

Electronic Engineering

GENERAL INDEX

Volume XV

June 1942, to May 1943

PROPRIETORS :

HULTON PRESS, LTD.,

43-44, SHOE LANE,

LONDON, E.C.4

	Page		Page
Abstracts of Electronic Literature			
40, 82, 127, 176, 218, 262, 306, 350, 394, 438, 484	484	Ceramic materials, investigation of, by optical and X-ray analysis	320
Accumulators, Manufacture of (photographs)	283	Ceramic materials and Porcelain, Dielectric or puncture strength	408
Accurate generation of Sub-frequencies from a Standard A.C. Discharge tube, Measurement of anode-cathode voltage drop	324	(see also Vol. 16)	
Aerial, Circular for u.h.f. (abstracted)	432	Choke coupled amplifiers at audio-frequencies (Data Sheet)	465
Aircraft Radio (German)	9	Choke Input Filter for Bi-phase rectifier circuits (Data Sheet)	201
Alignment, I.F., and Instability	241	Circular aerial for u.h.f. (abstracted)	432
Aluminium, The soldering of (abstracted)	388	Circuit performance and Logarithmic Charts—Part II	57
American Colour Television (abstracted)	195	CIRCUITS—	
American Photo-cells (Table)	525, 530	Abstracts	82, 127, 176, 262, 350, 484
American Standards for disk recording (abstracted)	261	Choke input filter for Bi-phase rectifier circuits (Data Sheet)	201
American Valves (R.C.A.)	254	Choke input filter (Data Sheet)	155
AMPLIFIERS—		Patents	84, 178, 222, 352, 396, 440
Biological, Differential input circuits for	40	Rectifier with Choke input Filters (Data Sheet)	155
Discussion	80, 130	Repeater for a relay station	387
Choke-coupled, at audio frequencies (Data Sheet)	465	Selective, and Frequency meter using a Tuning Fork	98
Oscillograph, Preserving D.C. level in	173	Coil Turns measuring equipment, general purpose (abstracted)	250
R.C. coupled (Data Sheet)	421	Colour Television—	
500 watt, Music amplifier	258	American System (abstracted)	
Amplifying and Recording Technique in Electro-Biology	462, 519	Colour and Stereoscopic (J. L. Baird)	
ANALYSIS of Waves—		First Stereoscopic Picture (J. L. Baird)	95
1. General Review	149	Improved (J. L. Baird)	327
2. Analysis of Semi-Periodic Wave-Forms	280	Reproduction of Pictures, 2-and-3-colour	510
3. Analysis of Periodic Wave-Forms	472	Components, German Army wireless, mechanical design of	238
(see also Vol. 16)		Condenser input filter, power supplies (Data Sheet)	203
Automatic analysis of ultra low frequency transients	34	Condensers, straight line rotating plate (abstracted)	434
Harmonic Analysis (mathematical)	13	Conducting silver films on refractory materials	216
APPARATUS, constructional—		Current potential characteristics, non-linear	339
Camera for recording low-speed transients with C.R.O.	52	DATA SHEETS—	
Coil turns measuring equipment (abstracted)	250	29, 30 and 31—Television Waveforms	19
Simple electronic switch	284	32 and 33 —Inductance of single layer Solenoids on Square and Rectangular Formers	65
Q. meter	452	34, 35 and 36—Rectifier Circuits with Choke Input Filters	155
Automatic analysis of ultra low frequency transients	34	37 —Choke Input Filter for Bi-phase Rectifier Circuit	201
Baird, J. L.		38 —Condenser Input Filter Power Supplies	203
Improved Colour Television	327	39, 40 and 41—Performance of the Cathode Follower Circuit (Part I)	287
First Stereoscopic Television Picture in Colour	95	42, 43 and 44—The Cathode Follower (Part II)	375
Colour and Stereoscopic Television	96	45 and 46 —Performance of R.C.C. Amplifiers	421
Beryllium Copper	276	47, 48 and 49—Choke Coupled Amplifiers at Audio Frequencies	
Biological Inter-electrode Impedances, a method of determining	524	50 —Spectral Response Curves (Colour Supplement)	109
BOOK REVIEWS		Frequency Wavelength and L.C. Product Table	111
Aircraft Radio	398	Corrections for D.S. 1-28 (Vol. 14)	112
Dictionary of Scientific Terms	342	Index for Vol. 14	246
Electric and Magnetic Fields	42	D.C. Meter Circuit, Multi-range (abstracted)	486
Electrical Counting	266	Demonstrating the Action of a Multivibrator	476
Elementary Mathematics for Wireless Operators	172	Demonstrations, Experimental for Radio Training Classes	252, 426
Experimental Radio Engineering	342	Design of German Army Wireless Components	238
Fundamentals of Vacuum Tubes	42	Designing a Resistance-loaded Push-pull Inverter	206
Introduction to Valves	266	Determination of an unknown frequency from a photographic record	243
Learning the Radio Telegraph Code	398	Dials, Tuning, Mathematical Calibration of (abstracted)	207
Plastics in Industry	86	Dielectric or Puncture Strength of Porcelain and other Ceramic Materials	408
Problems in Radio Engineering	342	(see also Vol. 16)	
Radio Circuits	86	Differential Electronic Stabiliser for Alternating Voltages	482
Radio Handbook Supplement	172	Differential input circuits for Biological amplifiers, Corrections	40
Radio Receiver Design	528	Discussion	80, 130
Radiology Physics	172	Direct writing oscillograph (abstracted)	54
Short Wave Wireless Communication	266	Discharge Tube, A.C. voltage drop in	324
Temperature Control	398		
The Amplification and Distribution of Sound	528		
Theory of Gaseous Conduction and Electronics	86		
Thermionic Valve Circuits	42		
Wave Guides	172		
Both Electrocardiograph, The	346		
Bridge, Wein, and some of its applications	214		
Calibration of Tuning Dials, mathematical (abstracted)	207		
Camera for recording low-speed transients from a C.R.O.	52		
Cathode Follower, The, Part I (Data Sheet)	287		
Part II (Data Sheet)	375		
(see also Vol. 16)			
CATHODE RAY TUBES—			
Abstracts	40, 262		
In Polarography	367		
Patents	128, 308		
Re-entrant loops on a C.R. tube (abstracted)	347		
Used Stroboscopically	102		
Cathodes, X-ray tube	364		
Cathodic Sputtering	61		

