

Technics RS-671AUS

by Panasonic

Front-Loading, 2-Motor High Fidelity
Stereo Cassette Deck

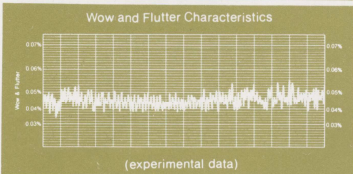
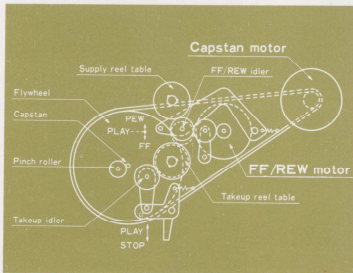


- Front-Loading, Front Operation Controls
- HPF™ Head with 10-Year Limited Warranty
- Peak Level Check Meters
- Dolby Noise Reduction System
- Separate Bias and Equalization Selectors
- Soft-Touch Pushbutton Controls
- Unattended Recording and Playback Possible
- 2-Motor Drive for Wow and Flutter of 0.075% (WRMS) or Better
- Memory Rewind
- Full Auto-Stop Mechanism

RS-671AUS Front-Loading, 2-Motor High Fidelity Stereo Cassette Deck

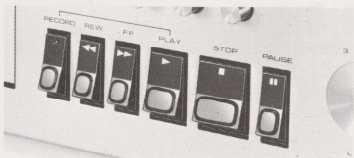
Here is a Hi-Fi stereo cassette tape deck of which Technics is justly proud: a handsome wooden cabinet with complete front-loading and front panel operation which will fit snugly into any rack or bookshelf. Just compare the many sensible and extremely practical features. A two-motor drive system for rock bottom wow and flutter, Dolby[®] noise reduction, memory rewind and unattended recording (with optional timer), not to mention the soft-touch pushbutton controls and still many others. This truly is a cassette tape deck of which you, too, will be justly proud.

2-Motor Drive System for Wow and Flutter of 0.075% (WRMS) or Better



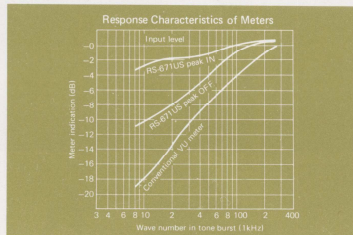
One motor is provided exclusively for fast forward and rewind functions. For driving the capstan, a precision electronically-regulated high-torque DC motor is employed. Its high torque, which is two to five times that of motors fitted in conventional cassette recorders, means extra stability under all conditions, particularly load fluctuations. And since it is a DC motor, it is virtually unaffected by minor fluctuations in the house AC power supply. An oversize flywheel and ultra-precision 3 mm diameter capstan result in an amazingly low wow and flutter rating that is equal to or better than that of many so-called professional reel-to-reel systems, and nothing less than remarkable for cassette decks. The 2-motor design also makes possible the use of Soft-Touch solenoid controls instead of stiff mechanical controls. The fast forward and rewind motor has a heavy-gauge metal shielding to prevent leakage of flux and to contribute to the superb signal-to-noise ratio of the unit.

Soft-Touch Pushbutton Controls



Many cassette units have piano-key type pushbutton controls, but most of them employ stiff mechanical controls. The RS-671AUS has pushbutton controls that activate quick-acting electromagnetic plungers for the PLAY, RECORD, FAST FORWARD, and REWIND modes, of the same type used in full-size professional reel-to-reel equipment. A mere 600 grams will suffice to activate any of the controls. This type of electrical control makes possible unattended activation of the unit by means of electric timers, without the need for a timer adaptor unit. In addition, the pause button can be locked in position for extended pauses, a highly convenient feature that enables editing of unwanted portions during recording.

Recording Level Indicators with Peak Check Switch



With the RS-671AUS you choose between **two** professional meter types at the touch of a switch in order to insure clean and noise-free recording, allowing you to match the meter characteristics to the demands of the material being recorded. The net result: optimum recording quality every time.

