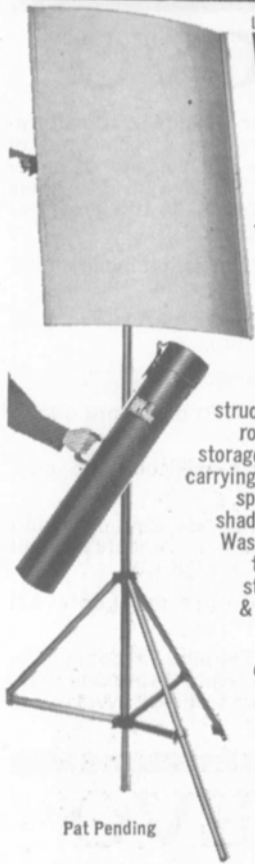


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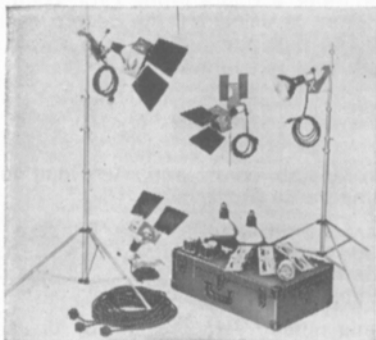
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## TESTS AND MEASUREMENTS

**Apparatus for Measurement of Non-Linear Distortion as a Continuous Function of Frequency**, H. D. Harwood, *BBC Engineering Div. Monograph*, No. 49, July 1963.

Measurements of the non-linear distortion products generated by a system, such as a loudspeaker, which has more than one degree of freedom must be made as a continuous function of frequency if a true assessment of the distortion is to be obtained. Various methods of performing such measurements are reviewed and the limitations are indicated. A description is

then given of a new system by which the individual harmonic and intermodulation distortion products can be measured as a continuous function of frequency. In addition the working principles are described of a new type of stroboscope which is capable of operating at constant illumination up to unusually high repetition rates; this device is suitable for examining vibrating systems for resonance modes which may give rise to distortion through excessive amplitude.

Details are given of the circuits employed and the performance obtained from an equipment constructed on these principles, and the results of some measurements are shown.

## current literature



The Editors present for convenient reference a list of articles dealing with subjects cognate to motion-picture engineering published in a number of selected journals. Photostatic or microfilm copies of articles in magazines that are available may be obtained from The Library of Congress, Washington, D.C., or from the New York Public Library, New York, N.Y., at prevailing rates.

**Bild und Ton** vol. 16, no. 9, Sept. 1963  
Über die Herstellung duplikationsfähiger Original-Bild-Negative (The Manufacture of Master Negatives for Duplicating) (p. 274) *Hilmar Mehnert*

**British Kinematography** vol. 43, no. 1, Jan. 1963  
The Production of Television Test Charts (p. 4) *L. J. van Rooyen and G. D. Shevel*

**Film Technikum** vol. 14, no. 8, Aug. 1963  
Vorbereitungen für ein europäisches Farbfernsehensystem (Preparations for a European Color TV System) (p. 260) *H. F. K.*  
Rückprojektionsanlage für Film und Fernsehen der Kamera- und Kinowerke Dresden (Back Projection Unit for Film and Television of the Camera and Kino Factory, Dresden) (p. 262) *Gerhard Pierschel*

**Fujitsu** vol. 14, no. 4, 1963  
Life of Transistors (p. 4) *T. Niimi*  
Switching Time in Diodes and Transistors (p. 89) *S. Tanaka and K. Katori*

**Hitachi Hyoron** vol. 45, no. 12, Dec. 1963  
Compensation of Beam Landing Errors for the Shadow-Mask Type Color Picture Tube (p. 74) *Takemaro Sakurai, Koro Shushido, Jihei Nakagawa, Kihachiro Koizumi and Eiichi Yamazaki*

**Tech. Jour. Japan Broadcasting Corp.** vol. 15, no. 11  
A Miniature Television Camera for Interview Use (p. 1) *Y. Fujimura, K. Suzuki and T. Hirashima*  
Temperature Rise Tests of UHF Transmission Lines (p. 41) *K. Endo and K. Takewaki*

**International Projectionist** vol. 38, no. 8, Aug. 1963  
Film Shrinkage and Frame Registration (p. 4) *Robert A. Mitchell*

**Jour. Brit. IRE** vol. 26, no. 2, Aug. 1963  
A Frequency Meter With Continuous Digital Presentation (p. 109) *P. Wood*  
On the Measurement and Interpretation of Nonlinearity in a Television System (p. 141) *J. B. Potter*

vol. 26, no. 3, Sept. 1963  
Direct Wide-Band Phase Shifters (p. 227) *P. V. Indiresan*

