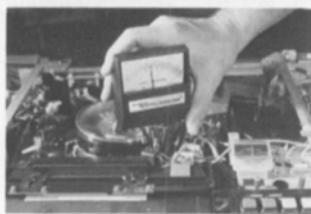


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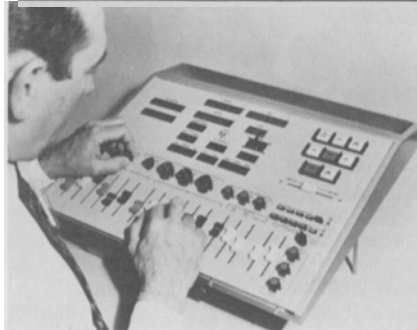
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## New Products & Developments

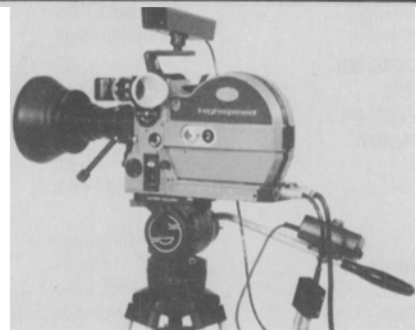


Two advanced color correction systems designed to operate with the TK-29C telecine camera (*Journal*, p. 702 September 1980) have been announced by RCA Broadcast Systems, Camden, NJ 08102. Users of the TK-29C may select the color correction system with the features that best meet individual requirements and preferences, either an RCA multiple event programmer or The System,™ a computer-controlled color correction system offered by Corporate Communications Consultants. The user may also custom design a correction system.

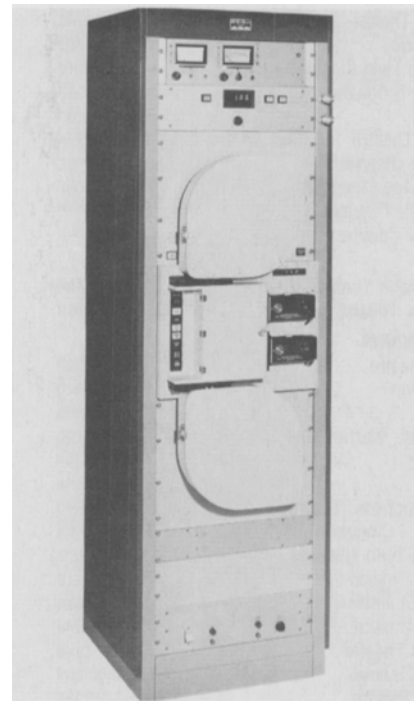
The key is a built-in dc interface in the TK-29C that gives quick access to 29 variable camera functions that correct and improve colorimetry, contrast and exposure for all types of motion picture film and slides before transfer to videotape or direct on-air broadcast. The RCA multiple event programmer corrects film scene by scene with controls for 11 elements that affect color balance and exposure; 12 parameters that affect colorimetry; three variables for contrast and color density; and three controls that affect negative film quality.

The System incorporates a color compensation system that works with non-encoded RGB signals to provide a wide, dynamic compensation range under computer control and supervision. It uses an exclusive control for the color derivatives in addition to the RGB low lights, mid-range and high lights compensation. The System provides for color balance, color correction and luminance correction, a total of 29 self-nulling, logarithmic, color adjustable variables under computer control. Each of the 29 variables is entered into the computer via an automatically re-setting device which eliminates the need to re-set each of the parameters each time that a correction is entered. Any event corrections can be recalled and applied to a new scene with or without additional entry. The Multiple Event Programmer is priced at approximately \$40,000; The System, at approximately \$45,000.

The 16SR high speed camera has been announced by Arriflex Corp., One Westchester Plaza, Elmsford, NY 10523. The camera is capable of operating at speeds from 10 to 50 frames/s. It is said to be the first high speed camera with an operating noise level of under



32 dB(A) at sync speed. The camera retains all the operating features of the Arri 16SR. The price for the 16HSR camera body is about \$23,974. A 400-ft magazine is available at a price of \$3800.



