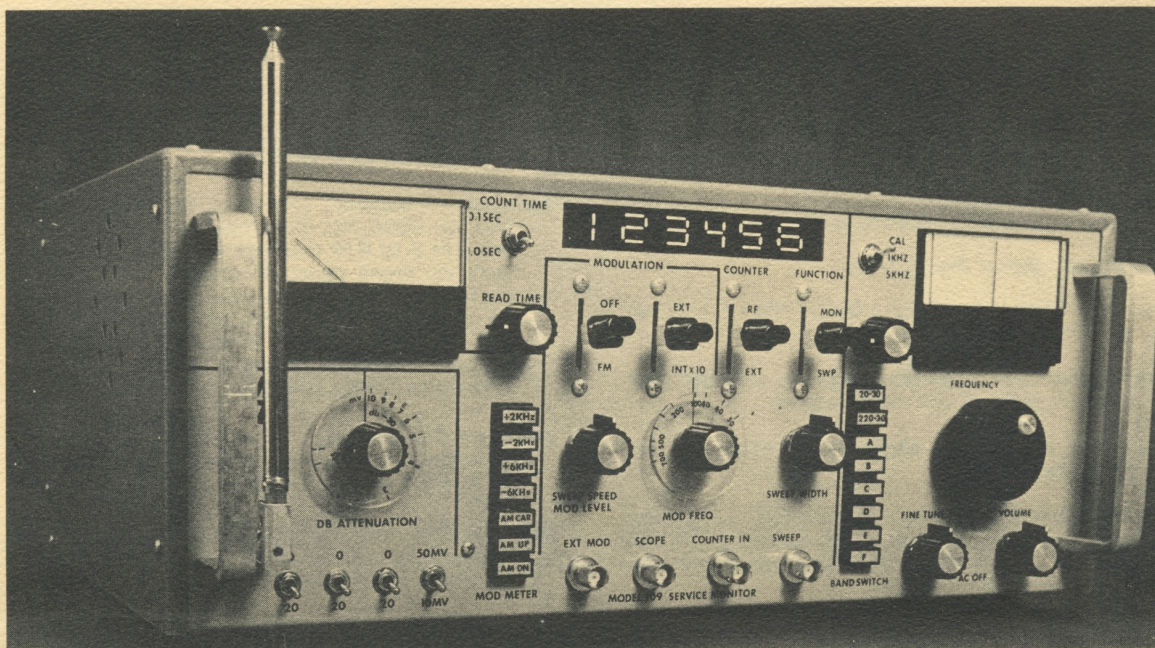


SCANNED BY K6AET

LAMPKIN 109

COMMUNICATIONS SERVICE MONITOR



FEATURES

Measure and generate frequencies to accuracies of better than 1 part per million.

Eight digit LED frequency display.

Capability of eight 12 MHz bands.

Measure AM modulation (0-100%) and FM modulation *(2 kHz and 6 kHz scales).

Two band internal modulation.

Optional error meter*, sweep function* and 12 VDC operation.*

109 communication service monitor has full capability to handle service requirements of the CB service industry. By use of optional plug-ins, it can be customized to perform 2-way communication testing through 512 MHz.

*Optional at additional cost.

Service Monitor

The Lampkin 109 Service Monitor is designed especially for the needs of the dealer/service shop. This instrument provides the technicians with the capability to measure and generate frequencies, monitor single side band, measure AM percentage, generate CW and AM, and serve as a digital counter from 50 Hz to 35 MHz.

This instrument exceeds the requirements for present CB servicing and yet is designed to easily accommodate future growth. If Band E is activated a 210-222 MHz band and FM deviation feature can be quickly added and at nominal cost. As the service shop grows, up to six other 12 MHz bands in addition to CB can be added to allow full servicing of marine, aviation, and business frequencies through 512 MHz. Other options allow the addition of a frequency error meter, sweep function and 12 volt DC operations.

**LAMPKIN
LABORATORIES
INC.**

SCANNED BY KSAET

LAMPKIN 109

SERVICE MONITOR

SPECIFICATIONS

Frequency Range - For measurement of transmitting frequencies or of received signals, and for generation:

Band 1: 20-32 MHz

Band 2: 2-8. Any 12 MHz band to 512 MHz

Resolutions - Better than ± 1 Hz.

Frequency Meter Accuracy - Better than 1 part per million ($\pm 0.0001\%$).

Internal Standard Accuracy - Stability is better than 1 in 10^6 (voltage and temperature).

Amplitude Modulation Monitoring - Measures AM percentage 0-100%.