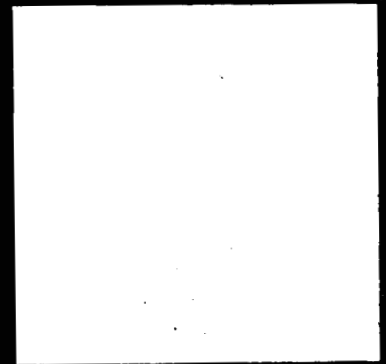
**Jour. Inst. Elect. Comm. Engrs., Japan** vol. 46, no. 12, Dec. 1963  
Anode Aperture Effects on the Performance of Electron Gun (p. 23) *Jun Nishida, Hiroshi Hamada and Masazumi Terada*  
An Analysis of Signal-to-Noise Characteristics of an FM System by Means of a Discontinuous Model of the Modulating Signal (p. 38) *Akima*

**Journal Inst. Telev. Eng. Japan** vol. 17, no. 11, 1963  
Recent Progress of Video Tape Recording FM Transmission System in VTR (p. 2) *J. Yoshida and M. Inatsu*  
The Recent Progress of Single Head VTR (p. 11) *K. Sugi and M. Yagi*  
The Recent Progress of 4 Heads VTR (p. 19) *M. Okazaki and K. Kano*  
Life and Reliability of Video Tape Recorder for Broadcasting Quality (p. 23) *S. Sonobe*  
Compact Type VTR (p. 27) *N. Kihara*  
Magnetic Characteristics of Magnetic Micropowders (p. 31) *K. Yokoyama*  
The Present Situation of Domestic Video Tape (p. 39) *G. Akashi*  
TDL Synchro Video Tape (p. 44) *M. Namikawa and S. Tochihara*  
Measurement of Video Tape Temperature (p. 48) *Y. Sakai and K. Hori*

vol. 17, no. 12, 1963  
A Flat Picture Tube With a Single Plate Deflection System (p. 11) *M. Takahashi and T. Kawamura*  
Vidicon Type Camera Tube Using Mosaic Target (p. 19) *Y. Kiuchi and H. Takahashi*  
Low Noise Amplifier for Vidicon Camera (p. 25) *Y. Tokunaka*  
Protection of Transistors Against Over Voltage in Video Amplifiers (p. 31) *H. Marabayashi, H. Ikeda and K. Wakui*

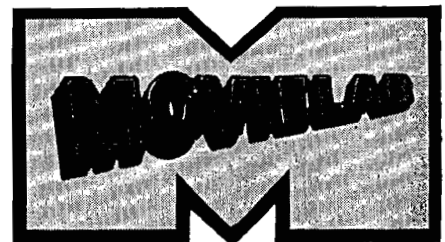
**Jour. Phot. Sci.** vol. 2, no. 1, Jan./Feb. 1963  
Tanning Development and Its Application to Dye Transfer Images (p. 1) *A. G. Hull*  
Factors Affecting the Quality of Black-and-White Reflexion Prints (p. 27) *J. L. Simonds*  
On the Relevance of Photon Noise and of Informational Assessment in Scientific Photography (p. 31) *P. B. Fellgett*  
Visual Contrast in Photographic Prints (p. 35) *C. J. Bartleson, R. H. Jenneiah and W. W. Woodbury*  
Printed Out Dodging Masks (p. 42) *L. Chalkley*

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Latent-Image Distribution and Development Rate in the Solarization and Re-Reversal Regions (p. 46) *G. C. Farnell and J. B. Chanter*

vol. 2, no. 2, Mar./Apr. 1963

The Sensitometric Properties of Emulsions at a Low Level of Chemical Sensitization (p. 57) *G. C. Farnell and P. G. Powell*

A Structural Theory for the Selwyn Granularity Coefficient (p. 65) *E. F. Haugh*

Power Spectrum of Granularity as Determined by Diffraction (p. 69) *H. Thiry*

Grid Images Applied to the Assessment of Definition (p. 78) *A. G. Hull and C. J. Bell*

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Printing Color Negatives (p. 109) *R. W. G. Hunt*

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The Photographic Properties of Some Novel Analogues of Phenidone (p. 157) *G. E. Ficken and B. G. Sanderson*

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The Specification of Conditions for the Incident Light Method of Exposure Determination (p. 230) *D. Connelly*

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Preliminary Investigation of Development-Center Distribution on Individual Photographic Emulsion Grains (p. 365) *W. F. Berg and H. Ueda*

**Kep-esHangtechnika** vol. 9, no. 4, Apr. 1963

Introduction to the Theory of Magnetic Signal Recording (p. 106) *Z. Vajda*

The Technical and Economical Comparison of Oval and Circular Loudspeakers (p. 114) *Rezső Karszay*

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**Kinomekhanik** Jan., 1963

The Magnetic Soundtrack in Mass Production Film Printing (in Russian) (p. 27) *S. Karipidi and S. Shusharin*

Signalling for the End of a Reel and Systems for Transfer from Projector to Projector (in the Automation of Cinema Shows) (p. 35) *V. Timofeev*

**Kino-Technik** vol. 17, no. 8, Aug. 1963

Pilotonverfahren mit frequenzmodulierter Zeichnung für Zwei- und Mehrspurgeräte (Pilot Sound Process with Frequency-Modulated Recording for Double or Multitrack Device) (p. 227) *H. Lennartz and J. Wehrmann*

Der Einfluss der Helligkeitsempfindung auf die Bildwiedergabe (The Influence of Sensitivity to Brightness on Image Reproduction) (p. 243) *H. Grosskopf*

