

3M BRAND PROFESSIONAL AUDIO RECORDER



SCHEDULED MAINTENANCE

Mincom Division **3M**
COMPANY

300 SOUTH LEWIS ROAD • CAMARILLO, CALIFORNIA 93010

WHO? WHAT? WHY?

Mincom division of 3M Company, a perennial leader in the field of Aerospace Telemetry Recorders, entered the professional audio hardware field in 1966 with a line of outstanding Recorders. The entry into an already highly competitive market, at the leader level, was made possible through the marriage of tape recording knowledge gained through research in Audio Recording Tape by 3M Company, and manufacturing excellence provided by Mincom. These two ingredients in proper proportion resulted in a recorder that has become the "work horse" of the recording industry.

1.

The demand for increased multi-track recording, overdub and exotic mixing techniques has caused audio recorders to become extremely intricate devices. This ultra-sophistication, coupled with the desire for continuing optimum performance, places a greater demand on your maintenance effort. To insure that your recorders continue to provide top-notch results, Mincom has designed a complete range of maintenance programs. These unique programs are intended to support this new breed of audio equipment with rapid parts availability and technical know-how that can only be offered by the people who build them.

This "Scheduled Maintenance Program" is coordinated through our home office in Camarillo, California or through our Field

Service and Repair facility in Cheverly, Maryland. Its options and features are explained in the following pages. We feel confident that among those listed is one that will fill your needs.

The last section of this booklet provides information about our Service and Technical Training facilities, designed and located with you in mind.

2.

For full details, contact one of the offices below:

Mincom Division, 3M Company
300 South Lewis Road
Camarillo, California 93010
(805) 482-1911
(TWX) 910-336-1676

Mincom Division, 3M Company
4701 Lydell Avenue
Cheverly Industrial Center
Cheverly, Maryland 20781
(301) 773-5050
(TWX) 710-826-0463



MAINTENANCE PROGRAMS

Mincom has three specific maintenance programs for the 3M Brand Professional Audio Recorders. These programs are designed to:

1. Avoid costly downtime for unexpected failures.
2. Insure top equipment performance through regularly planned maintenance and calibration.
3. Help you budget your maintenance costs in advance.

3.

OPTIONAL PROGRAM

In addition to the three specific Scheduled Maintenance Programs listed on the next page, Mincom can establish an "All Inclusive Program" of total Recorder responsibility. A program of this nature would be specifically tailored to your exact requirements upon special request.

4.

HERE THEY ARE:

	PLAN "A"	PLAN "B"	PLAN "C"
Scheduled Preventive Maintenance	One visit every month. A total of twelve preventive maintenance visits per year.	One visit every two months. A total of six preventive maintenance visits per year.	One visit every six months. A total of two preventive maintenance visits per year.
Emergency Calls	As required.	Six calls per year. All others charged at standard rate.	Three calls per year. All others charged at standard rate.
Total Maintenance Time	As required.	Twelve calls.	Five calls.
Parts	All required except magnetic heads.	All required except magnetic heads.	All required except magnetic heads.
Advantages	This plan eliminates all customer maintenance responsibilities. The monthly maintenance visits keep recorder performance at manufacturer's specifications while the emergency call feature provides on-call service in case of machine failure.	This plan provides complete preventive maintenance coverage of your equipment at frequent intervals for optimum equipment performance and at the same time fills the need for emergency service.	This plan provides a complete system checkout and calibration twice a year while supporting the equipment with emergency calls.

5.

6.

WHAT DO YOU GET FOR YOUR MONEY?

SCHEDULED PREVENTIVE MAINTENANCE VISITS:

1. Each visit is scheduled.
2. All maintenance and alignment is performed by a factory-trained Field Service Engineer.
3. During his visit he will:
 - a. Clean recorder components including capstan, capstan idlers and magnetic heads.
 - b. Check operating voltage.
 - c. Check/replace indicator and photocell lamps.
 - d. Check/replace relays in logic board and outboard control boxes.
 - e. Check fuses for proper types/values.
 - f. Check/adjust automatic mode devices.
 - g. Adjust capstan drive belt tension.
 - h. Adjust capstan idler pressure.
 - i. Adjust tape lifter.
 - j. Align all Reproduce Playback Card equalizers for correct level at all frequencies.
 - k. Calibrate reproduce output level.
 - l. Check record and reproduce head azimuth.

7.

- m. Adjust record level to specifications.
- n. Adjust bias and pre-emphasis for correct frequency response.
- o. Degauss magnetic heads and adjust noise balance for minimum noise level.
- p. Check all signal electronics and automatic control systems for correct operation.

EMERGENCY CALLS:

1. Your factory representative is as close as your telephone — in many cases your equipment will be back on the line within minutes after the arrival of the field engineer. Even in extreme cases a matter of a few hours is usually all that's required to return your recorder to an optimum operating status.
2. No maintenance service is any better than its parts availability — we stock parts on both coasts.

8.

SERVICE

The prime objective of our Field Service Department is to provide you with efficient and complete maintenance of your equipment. Our Field Service group specializes in on-call and emergency service.

Our Factory Service facility is responsible for the repair, overhaul and update of equipment returned to the factory. Factory Service prides itself on fast turn-around time.

9.



TRAINING

Training courses are available on most major Mincom equipment lines. The training courses present a detailed discussion of the equipment to the schematic level, including advance alignment, troubleshooting and maintenance procedures. The student becomes proficient in operation, alignment and maintenance of the equipment. Special courses are available, at the request of the customer, that will reflect his particular requirements.

10.





3M BRAND PROFESSIONAL
AUDIO RECORDER
PLANNED MAINTENANCE PROGRAM

PRICE LIST

Plan A	\$1500.00
Plan B	\$ 900.00
Plan C	\$ 480.00

*Prices subject to change without
prior notification
PAR/PM - 4/70