COMMUNICATION ELECTRONICS

SUBSIDIARY OF WATKINS-JOHNSON COMPANY

CONDENSED CATALOG
October, 1968

INDEX

For further information on any item listed in this Catalog—or for special assistance on any receiver problem—write CEI, 6006 Executive Boulevard, Rockville, Maryland 20852, or telephone Area Code 301, 881-3300. Complete specification sheets on any equipment listed in this Catalog will be sent upon receipt of one of the enclosed business reply cards. Prices subject to change without notice.

CEI produces the nation's most complete selection of advanced special purpose RF receivers and ancillary receiving equipment.

More than 100 different models are available, directed at surveillance, telemetry, direction finding, countermeasures and general communications.

This array of precision products begins with CEI-designed receivers and receiving systems covering the frequencies from 1 kHz through 12 GHz, including units with built-in signal monitors and counters. Separate signal monitors, frequency extenders, converters, preamplifiers, multicouplers, digital readouts and other accessories such as speaker units, meter panels and mounting frames also are offered.

All CEI products incorporate the latest advances in electronic components and circuit techniques. And, to assure the highest reliability in all of its products, CEI has adopted a policy of performing in-house all possible manufacturing operations—from design to delivery. CEI thus is one of the nation's most self-sufficient electronics firms.

CEI is a subsidiary of the Watkins-Johnson Company of Palo Alto, California. W-J is an established leader in research, development and manufacturing of microwave devices, both tube and solid state, receiving and transmitting equipment and systems.

354 RECEIVER

Unusually wide tuning range, variable IF bandwidths, high tuning accuracy. Tunes from 1 kHz to 600 kHz in single band, spanning ELF through VLF and LF into MF band. Front-panel switch selects 150 Hz, 1 kHz, 3 kHz, or 6 kHz IF bandwidths. Crystal bandpass filters determine all IF bandwidths.

$2,500

355 RECEIVER

Wideband unit for RFI and EMI detection in frequency range of 1 kHz to 600 kHz. Covers range in single band. Selectable IF bandwidths—1 kHz, 6 kHz, 20 kHz or 50 kHz—facilitate detection of wideband and narrowband signals.

$3,000

357 RECEIVER

Tunes from 1 kHz to 600 kHz in single band. Four IF bandwidths: 150 Hz, 1 kHz, 3 kHz, 6 kHz. Four-digit Nixie displays frequency to which receiver is tuned. Digital automatic frequency control (DAFC) circuit stabilizes receiver's local oscillator to ± 10 Hz of the desired frequency.

$4,200

371A RECEIVER

Wideband HF receiver covering 500 kHz to 10 MHz in one band. Designed for FM, AM, or CW reception over entire range. Particularly suitable for RFI detection and predetection recording.

$3,000

CEI

RECEIVERS

373A RECEIVER

Wideband HF receiver covering 500 kHz to 30 MHz in two bands: 500 kHz to 10 MHz and 10 MHz to 30 MHz. For FM, AM, or CW reception over entire tuning range. Particularly suitable for RFI detection and predetection recording. Four front-panel selectable IF bandwidths: 6, 20, 100 and 400 kHz.

$3,500

377A RECEIVER

Wideband HF receiver covering 500 kHz to 10 MHz in one band. For FM, AM, or CW reception over entire range. Particularly suitable for RFI detection and predetection recording. Six-digit Nixie displays frequency. Digital automatic frequency control (DAFC) circuit stabilizes receiver's local oscillator to ± 100 Hz of desired frequency. Selectable IF bandwidths: 6, 20, 100 and 400 kHz.

$4,500

415 AM RECEIVER

Fixed tuned. For AM reception requiring crystal-controlled stability in 60 MHz to 150 MHz range. Four standard tuners available. Front-panel switch selects one of four preset channels. IF bandwidths available of 50 kHz or 100 kHz.

$995

416 PULSE RECEIVER

Fixed tuned. For pulse reception requiring crystal-controlled stability in 60 to 150 MHz range. Four standard tuners available. IF bandwidth: 2 MHz.

$995

440 RECEIVER

Fixed tuned for AM reception. Crystal-controlled stability in 30 MHz to 220 MHz range. Four standard tuners available. IF bandwidths available of 20 kHz or 50 kHz. Receiver plugs into Equipment Frame EF-506 for rack operation or into Portable Equipment Case PEC-401 for battery operation. Photo shows six in rack mount.

$675

441 RECEIVER

Fixed tuned for FM reception. Crystal-controlled stability in the 30 MHz to 220 MHz range. Four standard tuners available. IF bandwidths available of 20 kHz or 50 kHz. Receiver plugs into Equipment Frame EF-506 for rack operation or into Portable Equipment Case PEC-401 for battery operation.

$675

501A, 504A VHF RECEIVERS

AM, FM, and CW reception from 54 MHz to 260 MHz in single band. 504A includes crystal marker oscillator. Two IF bandwidths: 10 kHz and 300 kHz. 501A-1 available with AFC.

501A—$1,600
504A—$1,750

521A, 521A-1 RECEIVERS

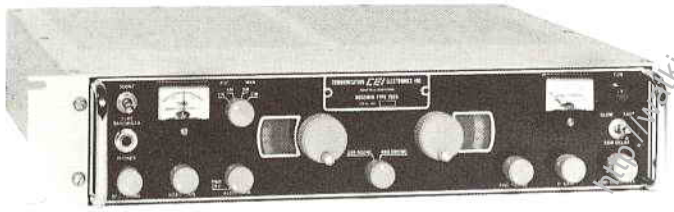
AM, FM, and CW reception from 20 MHz to 70 MHz. Three IF bandwidths: 4 kHz, 10 kHz, or 50 kHz. Built-in signal monitor with maximum sweep width of 300 kHz and resolution of 2.5 kHz. Ideal monitoring receiver for this active band. 521A-1 tunes from 20 MHz to 80 MHz.

