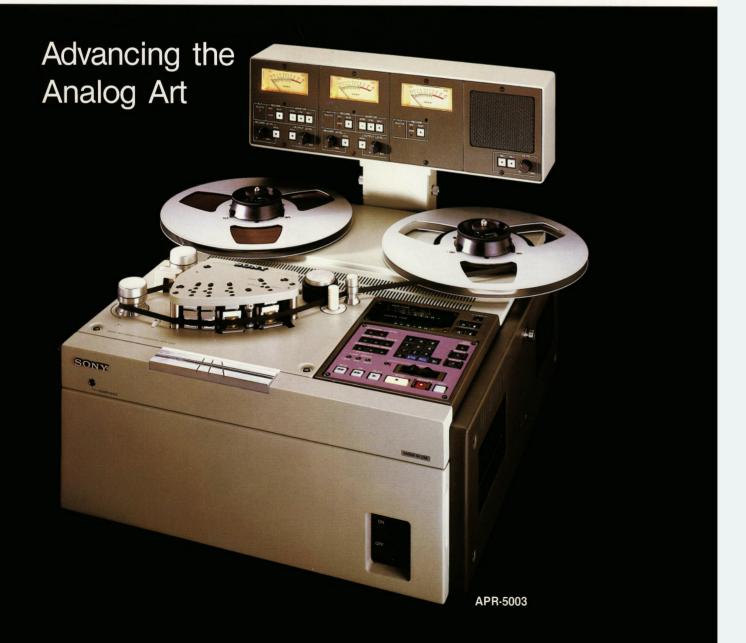
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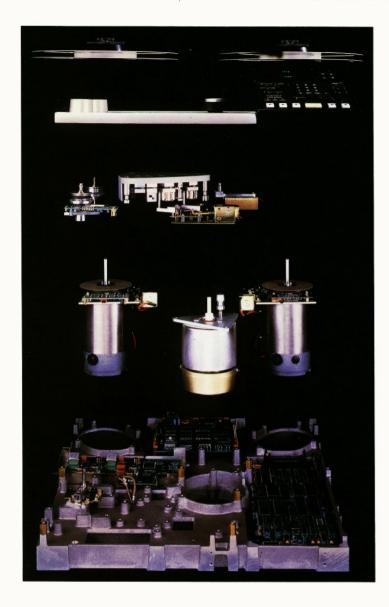
# SONY AUDIO RECORDERS APR-5000 SERIES



# AN ENTIRELY NEW GENERATION OF ANALOG AUDIO RECORDER/REPRODUCERS



# A NEW GENERATION TAPE TRANSPORT PROVIDES SUPERB RELIABILITY AND PERFORMANCE



Built on a rigid cast chassis, this new transport system features high torque DC spooling motors and a proven DC capstan motor design. An angled tape path makes head accessibility for editing easier than ever before, while maximizing the head wrap angle with a minimum number of surfaces touching the tape.

The transport is controlled by a 16 bit microprocessor, and the control panel shown below provides all customary machine functions as well as MVC (Manual Velocity Control). The processor manages both transport "housekeeping" functions and an audio section.

Tape tensions, speed servo control, a thirty memory programable AutoLocator, and audio alignment are among its responsibilities. On the APR-5003 center track time code unit, a built-in time code generator is provided as well as an internal chase/lock capability

which allows the machine to synchronize to incoming timecode-EBU and SMPTE (Drop/Non-Drop). It is also possible to cue up any desired point by the 10 keys on the control panel. A varispeed range of ±50% is included. making the transport a versatile tool for both music recording and broadcast applications.



APR-5003 control panel

# **Built-in Monitoring Facility**

A look at the APR-5000 series monitor/metering housing reveals a modular approach to format conversions. This compact assembly provides the controls professionals require, including a CAL (Calibration) position for the level controls. Each channel module contains metering, bias and erase confidence LED's, record ready switching and record/output level controls. Monitoring is switchable among input signals, output signals from the sync head, and output signals from the repro head. In addition, monitoring from the sync head also ensures punch in/out. The monitor speaker and it's ON/OFF switches are standard equipment.



APR-5001



APR-5002/APR-5002D/APR-5002H



APR-5003



# "Intelligent" Head Assembly Speeds Format Conversion

The transport's mechanical design provides for easy tape format/track conversions. Head block units can be interchanged by removing just three screws, and each contains an identity code switch which automatically changes alignment presets.

The head block provides information concerning the number of tracks, speed range, and tape width, to enable automatic optimization of transport ballistics for alternate reel masses.

# Digitally Controlled Electronics Make Alignment Faster and Easier Than Ever Before

A flip-down control panel allows one to pre-set three alternative alignments per speed. For a busy facility, this approach virtually eliminates time-consuming realignments with changing tape formulations. It also provides easy accessibility to the audio electronics and modular power supply. The user-friendly keyboard features rapid set up adjustments for levels

and equalization, and "double function" keys offer both gap compensation (repro head/sync head) and record compensation (feed forward/feedback adjustments) for the discriminating engineer. After the "individual" track select key is used to trim channels to one another, an "all" track select key may be used for rapid calibration of the machine in areas where channel correspondence is vital (stereo versions, for example). After all of machine alignment parameters have been programmed, they can be stored as one of three preset memories as 8-bit digital data. These are used to adjust for any of the following: various tape formulations, reference levels, bias levels, or alternate equalization standards. The parameters associated with a given head block unit can be written on a removable user labels (supplied) which can be stored with the head block for later reference.