The Model 690C 16/35mm Combination Optical Recorder, one of a new series, has been announced by Wide Range Electronics Corp., 2119 Schuetz Rd., St. Louis, MO 63141. The 690 optical sound recorders feature a dc servo drive and a built-in playback system for high performance reproduction capabilities as well as for aligning and testing purposes. Split magazines are used to make film loading and unloading faster and more convenient. The change from a positive to a negative sound track can be accomplished by a simple flip of a switch. Models are available to accommodate 16-mm, 35-mm, and 16/35-mm film in combination. The servo drive permits interlocking with various types of equipment when interfaced with a WRE shaft encoder.

Additional features of the 690C include two WRE-Maurer F-Prime galvanometers

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Nicolas Downie  
Semmering, Barnet Road  
Arkley, Herts  
Great Britain

August 4, 1980

Herewith my qualifications, or lack of them, for making the sweeping generalisations on the next two pages.

Before becoming a cameraman, Nick Downie was a professional soldier for 6 years, which included 3 1/2 years in the SAS and active service on four campaigns. He is now an independent film-maker, specialising in guerrilla warfare.

So far he has spent 3 months with the Pesh Merga guerrillas in Iraqi Kurdistan, 3 months with the Eritrean guerrillas, 6 weeks with Polisario in the Western Sahara, 6 months with the Rhodesian Army and, most recently, 4 months with the guerrillas in Afghanistan.

In 1977 he won The Royal Television Society's News Feature Award for Polisario, and in 1978 he won it again for Rhodesia. The Rhodesia film was also the ITV Nomination for Monte Carlo.

**O**verheard on location : German sound-recordist, pointing at my Aaton, "What sort of camera is that?" German cameraman, "The best".

**O**n my first day in Afghanistan we marched for fifteen hours non-stop. It was August and very hot. We crossed two passes — a total of 5000 feet going up and 6000 feet coming down. Throughout that time my Aaton perched comfortably on my shoulder, and I know of no equivalent camera which is so easy to carry. It is a tribute to the Aaton's ergonomic design that I ended the day just with blisters and not a heart attack.

**A**aton magazines are child's play to load and unload. Too many other cameras leave you struggling in the changing bag with a roll of film that is liable to uncoil as it comes off the spindle. Normally that only results in irritation all round and a few minutes' delay, but get caught like that as a helicopter gunship clatters over the brow of a hill and the delay is liable to be permanent.

**I**t is a common misconception that the camera best-suited to filming a war should be built like a tank. The trouble is, those cameras make a noise like a tank on the sound-track. Even in the middle of a battle there are moments of quiet when a well-blimped machine is just as important as on location in the home counties. One of the most valuable qualities of the Aaton is its silence.

**W**hen filming a battle, there is no worse experience than seeing one's companions making a hasty exit. Men carrying just a rifle and a bandolier can disappear with unnerving rapidity, and it is a grave disadvantage to be left lugging a heavy or unbalanced camera, trailing battery cables. The Aaton is light, neat, and easy to run with, even with legs that are turning to jelly.

**W**ith all the other cameras I know, the day you drop the thing in a river in the middle of nowhere, is the time to go behind a rock and quietly cut your throat. With an Aaton you simply produce half-a-dozen Allen Keys, strip it down, and give it a good clean. Blow the electronics, and it takes five minutes to replace them with a set of "Red Spares".

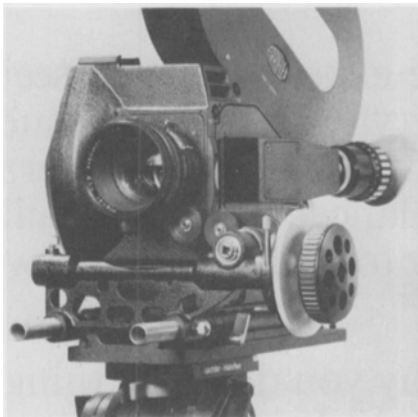
**W**hen you're freelance, and about to invest thousands of hard-earned pounds in a camera, you think for a long time before chatting-up the bank manager. I bought my Aaton after I'd tried all the other comparable makes, usually under fire, and the Aaton was the only one which met every specification.