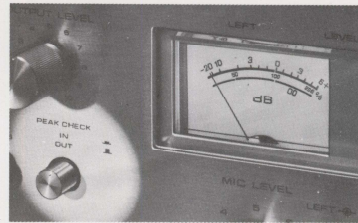
Normal Position:

In 'Normal' position the meters exhibit response characteristics closely approximating true N.A.B. VU ballistics. This mode is especially well suited for recording from FM or the average record or tape.

Peak-Check Position:

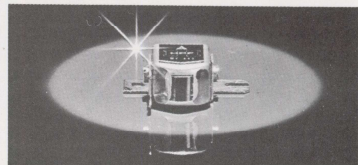
Today, many professional recording engineers prefer the British standard of B.B.C. peak-meters to minimize saturation distortion when the music contains many brief high-energy transients which the VU meter may not "see." While some consumer hi-fi decks now include L.E.D. indicators, Technics has opted for the rather expensive-to-build *peak-check* mode which is similar to the B.B.C. standard, because a meter lets you see how the signal "comes on", whereas the blinking light only indicates that distortion has already occurred.

Expanded Meter Scale

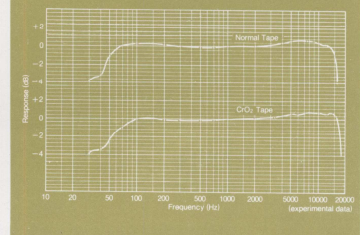


Recognizing the extraordinary advances in tape properties that have taken place since the standard meter scale was designed, Technics has doubled the headroom calibration from +3 dB to +6 dB.

HPF™ Head with 10-Year Limited Warranty†



Overall Frequency Response



The HPF recording/playback head, a superb Technics innovation, provides extended high frequency response from its precision finish and also results in reduced noise and distortion because it requires less equalization compensation. Formed under high temperature and pressure to the hardness of tempered glass, it is capable of withstanding severe use that might easily damage conventional heads. This is particularly important when CrO₂ tapes are used; its hardness enables it to retain its original performance characteristics for years instead of gradually deteriorating in performance. Technics has so much faith in this head that it is protected for a full ten years by our limited warranty covering parts and labor.

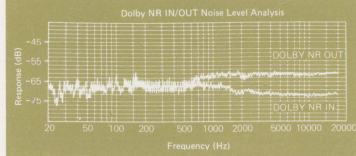
Dolby Noise Reduction System

Today, Dolby Noise Reduction has become essential for high fidelity recording, for it provides up to 8 dB improvement in the signal-to-noise ratio, particularly in the higher frequency ranges. When switched in, low-level high-frequency signals—the ones most likely to be obscured by background hiss—are boosted to override the

[®]Dolby and "Double D" device are the trademarks of the Dolby Laboratories Inc.

† See page 4.

noise level. In playback, they are attenuated by the same amount that they were boosted by to restore them to the proper relative value, and in doing so, the noise level is moved down beyond audible range. The RS-671AUS features the Dolby Noise Reduction system which enables it to offer a signal-to-noise ratio of 65 dB, equal to or better than a lot of profession-



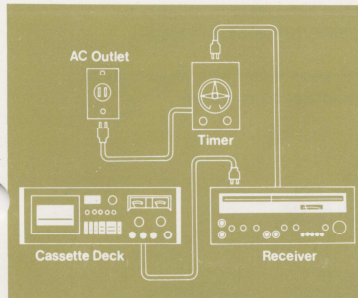
al equipment. In fact, the entire circuitry of the RS-671AUS is 'Dolby-oriented' so that the fullest possible effects of this splendid noise reduction concept may be realized in every aspect, including improved signal-to-noise ratio, frequency response, plus the very best possible performance out of CrO₂ tapes.

Front Panel Controls



All operations are performed from the front, including insertion and removal of cassettes. This means it can be stacked along with the rest of your stereo equipment, or arranged neatly in a bookcase. The handsome wooden cabinet (real wood sides and simulated wood top) enhances the appearance of the deck wherever you decide to position it. And whether at standing eye level or at sitting eye level, all operations are clearly visible, including the tape motion.