#### SYSTEM CONFIGURATIONS

MODEL	DESCRIPTION
	Recorder/Reproducers
APR-5001	Audio Recorder (Mono, High Speed) 12 1/2" reel 1/4" signal channel recorder/reproducer, 7 1/2, 15, 30 ips
APR-5002	Audio Recorder (NAB, High Speed) 12 1/2" reel 2-channel, NAB standard recorder/reproducer, 7 1/2, 15, 30 ips
APR-5002D	Audio Recorder (DIN, High Speed) DIN Head (0.75mm guard band, full track erase) version of APR-5002
APR-5002H	Audio Recorder (1/2", High Speed) Half inch stereo format version of APR-5002
APR-5003	Audio Recorder (3-channel, High Speed) 12 <sup>1</sup> / <sub>2</sub> " reel, NAB standard 2-channel recorder/reproducer, with IEC center track time code record/reproduce functions
	Option
APR-OP5010	Editing Scissors Machine-mounted editing scissors 1/4" format only
	Accessories
RM-5010	Remote Control Unit Transport remote control for APR-5000 series, includes 10m cable
SU-14	Tape Recorder Stand
APR-HB5001	Headblock Unit Mono Headblock Assembly
APR-HB5002	Headblock Unit NAB 2 Track Headblock Assembly
APR-HB5002D	Headblock Unit DIN 2 Track Headblock Assembly



#### **APR-5001**

The APR-5001 full track mono version is suitable for on-air sound effect use by broadcasters.



#### **APR-5002**

The APR-5002 2-channel version is designed as a multi-purpose master recorder for broadcasters, recording studios, and post production houses.

#### APR-5002D

The APR-5002D is the DIN head version of the APR-5002 2-channel recorder/reproducer.



#### **APR-5002H**

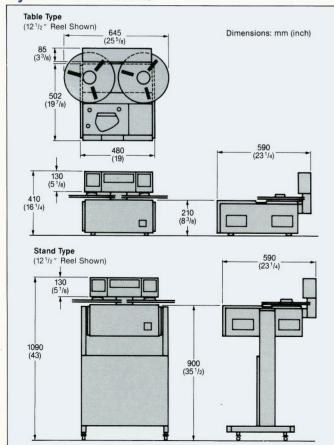
The APR-5002H is a ½" tape width version of the APR-5002 2-channel recorder/reproducer. It is designed as a high-quality master recorder for recording studios.

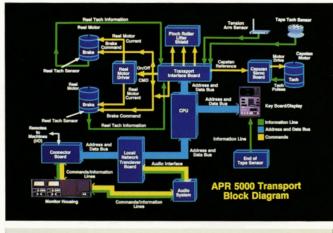


#### **APR-5003**

The APR-5003 IEC center track time code version is specially targeted to meet the requirements of broadcasters and post production houses. Featuring the ability to generate, record and reproduce a time code track in the "guard band" found on NAB standard 2-track recordings, the APR-5003 is ideal for lock up to VTR's or other ATR's. The AutoLocator readouts on this machine show time code in hours, minutes, seconds and frames. AutoLocate routines can be performed accurately to time code addresses. Microprocessor intelligence ensures the coincidence of code to recorded/reproduced audio, and serial control capability makes the APR-5003 ideal for integration into video editing systems.

# **System Dimensions**







SPECIFICATIONS rull stop to 1.9 meters per d in either direction /120/220/240V, 50Hz/60Hz 3: 50Hz-20KHz + 0.75/ – 3dB 3: 30Hz-16KHz + 0.75/ – 2dB B: 20Hz-8KHz + 0.75/ – 2dB aproduce, reference to :: 50Hz-28kHz + 0.75/-3: 30Hz-24kHz + 0.75/-B: 20Hz-20kHz + 0.75/-1: (3, 5, 7") 1: 1,000m (11 1/2") level of for all 3dB 2dB -2dB Perroduce \$:50Hz-28kHz + 0.75/ - 3dB \$:30Hz-24kHz + 0.75/ - 1.5dB \$:30Hz-20kHz + 0.75/ - 1.5dB \$:50Hz-20kHz + 0.75/ - 3dB \$:50Hz-16kHz + 0.75/ - 2dB \$:30Hz-16kHz + 0.75/ - 1dB NAB A: (3, 5, 7") "), DIN: 1,000m (111/2") level of for all : 50Hz-20kHz + 0.75/-: : 30Hz-16kHz + 0.75/-: 3: 20Hz-8kHz + 0.75/-: 2: 20Hz-8kHz + 0.75/-: 1,000m (11 1/2") +0.75/level of for all -3dB -2dB -2dB NAB A: (3, 5, 7") "), DIN: 1,000m (11 1/2") Hz-25kHz + 0.75/-)Hz-20kHz + 0.75/-0Hz-10kHz + 0.75/-duce, reference to for a 3dB 2dB 2dE NAB A: (3, 5, 7") ), DIN: 1,000m (11 1/2") +0.75/-+0.75/-+0.75/-

Sony Corporation

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