**A**n Aaton is like a good woman : some of the best qualities only emerge after prolonged acquaintance.

which can be switched to or from either 16-mm or 35-mm soundtracks. The 690 system's footage counter counts both feet and frames. The microprocessor memory can be pre-programmed to automatically turn the cross modulation unit and test exposure on and off at any predetermined amount of footage and, at command, at the end of each roll of film. Most of the major recording functions can be automatically monitored and controlled.



The 125 XL super 8 silent camera has been announced by Eumig (U.S.A.) Inc., Lake Success Business Park, 225 Community Dr., Great Neck, NY 11020. An  $f/1.2$  multicoated zoom lens together with a  $220^\circ$  shutter opening makes possible its operation in low light. The lens is an 8 to 40-mm zoom — a 1 to 5 range — with both manual and power zoom and a macro setting which reduces the normal 5-ft close focusing limit down to the front surface of the lens. A special PMA (Panoramic Macro Aspheric) accessory lens supplied with the camera provides extreme wide angle shots and exchanges the focal length of the lens to 4.5 mm. The camera has through-the-lens viewing with backlight control and stray light suppressor switch. The price is about \$300.



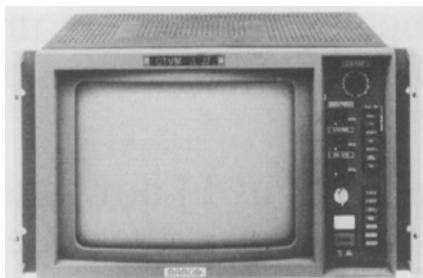
The Arri Follow-Focus system for 16- and 35-mm Arriflex cameras has been announced by Arriflex Corp., One Westchester Plaza, Elmsford, NY 10523. The system is designed for use with the Arri bridge plate and can be used with fixed focal length and zoom lenses. Installation of the Follow-Focus attachment can be accomplished without having to use special tools. The device can operate from either the right or left side of the camera. The price of about \$1944 includes the Follow-Focus mechanism, footage marking disk, lens drive and focus ring. A flexible remote attachment is available as an option.

The Arri shoulder cushion for the 16SR camera has been announced by Arriflex Corp., One Westchester Plaza, Elmsford, NY 10523. The shoulder cushion is said to be resilient,



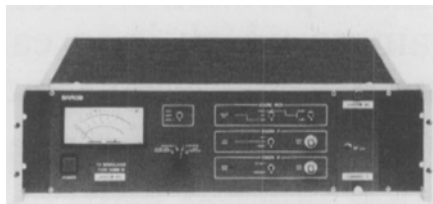
lightweight, and contoured to cushion the camera comfortably on the operator's shoulder. It allows the camera to be safely rested on its base without damage to the camera or to the surface upon which it rests. The Arri shoulder cushion is shown above mounted to the camera and in the foreground. The price is \$92.

A new line of nickel-cadmium power packs designed to provide longer operating times for ENG and EFP cameras, videotape recorders and battery-operated lights has been announced by Cine 60 Inc., 630 Ninth Ave., New York, NY 10036. The battery packs have 20 and 10 Ah capacities and are said to have as much as ten times the life expectancy of silver zinc batteries. The battery packs are said to be able to operate some VTRs for almost 23 h, some lights for almost  $2\frac{1}{2}$  h, and some television cameras over 10 h continuously. The nickel cadmium cells are housed within a carrying case with a built-in overnight charging system. There are nine models in the new line ranging in voltage from  $\pm 7.2$  to 30 V at 20 and 10 Ah. Some of the models are equipped with 4- or 5-pin Cannon connectors and/or 2-pin Amphenol connectors for use with various types of portable television equipment. The power packs measure  $1\frac{3}{4} \times 6\frac{1}{2} \times 6\frac{3}{4}$  in weighing from 18 to 26 lb depending on the model. Prices range from \$1500 to \$1700.