Unattended Recording and Playback Possible with Timer



With the RS-671AUS you can even record any desired radio program in your absence. Simply connect a timer to the cassette deck, set the deck for recording and the timer for the program start time. No additional adaptor is needed. At the preselected time, the recording will start automatically. Some timers have provision for automatic shut-off, too. In the same way, the deck can be set to begin playback at a predetermined point in time.

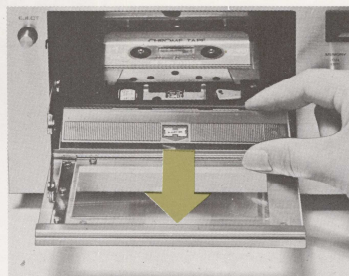
Output Level Control

An output level control is provided, to enable the output of the RS-671AUS to be matched to the levels of other signal sources such as the turntable or tuner. Thus, the sound system may be switched from source to source without having to worry about being blasted with high peaks or, alternately, having to boost the volume for lower level signal sources.

Illuminated Cassette Compartment

The cassette compartment is equipped with a carefully angled illuminated mirror which serves to provide an eye-level view of the cassette, a design feature that assures constant visibility during use. Now you can see at a glance which cassette is playing, or how much tape is left while making a recording.

Removable Head Cover



As tape travels across the heads, the head surfaces are liable to pick up dirt or dust. This can easily result in a deterioration of recording and playback performance, particularly in the high frequency ranges. The entire head cover of the RS-671AUS is removable for easy checking of the condition of the heads and cleaning, demagnetizing, and other maintenance work whenever necessary. And the illumination provided, plus the mirror, greatly facilitate quick and efficient execution of such maintenance work.

Memory Rewind

This feature assures quick and fuss-free return to the beginning of a selection just played, an earlier selection, or any earlier preset point on the tape. It is highly convenient for replaying favorite selections. It may also be used in recording, for reviewing the selection or portion just recorded before recording additional



material. To utilize this function, simply depress the memory rewind switch to the ON position at the beginning of the selection to be recorded, and then set the tape counter to 000. To review a subsequent recording, simply depress the rewind button and the tape will be rewound automatically to the 999 position, at which point the play button is now depressed to start the tape from the preselected point.

Full Auto-Stop Mechanism

Since cassette tapes are essentially reel-to-reel tapes enclosed in compact packages, the tape drive must be shut off as soon as the end of the tape is reached, whether in the PLAY, RECORD, FAST FORWARD or REWIND modes. The RS-671AUS has a fully automatic electromagnetic type mechanism employing reed switches, which shuts off the tape transport when the end of the tape is reached. This prevents damage to valuable tapes or the tape transport itself from undue stress, for lasting, trouble-free, fool-proof operation.

Tape Counter

A convenient tape counter with reset button is provided. This feature is particularly useful when long-play tapes are used. Set the counter to 000 when commencing a recording, note down the readings of the counter at salient points of the recording such as breaks in the music or changes in selection, and you have a permanent record of just what is recorded where on the tape for rapid retrieving of the desired portion of the tape.

Muting Circuitry

Clicks and pops, disturbing switching noises, will never be heard or recorded thanks to the RS-671AUS special muting circuit which silences the signal until all sections of the deck have completed their switching.

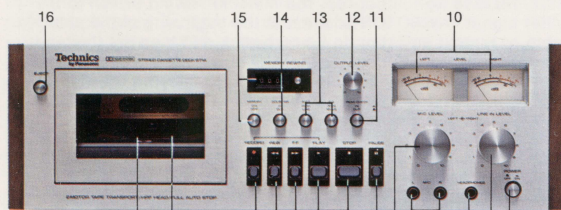
Low Noise Pre-amplifier

The pre-amp must handle feeble input signals one moment and a loud crescendo an instant later. Technics has paid particular attention to the pre-amp in the RS-671AUS, making it low-noise and giving it great "headroom". Selected low-noise transistors, power supply stability, and rock-steady bias current control insure freedom from distortion.