	Page		Page
Editorials 7, 51, 139, 187, 231, 275, 319, 363, 407, 451, 495	326	Laboratory Slang (correspondence)	217, 260
Electrical properties of Polystyrene (abstracted) ...	326	Leland Instruments, Hewlett Packard Resistance-tuned oscillator—Model 200	38
ELECTRO-MEDICAL—		Life of Newton	332
Abstracts	176	Portrait	319
Amplifying and Recording Technique in Electro-Biology	462, 519	Logarithmic Charts and circuit performance—Part 2 ...	57
Automatic Analysis of ultra-low frequency transients	34	Magnetic materials, Testing by C.R.O. (abstracted) ...	286
Biological Amplifier, Differential Input Circuits—		Magic Eye as a Resonance Indicator	164
Corrections	40	Correspondence	217, 260
Discussion	80, 130	Making up Odd Impedances	333
Determining Biological inter-electrode impedances	524	Manufacture of Accumulators (photographs)	283
Electrocardiography, miniature	346	" of Radio Valves, Some aspects of	140
Electroencephalography	519	" and properties of Tungsten and Molybdenum	104
Electronics in Medicine and Surgery	114, 166	Mathematical calibration of tuning dials (abstracted) ...	207
Encephalophone, The	419	MEASUREMENT—	
Suppression of radio interference from electro-medical and other H.F. apparatus (abstracted)	28	Abstracts	40, 82, 176, 350, 394, 484
X-ray Tube Cathodes	364	Coil Turns measuring equipment (abstracted)	250
X-ray Tubes. The Target	188	Patents... ..	178
Electro-physical Units	114	Q., measurement of	452
Electron Lenses, simplified method of obtaining characteristics (abstracted)	366	R.F. Power	344
Electron Optics	295, 328, 372	Smoke Density, using Photo cells	507
Correspondence	374	Measurement of the anode-cathode voltage drop of an A.C. Discharge Tube	324
Electronic Switch, simple	284	Mechanical design of German Army wireless components	238
Experimental demonstrations for radio training classes	252, 426	Medicine and Surgery, Electronics in	114, 166
Filter, Choke Input for Bi-Phase Rectifier Circuit (Data Sheet)	201	Mercury, solubility of metals in (abstracted)	483
Filter Condenser Input, Power Supplies (Data Sheet) ...	203	METERS—	
Foreign Radiolocation Patents	74	Improved inter-electrode capacitance (abstracted) ...	212
Freon (abstracted)	483	Multi-range D.C., circuit (abstracted)	486
Frequency Changers	118	Taylor Model 90, Universal	220
Frequency comparison, Re-entrant loops on a C.R. Tube measurement below 15 kc/s (corrections)	40	Universal shunts for multi-range	76
" meter and Selective Circuit using a Tuning Fork	98	Method of demonstrating action of the multivibrator	476
" Mixing with a triode-hexode	300	Method of determining Biological inter-electrode impedances	524
" proposed new definitions	148	Miniature Electrocardiography	346
" unknown, determination of from a photographic record	243	Molybdenum and Tungsten, manufacture and properties of	104
" wavelength and L.C. Product Table	109	More Television Waveforms	245
Generation of sub-frequencies from a standard	244	Mullard GM 3156 Oscillograph	152
Generation of Groups of Harmonics	232	Multivibrator, Demonstrating the action of	476
German Aircraft Radio	9	Music Amplifier, 500 watt... ..	258
German Army wireless components, mechanical design of	238	Needles, large radius, playing records with (abstracted) ...	79
General purpose coil turns measuring equipment (abstracted)	250	Newton, Life of	332
Generator, Pulse, for circuit testing (abstracted)	310	Portrait	319
Hard valve single-sweep Time Base	418	Non-linear current potential characteristics	339
Harmonic Analysis of Waves	13	Note on Send Elements and Insertion Loss	75
Harmonics, Generation of Groups of	232	Notes from the Industry—	
Hewlett Packard Oscillator, Model 200	38	37, 78, 124, 174, 256, 354, 392, 436, 480, 526	
Imhof, 500 watt music amplifier	258	Notes on Receiver Design	70, 118, 160, 208
Impedances, Making up Odd	333	OSCILLATORS—	
Inductance of Single layer Solenoids on square and rectangular formers (Data Sheet)	65	Hewlett Packard (model 200)	38
Industrial X-ray unit	433	Stabilised Generator (Patent)	249
Industry (see also Notes from the Industry)		Synchronisation of	412, 457
Abstracts 40, 82, 176, 218, 262, 350, 394, 438, 484		Corrections	461
Patents... ..	84, 264, 308	(see also Vol. 16)	
Input circuits, Differential for Biological Amplifiers	40	Tuned-anode-tuned grid	192
Discussion	80, 130	Correspondence	261
Insertion Loss, and Send Elements, a note on	75	OSCILLOGRAPHS—	
Instability and I.F. Alignment	241	Amplifiers, preserving D.C. level of... ..	173
Interference, suppression of, from Electro-medical and other H.F. Apparatus (abstracted)	28	Correction	217
Inter-electrode capacitance meter, improved (abstracted)	212	Direct writing (abstracted)	54
Internal Resistance, effects of	252	In Polarography	367
Inverter push-pull, resistance loaded, Design of	206	Mullard G.M. 3156	152
Investigation of Ceramic materials by optical and X-ray analysis	320	Recording camera for	52
		Testing magnetic materials by (abstracted)	286
		Patents Record 84, 128, 178, 222, 264, 308, 352, 396, 440	
		Performance of the Cathode Follower Circuit (Data Sheet)	290, 375
		(see also Vol. 16)	
		Performance of R.C.C. amplifiers (Data Sheet)	421
		Periodic Waveforms, analysis of	472