The CTVM 3 series of Barco master control color monitors has been announced by Rohde & Schwarz Sales Co., 14 Gloria Lane, Fairfield, NJ 07006. Included in the series are the CTVM 3/37 (shown above), a compact 15-in monitor designed especially for VTR applications, and the CTVM 3/51 offering a 20-in screen. Features of the CTVM 3 series include functional plug-in modules; automatic frequency correction when the signal changes field rate; preset controls for brightness; chroma and phase fast and slow sync time constant; remote control facility for input selection; automatic and manual degaussing; switchable color temperature; residual sub-carrier test switch on the NTSC and PAL version and SECAM horizontal to vertical switch. Available options include switchable

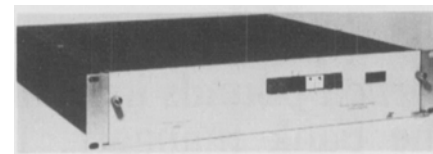
comb filter and aperture correction. The CTVM 3/37 can be fitted with a color decoder for any television standard, i.e., NTSC, PAL B, PAL M, and SECAM (vertical and horizontal). If required, the standard can be changed by simple replacement of the plug-in decoder printed circuit modules. Prices for the CTVM 3/37 range from \$3950 to \$7400. Prices for the CTVM 3/51 range from \$5200 to \$8200.



The new Barco TV Modulator, Model VSBM 1/S has been announced by Rohde & Schwarz Sales Co., 14 Gloria Lane, Fairfield, NJ 07006. A high precision TV modulator it applies SAW devices for VSB band filtering with extremely steep transition from pass-to stopband and exact group delay performance. Neglectable spurious outputs and a 60-dB suppression of unwanted sidebands allow uncomplicated adjacent channel operation in all CATV and CCTV systems. The VSBM 1/S is available for systems M and BG as an IF modulator and can be equipped with a frontal plug-in RF converter for any TV channel between 40 and 890 MHz.

Temperature controlled quartz oscillators offer a high frequency stability for transmitter applications. Two video inputs, an auxiliary IF input and a sound AF input are provided. Through the front panel input selection switch the video 1 or video 2 input can be selected. When no signal is present on the video 1 input the VSBM 1/S switches to the video 2 input or to the auxiliary IF input (internally selectable) while the original sound passes or switches to the built-in 1-kHz oscillator (internally selectable). The level of the combined IF output signal is  $-20$  dB adjustable. Permanent vision and sound IF test outputs are separately available for signal check. The VSBM 1/S is priced at about \$5600.

The Christie 35 projector has been announced by Christie Electric Corp., 20665 Manhattan Pl., Torrance, CA 90501. The projector, manufactured as a single unit, is built for full compatibility with current screen projection and for operation with xenon systems. The soundhead is permanently aligned to the projector head for a smoother, steadier image. The price is about \$5500 including lens holder and soundhead.



Vicmacs Type 1724 Vertical Interval Machine Control System has been announced by Candex Pacific Inc., 693 Veterans Blvd., Redwood City, CA 94063. The system allows for the remote control of machines or the transmission of data. Control signals or data

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can be inserted on to any spare television line in the vertical interval period, or a standard telephone line may be used. In television studio installations, the digital control signals from a particular studio control room are superimposed within the vertical interval of its own studio output.

The system building block is a standard self-contained microcomputer unit which contains one receiver and one transmitter. The unit contains one large plug-in microprocessor printed circuit board which coordinates both the transmitting and receiving processes, a modular power unit, and a rear panel assembly.

The transmitted signal is a 40-bit word inserted into any spare line in the vertical interval. A complete transmission takes place over two television fields with 40 bits transmitted per field. The first part is the Address Field and the second part is the Data Field. The Address Field comprises a receiver address of 12 bits, a transmitter address of 12 bits, and a cyclic redundancy check of 16 bits. The Data Field comprises a 32-bit data word and an 8-bit qualifier.

The base price is about \$5000. Various options are available.

Three videotape editing controllers have been announced by US JVC Corp., 5875 Queens Midtown Expwy, Maspeth, NY 11378. The line consists of the RM-70U Remote Control Unit, the RM-82U Automatic Editing Control Unit and the RM-88U, (shown above), a full function Automatic Editing Control Unit. Each RM controller has a



large rotary search dial control enabling a user to locate quickly any portion of a videotape program. This shuttle search mechanism can vary the playback speed of any controlled videocassette recorder (VCR) from still to five times normal speed in both forward and reverse. It also maintains any selected playback speed automatically when a user releases it during operation. Each of the new RM units is also constructed on a full logic circuit based on a microprocessor.

