

the TURNER co.
Cedar Rapids, Iowa

250 Series microphone specifications

turner 250 Series

specifications

Figure 1
Model 250 Microphone



GENERAL:

The 250 series is headlined by models 250, 251, and 256 the three models in the series with exclusive new triple switching action. A touch bar on-off switch with a locking lever for convenience in extended "talks" and an auto-lift switch in the base of the microphone. Lift it up, it's on — set it down, it's off. Plus a switch in the base to disable the Auto-lift switch if that feature is not to be used in a particular application.

All models in the series feature single unit die cast construction. One piece only. No accessories needed.

Excellent for use as police dispatcher, control tower, taxi dispatch, or paging in restaurants, bowling alleys and other communications fields, the model 250, (hi impedance dynamic) and 251 (low impedance) dynamic are rugged yet sensitive units. Both feature Turner's "Dynaflex" plastic diaphragms which are capable of withstanding extremes of both temperature and humidity. For line shorting switching, specify model 257 (for 250) or 258 (for 251).

Models 252, 253, 254X and 254C complete the series. Models 252 (hi impedance, dynamic) and 253 (low impedance) have a chrome finish, and are without the auto-lift switch, and have 7' cable.

The Model 254X is a crystal microphone with a gray hammer-tone finish and 7' cable. The model 254C has a ceramic interior. Models 254X and 254C are wired for switch relay operation. Models 254 and 256 are excellent for amateur communications of all type. For line shorting switching specify model 259.

The hi impedance dynamic models, 250, and 252 should be used with an amplifier having a high impedance input of 100,000 ohms or more. The 150 ohm models, 251, and 253 should be used with an amplifier having an input of from 50 to 250 ohms. Care should be taken when installing microphones to see that the cables do not run parallel to A.C. power lines for long distances as hum may be induced into the microphone circuit.

The crystal microphones in the series, models 254 and 256 should be used with an amplifier having an input resistance of 1 megohm or more. Additional cable may be added without changing the frequency response, however, the addition of 20' of low capacity cable will result in a loss in output level. Avoid any use which might subject the microphone to excessive heat as this will permanently damage the microphone interior.

SPECIFICATIONS:

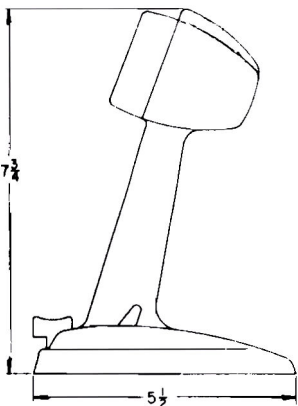


Figure 2

TYPE
IMPEDANCE
RESPONSE
OUTPUT LEVEL
(RE: 1 VOLT
PER MICRO-BAR)
CABLE
CASE
FINISH
DIMENSIONS
WEIGHT
POLAR PATTERN
SWITCHES AND
WIRING, SEE FIG.

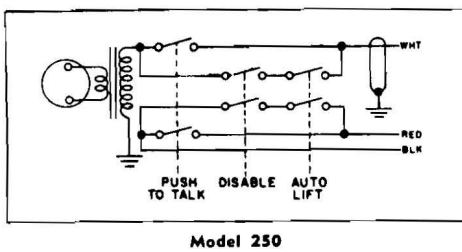
	250	251	252	253	254C	254X	256	257	258
TYPE	Dynamic	Dynamic	Dynamic	Dynamic	Ceramic	Crystal	Crystal	Dynamic	Dynamic
IMPEDANCE	Hi	150	Hi	150	Hi	Hi	Hi	Hi	150
RESPONSE		60-10,000 c.p.s.			80-7,000 c.p.s.				
OUTPUT LEVEL (RE: 1 VOLT PER MICRO-BAR)	-52	-52	-52	-52	-54	-48	-50	-52	-52
		Per Hi Z				Per Hi			Per Hi Z
CABLE	20'	20'	7'	7'	7'	7'	20'	20'	20'
CASE	(All Models) Die Cast Zinc Alloy								
FINISH	Chrome	Chrome	Chrome	Chrome	Painted	Painted	Chrome	Chrome	Chrome
DIMENSIONS	(All) See Figure 2								
WEIGHT	3 lbs.	3 lbs.	3 lbs.	3 lbs.	2 1/2 lbs.	2 1/2 lbs.	2 1/2 lbs.	3 lbs.	3 lbs.
POLAR PATTERN	(All) Omni Directional								
SWITCHES AND WIRING, SEE FIG.	3	4	5	6	7	7	8	9	10