	Page
PHOTO-ELECTRIC CELLS—	
American types (table)	525
G.E.C. KMV6 (R.C.A. 931)	530
"Pea" type	504
Selenium, measurement on	505
Smoke density, measurement by	507
Spectral response of	501
Voltage control gear	516
Playing records with large radius needles (abstracted)	79
Polarography, Oscillograph in	367
Polystyrene, Electrical properties of (abstracted)	326
Porcelain and other Ceramic materials, dielectric or puncture strength	408
(see also Vol. 16)	
Power supplies, Condenser input filter (Data Sheet)	203
Practical notes on Receiver Design	70, 118, 160, 208
Preserving D.C. level in Oscillograph Amplifiers	173
Correction	217
Prolonging Valve life (abstracted)	194
Pulse Generator for Circuit testing (abstracted)	310
Push-pull inverter resistance loaded, design of	206
"Q" measurement of	452
RADIO—	
Abstracts	262, 306, 350, 484
German Aircraft	9
Patents... ..	128, 222, 264
Receiver Design, practical notes on	70, 118, 160, 208
Training classes, experimental demonstrations for	252, 426
Valve manufacture, some aspects of	140
Radiolocation Patents, Foreign	74
R.C.A. photocells	525, 530
" valves	254
Receiver Servicing, Training students in	390
Records, Playing with large radius needles (abstracted)	79
Recording Low-speed transients, Camera for	52
Recording, Standards for (abstracted)	261
Rectifier Circuit, Bi-phase, choke input filter for (Data Sheet)	201
Rectifier Circuits with Choke input Filters (Data Sheet)	155
Re-entrant loops on a C.R. Tube (abstracted)	347
R.F. Power measurement	344
Repeater circuit for a relay station	387
Reproduction of Pictures, 2 or 3-colour	510
Resistance loaded push-pull Inverter, Design of	206
Resistors, Standard values of	430
Resonance Indicator, Magic Eye as	164
Correspondence	217, 260
Scientist and the Community, The	147
Reply by Dr. Bernal	242
Discussion	260, 348, 436
Selective Circuit and Frequency meter using a Tuning Fork	98
Selenium photo-cells, measurements on	505
Semi-periodic waveforms, analysis of	280
Send elements and insertion loss, a note on	75
Shunts universal, for multi-range meters	76
Simple electronic switch	284
Simplified methods of determining characteristics of Electron Lenses (abstracted)	366
Smoke density, Measurement, using photocells... ..	507
Soldering of Aluminium (abstracted)	388
Solenoids, inductance of (Data Sheet)	65
Solubility of metals in Mercury (abstracted)	483
Some aspects of Radio Valve Manufacture	140
Sound Head, The	496
Spectral response curves (Data Sheet)	509
" of photoelectric cells	501
Sputtering, Cathodic	61
Stabilised Oscillation Generator (Patent)	249
Stabiliser, Differential electronic for alternating voltages	482