FM Deviation Monitoring - (Optional)* - Measures peak FM deviation, two meter scales 0-2 kHz and 0-6 kHz. Has scope output for viewing demodulated waveform.*

Sensitivity - 1 mV worst case, 200 μ V nominal.

Counter - LED digital display of from 50 Hz to 35 MHz.

Error Meter - (Optional)* With 1 kHz and 5 kHz full scale readings permits simultaneous measurement of carrier frequency error and FM deviation. NOTE: FM option must be included.*

Output Level - 50 mV rms to less than 0.1 μ V controlled by a 20 db variable attenuator, three 20 db step attenuators, one 14 db step attenuator,

and one external 20 db fused pad. A 40" telescoping antenna is supplied.

Modulation - Internal, two band, 50 to 600 Hz and 500 to 6000 Hz. External, 50 to 10,000 Hz, requires 3 to 4 V rms into 600 ohm load, receptacle on front panel. Frequency of internal or external modulation can be checked with internal counter. AM, variable from zero to 100% - FM, variable up to 25 kHz peak deviation (optional)*. Sweep, generate swept frequencies with up to 1 MHz sweep width (optional)*.

Ambient Temperature - The CSM will operate to specifications in ambient temperatures from 0°C (+32°F) to 50°C (+122°F).

Spurious Products - Will be greater than 40 db down, referred to carrier, with ± 100 kHz or $\pm 0.1\%$ of the desired frequency.

Power Supply - 120 VAC, 50-400 Hz, 25 watts nominal voltages. 12 VDC and 220 VDC are optional.*

Warm-up Time - None - ready for use instantly.

Net Weight - 17 pounds.

Size - 6 $\frac{3}{4}$ " high x 17" wide x 11" deep.

Guarantee - One year warranty against defects in material and workmanship.

*Optional at additional cost

109 SERVICE MONITOR OPTION LIST

109-00 Basic Instrument

109-10 Error Meter Function*

109-20 FM Deviation Function*

109-30 12 MHz Bands

109-40 Carrying Case

109-50 D.C. Option

109-60 20 db Fused Pad

109-65 Package 4 fuses

109-70 Sweep Function

*109-10 and 109-20 options must be purchased together.

LAMPKIN LABORATORIES INC.

P.O. Box 9048 • Bradenton, Fla. 33506 • Ph. 813 746-4175

8400 9th Ave N.W. 33505

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Lampkin Laboratories Inc.



8400 Ninth Avenue N.W.
P. O. Drawer 2048
BRADENTON, FLORIDA 33506

A SUBSIDIARY OF PRECISE POWER CORPORATION

Phone (813) 746-4175

FM Associates
904 Mantrose Dr
Greensboro, NC
(919) 294-2754

109 SERVICE MONITOR PRICE LIST

109-00	Basic Instrument	\$1,550.00	✓
109-10	Error Meter Function*	150.00	✓
109-20	FM Deviation Function*	125.00	✓
109-30	12 MHz Bands		
	A. 220-232 MHz	70.00	
	B. 0-21 and 40-52 MHz	60.00	✓
	C. 10-22 and 30-42 MHz	60.00	✓
	D. 110-122 MHz	70.00	
	E. 140-152 MHz	70.00	
	F. 150-162 MHz	70.00	✓
	G. 160-172 MHz	70.00	✓
	H. 450-462 MHz	110.00	✓
	I. 460-472 MHz	110.00	
109-40	Carrying Case	50.00	
109-50	D.C. Option	65.00	
109-60	20 db Fused Pad	20.00	✓
109-65	Package 5 fuses	10.00	✓
109-70	Sweep Function	70.00	✓

*109-10 and 109-20 options must be purchased together.

Terms of Sales: All shipments are made F.O.B. Bradenton, Fla. Florida residents add 4% sales tax or furnish certificate of registration number. Terms are 2% 10 days, net 30 for customers with approved credit. Otherwise, shipment is made C.O.D. or cash with order.

Repairs: Please contact factory before returning any equipment. All repairs should be sent prepaid, including detailed information concerning any problems with the unit. (We pay one-way transportation on warranty repairs.)

Guarantee: Lampkin equipment is guaranteed against defects in material and workmanship for one year from date of sale.

Prices effective January 1, 1976. Subject to change without notice.

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	I. 450-462 MHz	110.00
	J. 460-472 MHz	110.00
109-40	Carrying Case	50.00
109-50	D.C. Option	65.00
109-60	20 db Fused Pad	20.00
109-65	Package 5 fuses	10.00
109-70	Sweep Function	70.00

(*109-10 and 109-20 options must be purchased together.)

Model 701	CB Output Console - WATT METER	95.00
Model 303	Two Tone Generator	390.00
Model 501	Oscilloscope	390.00

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