The RM-70U, a basic unit, offers remote control of tape operation in combination with various VCRs. In addition to standard VCR playback functions, the RM-70U can be used in pause or still frame modes. It is priced at about \$360.

The RM-82U offers video editing and FM-to-FM dubbing capability. One of its features is split insert editing capability by which either of two audio channels or the video channel may be replaced in the editing process, independent of any other signal. The price is \$1800.

The RM-88U has edit point correction making it possible to shift and correct edit points with frame-by-frame accuracy. Designed for an advanced editing system, it can

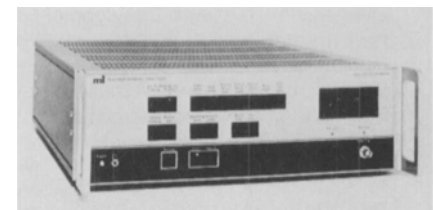
control any combination of three VCR units, feeding a master recorder. It has independent entry for edit-in and edit-out points for both the player and recorder in the system, thus allowing automatic start-stop controls on edits. There is also a counter display of the edit-in and edit-out points. The units has both preview editing and automatic pre-roll editing for successive assemble edits. Price of the RM-88U is \$3200.



A new 50-kW VHF transmitter for highband (channels 7-13) television stations using circularly polarized signals and for other broadcast applications using high power has been announced by RCA Broadcast Systems, Camden, NJ 08102. The transmitter, designated the TTG-50H, is designed especially for use by broadcasters operating from tall towers, 1500 ft and more. It is also intended for operation where radiation of circularly polarized signals requires power in the 70- to 100-kW range. Solid state technology used in the TTG series has eliminated all but two tubes, one visual and one aural. A universal crystal oscillator combined with a frequency synthesizer accommodates any channel or frequency offset. The aural, visual, and IF frequency synthesizers are controlled by the same crystal.

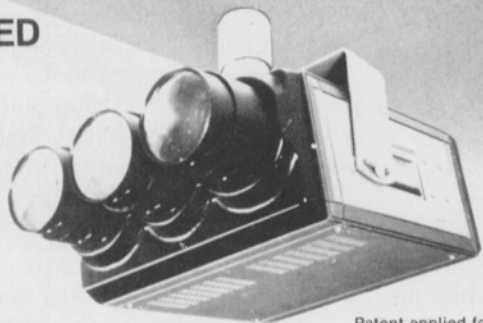
The TTG series offers a broad range of power levels, system configurations, and broadcast standards with a choice of 22 transmitter models. The TTG-50H is designed to operate conservatively at up to 50 kW visual and 7.0 aural power output.

The single transmitter is contained in four cabinets; the front line consists of a driver cabinet (shown above), a control cabinet, and a power amplifier cabinet, complemented by a power supply cabinet in the rear. In parallel configurations a combining cabinet that houses two exciter-modulators, an exciter switch, and a mode controller joins the system. The TTG design uses such advances as broadband microstrip circuitry, a heat pipe cooling system which transfers heat from the power amplifier transistors to a heat sink, and an automatic solid state control system to stabilize both visual peak power and aural power output levels.



A television interval timer, Model 2920, has been announced by Marconi Instruments, 100

