliers.

Each and every AM3 unit passes rigid final tests ensuring that it complies with, or exceeds, the published specifications.

A good quality sound reproduction system demands that the very highest standards be maintained in all components of the chain. The aim must be to have amplifier and loudspeaker standards commensurate with tuner quality, since the combined system performance can be limited by the characteristic of any one component.

PRECAUTIONS

DO read the instructions thoroughly before operating your unit.

DO allow adequate ventilation.

DON'T operate the equipment with the cover removed.

DON'T increase any fuse rating beyond that specified.

DON'T connect or disconnect any auxiliary equipment to the unit while it is switched on.

DESCRIPTION

The McKAY DYMEK AM3 tuner is capable of reproducing, with extremely low distortion, the programme of stations transmitting in the broadcast band. The tuner is designed for use with any high quality audio amplifier, whether valved or transistorised. Optimum reception from local or distant stations is assured by a choice between sharp or broad bandwidths, and a meter indication of signal strength. An aerial attenuator is included to prevent overload distortion on strong local stations.

A sharp notch filter tuned precisely to 10 kHz is included in the output circuit. This provides adequate attenuation of adjacent channel heterodyne whistles.

The antenna input circuit incorporates an adjustable rejector for interfering signals in the I.F. range.

INSTALLATION

The AM3 tuner is designed for "free standing" on a shelf or table. If desired the unit can be built into a cabinet or console. It is advisable to install a supporting shelf, or runners, to take the weight of the unit. Care must also be taken to provide adequate ventilation.

The tuner operates from a 105/125 Volt 50-60 Hz supply. For local reception the ANTENNA terminal should be connected to a short length of well insulated wire. The GROUND terminal can be connected to a "ground", such as a water pipe, if any electrical interference is experienced. Use of the Radio Antenna and Ground terminals fitted in most homes is recommended where more distant reception is desired.

THE ANTENNA WIRE SHOULD BE KEPT AS FAR AWAY FROM THE AMPLIFIER SPEAKER LEADS AS POSSIBLE.

The OUTPUT socket on the rear panel must be connected to your amplifier by a shielded coaxial cable. The outer shield of the cable should be connected to the body of the plug provided and the inner conductor to the centre pin. Select HIGH or LOW output sockets according to amplifier requirements.

A fine setting of the output level can be obtained using the ADJUSTMENT control on the rear of the tuner. To set this, turn the set on, select a station and set the VOLUME control on the amplifier to its normal-listening-level position. Now turn the ADJUSTMENT to give about the same sound level from the amplifier set on TUNER as when it is set on DISC.

TUNER OPERATION

1. Press the ON button, the dial should light up and the tuning meter needle will move to the left.
2. Select SHARP and DISTANT.
3. To tune a station correctly use the TUNING control to obtain a maximum deflection to the right of the tuning meter needle. If the needle moves to the right hand extreme of the meter this indicates the station is too close or too strong and LOCAL should be selected. Retune after operating the DISTANT/LOCAL switch.

4. Once the receiver is accurately tuned select BROAD. *DO NOT RETUNE* even if the tuning meter needle should not now indicate a maximum.

NOTE: THE TUNER WILL ONLY REPRODUCE THE FULL FIDELITY OF A STATION WHEN IT IS TUNED ACCORDING TO THE ABOVE PROCEDURE. ALWAYS SELECT "SHARP" BEFORE RETUNING AND WHEN RECEIVING WEAK OR DISTANT STATIONS.

LOGGING STATIONS

A special feature of the AM3 tuner is the provision of a logging scale. This is the linear, calibrated scale on the dial below the frequency numbers. This provides the user with a more accurate and convenient reference when locating a transmitting station.

For example, if a station is found to have a log reference of 67, then the set could be retuned to that station at any time simply by setting the pointer to 67, and then making the precise tuning adjustments outlined above.

If unsatisfactory performance is experienced, contact your dealer or McKAY DYMEK agent.

TYPICAL AM3 TUNER TECHNICAL SPECIFICATION

TUNING RANGE	525kHz - 1605kHz
SENSITIVITY	2 μ V for more than 10dB Signal to Noise Ratio (SHARP and DISTANT selected)
BANDWIDTH	3dB points SHARP \pm 3.0kHz BROAD \pm 8.7kHz (1mV @ 1MHz input, BROAD and DISTANT selected)
DISTORTION	1kHz 30% Modulation 0.5% 1kHz 50% Modulation 1.0% 1kHz 80% Modulation 1.5% (1mV @ 1MHz input, BROAD and DISTANT selected)

AGC CHARACTERISTIC	Less than 6dB output variation for an input level change of 10 μ V to 10mV (BROAD and DISTANT selected)
AUDIO OUTPUT	HIGH Socket 250mV r.m.s. LOW Socket 25mV r.m.s. (Preset gain control at maximum setting BROAD and DISTANT selected. 1mV @ 1MHz input, 1kHz 30% modulation)
10kHz REJECTION	45dB (Fixed output filter)
I.F. REJECTION	25dB (Fixed 455kHz filter)
I.F. REJECTION	23dB (Input filter, adjustable 400kHz - 500kHz)
POWER SUPPLY	105 - 125V, 50 - 60Hz
POWER CONSUMPTION	5VA max.
WEIGHT	7 lbs (3.2 kg) 16" (410mm) Wide 8" (200mm) Deep
DIMENSIONS	4½" (115mm) High

TYPICAL ZERO SIGNAL DC TRANSISTOR VOLTAGES

Conditions of measurement: 115 V mains supply. (Voltages in high resistance circuits measured with a VTVM.)

		AM3 TUNER		
		C	B	E
RF Section M1207	VT1	9.5	2.1	1.5
	VT2	10.5	2.0	1.4
	VT3	11.0	2.2	1.7
IF/AF Section M1209	VT1	10.0	2.1	1.4
	VT2	2.2	0.25	0
	VT3	0	0.4	0.4
	VT4	4.3	2.0	1.4
10 kHz Filter Section M2613	VT1	10	3.4	2.8