Separate Bias and Equalization Selectors



Front Panel Facilities



1. HPF Head
2. Lighted Cassette Compartment
3. Soft-Touch Pushbutton Controls
4. Lockable Pause Control
5. Microphone Level Control (L/R)
6. Microphone Inputs
7. Headphone Jack
8. Line Input Level Control (L/R)
9. Power Switch
10. Level/Peak Check Meters
11. Peak Level Check Switch
12. Output Level Control
13. Bias and Equalization Selectors
14. Dolby NR Switch
15. Memory Rewind
16. Eject Button

In addition to conventional "normal" tape (with ferric oxide in its magnetic coating) and the newer chromium dioxide tape (which gives better high-range frequency response and dynamic margin), there is now yet a third type appearing on the market: a dually coated tape with both ferric and chrome layers which is supposed to combine the advantages of the other two. Each of these types, however, requires a somewhat different "environment" in recording in order to give optimum results. Technically speaking, each needs a different combination of bias current and equalization curve. That is why the RS-671AUS has been equipped with a versatile new feature: separate selector switches for bias and

equalization. If these are set according to the table below, the full quality potential of each type of tape will be utilized, to give you the best possible frequency response, signal-to-noise ratio, dynamic range and lowest possible distortion. Moreover, the bias oscillator circuit has been carefully designed to eliminate any possible distortion from that source too.

Tape	Selector	Bias	Equalization
Normal		Low	120µS
CrO ₂		High	70µS
Super Low Noise		High	120µS
High Resolution (FeCr)		Low	70µS

HPF Tape Recorder Heads 10-Year Limited Warranty

Panasonic Company, Division of Matsushita Electric Corp. of America and Matsushita Electric of Hawaii guarantee the HPF tape head incorporated in the RS-671AUS, in home use, to be free from defective material and workmanship, and agree to replace any defective HPF tape head with a new one provided the tape recorder is purchased and retained within the U.S.A.

This warranty covers 10 years labor and parts, from date of original purchase if the tape recorder is delivered prepaid to an authorized service agency. Bill of sale or other proof of date of purchase must be presented to receive in-warranty service.

This warranty does not apply if the tape head or the tape recorder incorporating same has been subjected to damage in transit, accident, misuse or abuse following sale.

Technical Specifications

Track System: 4-track 2-channel stereo recording and playback

Recording System: AC bias (85 kHz), AC erasure

Tape Speed: 1 $\frac{7}{8}$ ips

Wow and Flutter: 0.075% (WRMS)

Frequency Response: CrO₂ tape; 30-17,000 Hz
Normal tape; 30-15,000 Hz

Signal-to-Noise Ratio:
(signal level = 250nWb/m) Dolby NR out; 52 dB (Normal tape)
Dolby NR in; 65 dB (CrO₂ tape, above 5 kHz)

Fast Forward and Rewind Time: Approx. 90 seconds with C-60 cassette tape

Inputs: MIC; sensitivity 0.3 mV/applicable microphone impedance 600 Ω-20 kΩ
LINE; sensitivity 60 mV/impedance 68 kΩ

Outputs: LINE; output level 0.42 V (at OVU)/load impedance 50 kΩ over
HEADPHONE; output level 65 mV/8Ω

Motors: 2-Motor system
1-Electronic speed control motor for capstan drive
1-DC motor for reel table drive

Heads: 2-Head system
1-HPF head for record/playback
1-Ferrite head for erasure

Power Requirement: AC; 120 V, 50/60 Hz (not necessary for conversion)

Power Consumption: 30 W

Dimensions: 5 $\frac{3}{8}$ "(H) × 17 $\frac{1}{4}$ "(W) × 13"(D)

Weight: 22 lbs.

Accessories: 2-Connection cord G

Optional Accessories: Electret condenser microphones
RP-3850E/RP-3830E/RP-3550E

The cabinetry features real wood sides with an overlay of printed vinyl and a simulated wood top panel.

Technics
by Panasonic

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