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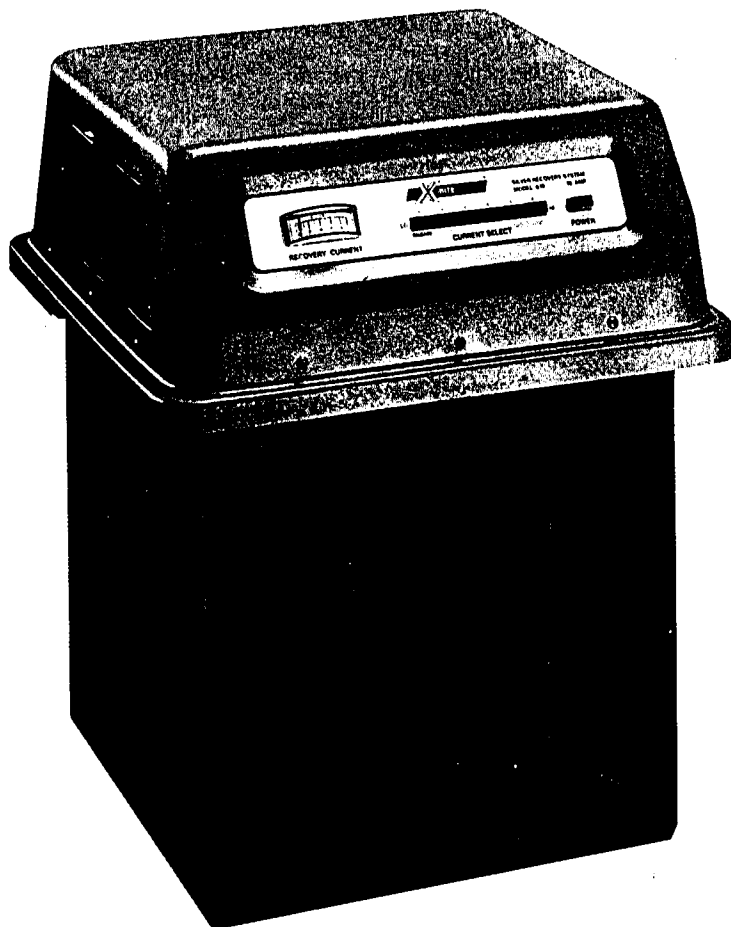
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Cathode Size:

Discs: 5.4" dia. — 8 discs

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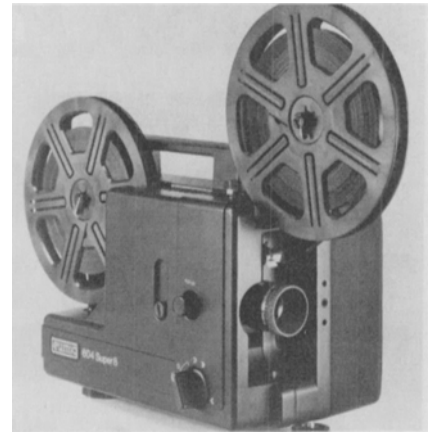
Stonehurst Court, Northvale, NJ 07647. The instrument replaces the conventional waveform monitor for the measurement of timing intervals required under FCC transmission specifications. All measurements through the whole of the active field are performed automatically. In the manual mode, Model 2920 provides digital readout of each parameter at the touch of a button; but since all functions can be controlled remotely, the unit can be integrated into a video monitoring and data logging system. The unit measures a total of 15 different parameters based on recommendations made in EIA specification RS170A. Measurements not involving picture information are averaged over a large number of samples to eliminate the effects of noise. For horizontal picture blanking, total vertical blanking interval, and picture start measurements, Model 2920 detects the presence of video at +20 IRE and displays the minimum reading of a large number of samples. Changes in each of the measurements can be monitored directly by front panel selection of the particular parameter of interest. The 2920 is priced at \$4950.

The HP 3707A BB + Sweep Generator, a microwave link analyzer for digital radio testing has been announced by Hewlett Packard, 1501 Page Mill Rd., Palo Alto, CA 94304. The instrument, a baseband plus sweep generator, is designed to drive an HP 8620C Up Converter to give a swept frequency-modulated source from 0.5 to 18 GHz. This source used with a standard HP 3702 B or 3712 A IF/BB receiver can measure distortion in a radio link. Its principal area of application is in dig-

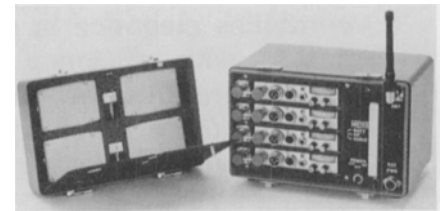


ital radio testing; however, it can also be used for testing analog radio systems which use direct modulation. Price of the 3707A BB + Sweep Generator is \$1950. Price of a typical complete system using an HP 3702B 70 MHz IF receiver and including an 8620C Up Converter is \$20,960.