	Page
Standards for recording (abstracted)	261
Standard values of resistors	430
Stereoscopic and Colour Television. First Picture (J. L. Baird)	95, 96
Straight Line Rotating Plate Condensers with large angle of rotation (abstracted)	434
Sub-Frequencies from a Standard, Accurate Generation of	244
Suppression of Radio Interference from electrical and other apparatus (abstracted)	28
Synchronisation of Oscillators	412, 457
Corrections	461
(see also Vol. 16)	
Table of American Photo-cells (R.C.A.)	525
Taking care of Transmitters (abstracted)	304
Target, X-ray, The	188
Taylor Model 90, Universal test meter	220
TELEVISION—	
Abstracts	40, 127, 438
American system (abstracted)	195
Colour and Stereoscopic Television (J. L. Baird)	96
Colour Television	195
Improved Colour (J. L. Baird) Patents... ..	128, 178, 222, 264, 352,
Stereoscopic Colour, First Picture (J. L. Baird)	95
Television Waveforms (Data Sheet)	19
" more	245
Testing of magnetic materials by the C.R.O. (abstracted)	286
Theory—	
Abstracts	82, 127, 176, 218, 262, 306, 350, 394, 484
THERMIONIC DEVICES—	
Abstracts	82, 127, 218, 262, 306, 350, 438
Magic Eye as a resonance indicator	164
Patents... ..	222, 264, 396
Time Base, Hard Valve Single Sweep	418
Training Students in Receiver Servicing	390
Transformers, Voltage regulating	384
Transmitters, Taking care of (abstracted)	304
Triode-hexode, Frequency mixing with	300
Tuned Anode-tuned grid oscillator, Analysis of	192
Correspondence	261
Tungsten and Molybdenum, manufacture and properties of	104
Tuning dials, Mathematical calibration of (abstracted)	207
Universal test meter, Taylor model 90	220
Universal Shunts for multi-range meters	71
Valve as an amplifier	426
" Life, prolonging (abstracted)	254
Valves, manufacture of	254
some R.C.A.	32
Vibrator waveforms	516
Voltage control gear, a photoelectric	324
Voltage drop of an A.C. discharge tube, measurement of	384
Voltage regulating transformers	384
WAVE ANALYSIS—	
1. General Review	149
2. Analysis of semi-periodic waveforms	280
3. Analysis of periodic waveforms	472
(see also Vol. 16)	
Automatic Analysis of ultra low frequency transients	34
Harmonic Analysis (mathematical)	13
WAVEFORMS—	
Television (Data Sheet)	19
More Television	245
Vibrator	32
Wavelength Frequency and L.C. product, Table for	109
Wein Bridge, some of its applications	214
X-ray tube cathodes	364
X-ray tube design—The Target	188
X-ray unit, industrial	433