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Verfahren und Einrichtungen zur vollautomatischen Scharfeinstellung optischer Geräte, insbesondere photographischer und Fernsehkameras (Process and Devices for the Completely Automatic Focusing of Optical Systems, Especially Photographic and Television Cameras) (p. 298) *H. Atof*

**The Marconi Review** vol. XXVI, no. 149, 2d quarter 1963

Weather and Radar (p. 144) *G. C. Rider*

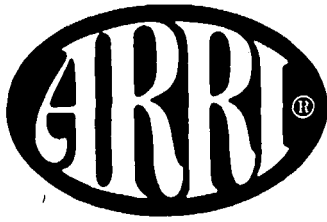
Nomograms for Calculating the Solar Zenith Distance and Azimuth at any Latitude (p. 163) *L. W. Barclay*

vol. XXVI, no. 151, 4th quarter 1963

The Light-Emitting Diode: Its Application to a Short-Path Television Link (p. 242) *A. J. Goss and A. E. Sarson*

**Photo Trade World** vol. 24, Sept. 1963

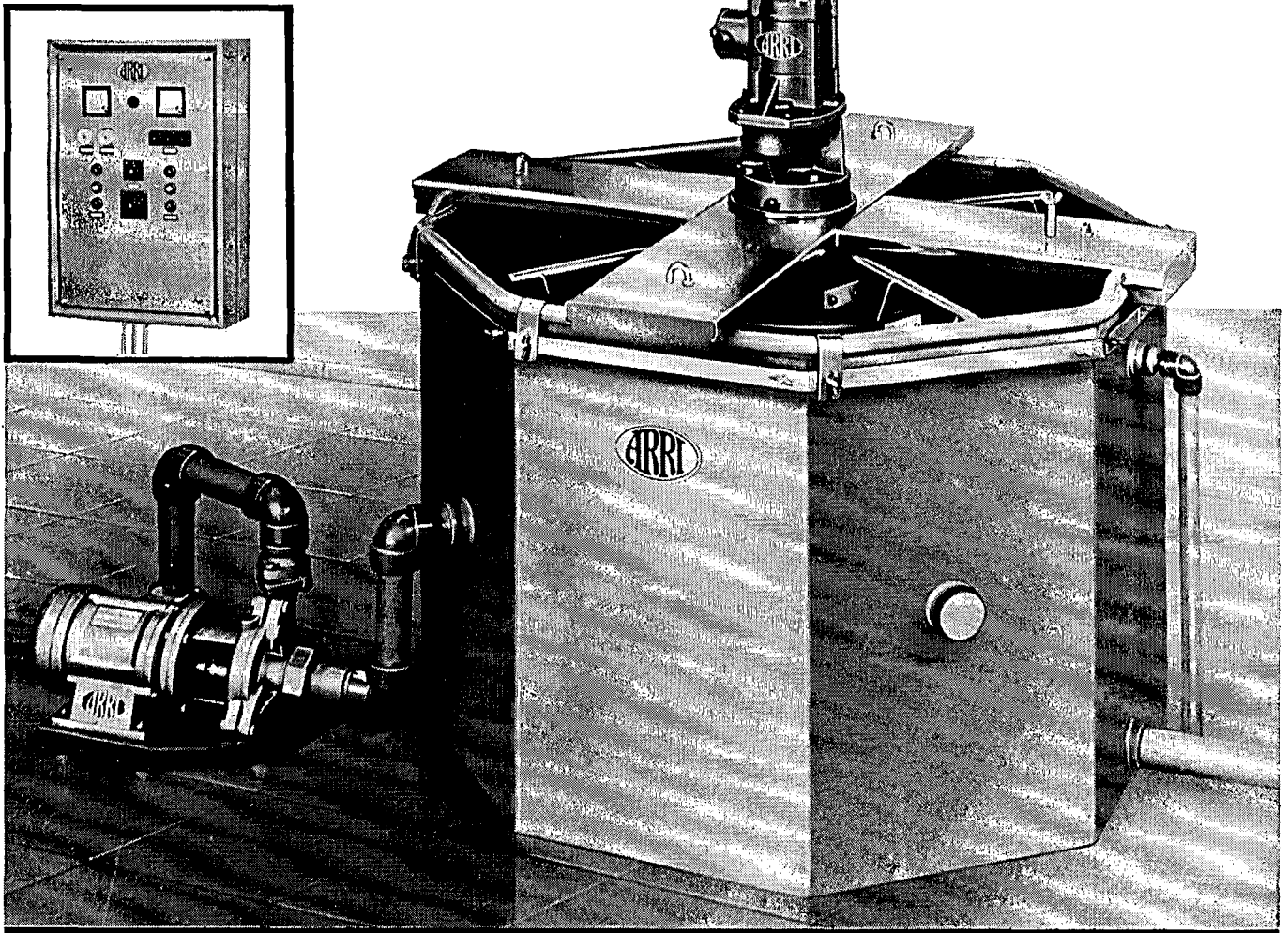
Photo Trade World Trading Guide 35mm S. L. R. Cameras—Edixa Type Mount (p. 476)



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