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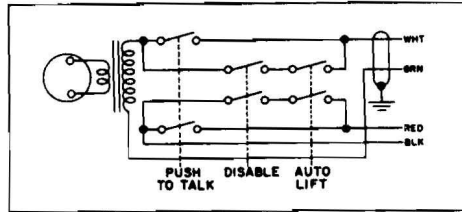
TURNER model 250 Series microphone specification

Figure 3



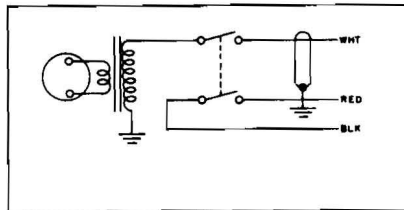
Model 250

Figure 4



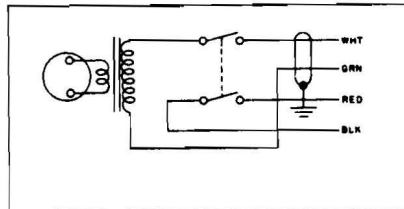
Model 251

Figure 5



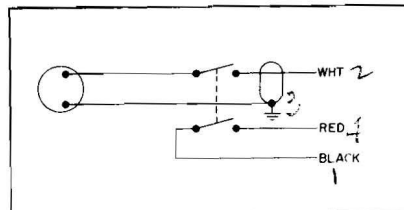
Model 252

Figure 6



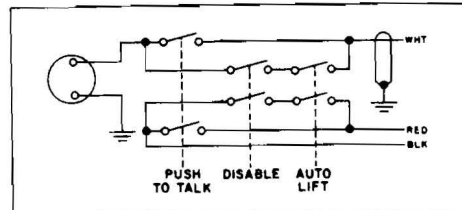
Model 253

Figure 7



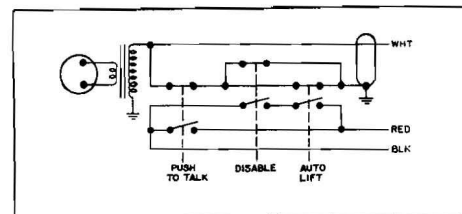
Models 254X and 254C

Figure 8



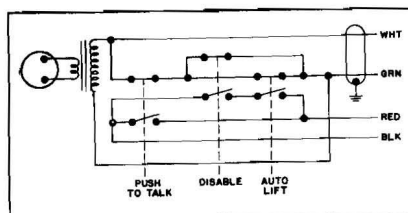
Model 256

Figure 9



Model 257

Figure 10



Model 258

RELAY OPERATION:

All models come with either three conductor (one shielded) or four conductor (two shielded) cable to allow the installer to wire for external relay operation.

CAUTION:

The amplifier chassis and other associated equipment should be connected to an earthen ground to avoid shock hazard during operation of the system.

ARCHITECT-ENGINEERS SPECIFICATIONS:

The microphone shall be a pressure operated dynamic, Turner Model 250 (251*) or equivalent. Frequency response shall be uniform from 60-10,000 c.p.s. (60-13,000 c.p.s.) and shall be substantially independent of direction to the source of sound. Sensitivity shall be -52 db at hi impedance (ref. 1 volt per dyne per cm²) and RETMA (GM) —146 db at 150 ohms.

The case shall be of one piece die cast zinc alloy with satin chrome finish. Dimensions shall be 5½" deep x 7¾" high x 3¾" wide. The diaphragm shall be of "dynaflex" plastic, having high impact strength and shall be independent of the effects of temperature and humidity. Microphone impedance shall be 25,000 ohms (150 ohms). * Cable shall be black three conductor, one shielded (four conductor, two shielded)* 20 ft. in length. The microphone shall be wired for relay operation. The microphone shall have the following switching arrangements: (1) Touch front bar to talk; (2) lift switch in base (3) on-off lever lock switch on the side of the microphone base and a switch to disable the lift switch in the base (underside). The weight of the microphone shall be three pounds including cable.

*When specifying model 251, substitute the values in parenthesis.

GUARANTEE:

All Turner microphones are individually and thoroughly tested before leaving the factory and are guaranteed against defective materials and workmanship for one year, providing that instructions are fully complied with and that units are not opened or tampered with in any way.



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