A new super 8 silent projector, the Mark 604, has been announced by Eumig (U.S.A.) Inc., Lake Success Business Park, 225 Community Dr., Great Neck, NY 11020. The lens is a 17-30 multicoated zoom projection lens with  $f/1.4$  speed for a bright screen image. It is backed by a 12-V, 100-W tungsten halogen lamp with a dichroic reflector. Threading and take-up onto the 400-ft reel are fully automatic. The sprocketless 18 frames/s film transport with framing control is said to give an unusually steady projected image. All basic projection functions, including fast re-



wind through the film channel, are controlled by a single six-position selector knob. The price is \$164.



The Quad case, a wireless microphone antenna system for two to four wireless microphone channels housed in a portable case, has been announced by Cetec Vega, P.O. Box 5348, El Monte, CA 91731. Designated Model 151, the Quad Case houses four Model 66 portable receivers and has a built-in antenna splitter (multi-coupler) that feeds all four receivers from one detachable antenna. The removable front cover has storage compartments for four Model 77 pocket-size transmitters and four spare 9-V batteries. Power for the receivers and the splitter is provided by standard alkaline "D" cells or an external dc source. The system measures 17.8 x 24.8 x 27.9 cm and weighs less than 9.1 kg including batteries. An interlock assures that the system power is shut off when the case is closed. A toggle switch permits selection of internal power or any external 12-V to 18-V dc power source via a front panel connector. An LED signals when the power is on. The price is \$747.

The DN60 real time audio spectrum analyzer has been announced by Klark-Teknik, Walter Nash Rd., West Kidderminster, Worcs, England. The instrument is micro-processor controlled and features 30 x 1/3 octave 2 pole-pair filters 25 Hz to 20 kHz on ISO frequencies. Other features include a 30 x 16 high intensity main LED display plus separate SPL display, three memories, internal noise source, an optional RT60 reverberation card, an external oscilloscope output, and others. Applications include on-site acoustic measurements, music analysis, equalization and alignment of tape recorders, noise surveys, and test bench voltage measurements. The price of \$3000 includes the RT 60 reverberation option.

A small, lightweight microphone, the SM63-CN, has been announced by Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. Designed for professional on-camera or on-stage use, the new unit is a dynamic om-

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nidirectional type with an output said to be about 6 dB higher than larger comparable units. Other features include a controlled low-frequency rolloff to insure natural sounding voice and music pickup, a hum-backing coil to make it insensitive to strong hum fields such as those produced by studio lighting, a mechanical-elastomer isolation system that makes it resistant to handling noise, a built-in breath and pop filter, and a rugged Veraflex® polyester grill.

The SM63-CN is 144.5 mm long and 33 mm in diameter. It weighs 80 g. The price is \$100.

A film cleaning machine designated the Kinetronics LC-100, has been announced by

Kentronics Corp., 42 Sherwood Terrace, Lake Bluff, IL 60044. The machine is 7½ in high, 11½ in wide and 8½ in deep. It utilizes a solid state liquid control system, Swiss velvet cleaning tapes, and a static neutralizer. The film cleaning solution called Kinetreat PR is said to cut safely through the fingerprints, oils, and grease that hold dirt to the film. The LC-100 is available in 16/35-mm, 46-mm, 70-mm, and 105-mm models. Prices start at under \$600.

An improved ECCO 202 instant antistatic film cleaning and conditioning system has been announced by Electro-Chemical Products Corp., 89 Walnut St., Montclair, NJ

07042. The system is said to clean, condition, lubricate and stop dust and lint attraction on both sides of motion picture film or filmstrip in one operation. Designed for 8-, 16-, and 35-mm formats, the system consists of one Model "D" applicator, one quart of ECCO 1500 solution, six cleaning flannel, double-faced rolls and two 2- x 4-in felt pad cushions. It weighs 4 lb and is priced at about \$60.

*Further information about these items can be obtained from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.*

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