521A—$3,200
521A-1—$3,200

CEI

RECEIVERS

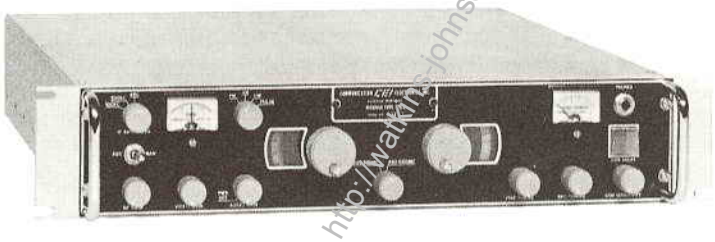
702A UHF RECEIVER



For critical reconnaissance work. Extremely low oscillator radiation, low noise, small size, light weight, low power consumption. IF bandwidths: 50 kHz, 300 kHz, 2 MHz. Receives AM, FM, CW. 235-1000 MHz. Carrier operated relay (COR) circuit.

$3,000

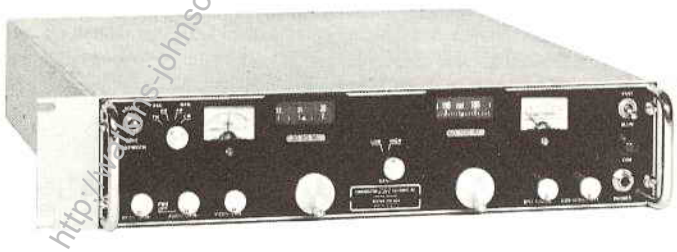
775-3 RECEIVER



For AM, FM, CW and pulse signals in UHF range of 235 to 1000 MHz. Maximum performance with advantages of small size and low power consumption. Carrier operated relay (COR) circuit. IF bandwidths: 100 kHz, 500 kHz, 4 MHz.

$3,700

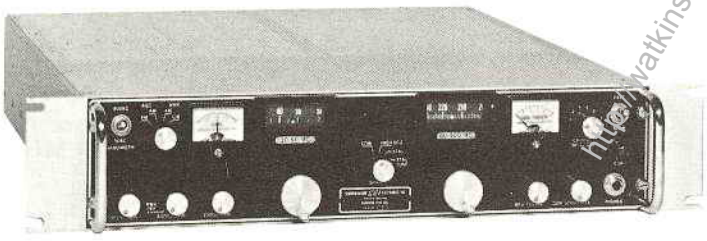
901B, 904A, 905A, 906A VHF RECEIVERS



Compact, high performance, general purpose VHF receivers covering 30 MHz to 300 MHz in two bands. 904A and 906A include crystal marker oscillator. 905A and 906A contain carrier operated relay. All have IF bandwidths of 20 kHz and 300 kHz.

901B—$1,925
904A—$2,075
905A—$2,025, 906A—$2,175

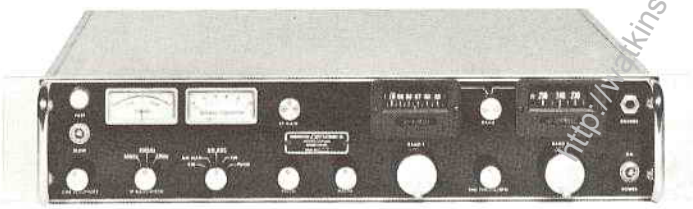
952 VHF RECEIVER



AM, FM, CW VHF receiver covering 30 to 300 MHz in two bands: 30 to 90 MHz and 60 to 300 MHz. Wide tuning range. Crystal-control capability in 100 MHz to 150 MHz range. Front panel switch selects one of six crystal-controlled channels. IF bandwidths: 50 kHz and 300 kHz.

$2,400

977 RECEIVER



For reception of AM, FM, CW, and pulse signals in VHF frequency range of 30 to 300 MHz. All solid state, with dual gate MOS field-effect transistors for high dynamic range. Three IF bandwidths: 60 kHz, 300 kHz, and 3 MHz. Pulse AGC circuit permits operation on pulse widths as narrow as 1 microsecond with pulse repetition rates as low as 50 pps. Ideal when wide bandwidth and pulse reception is required. Can be used with CEI's Type DRO-302A for digital readout and digital automatic frequency control.

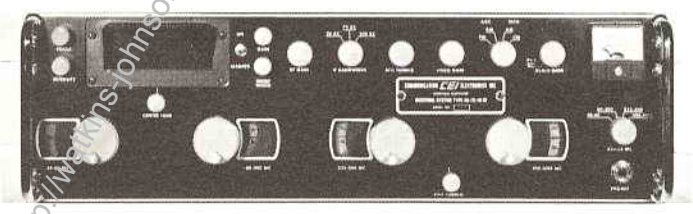
$2,700

RS-111-1B-7 VHF-UHF RECEIVING SYSTEM

For complete coverage of the frequency range from 30 to 1000 MHz. AM, FM, CW reception. Displays RF signals with built-in signal monitor. Internal relays provide single AM or FM video output. System operated from single antenna input. Four IF bandwidths: 20 kHz, 75 kHz, 300 kHz and 2 MHz. Front panel tuning meter. AGC output available for remote monitoring.

$6,250

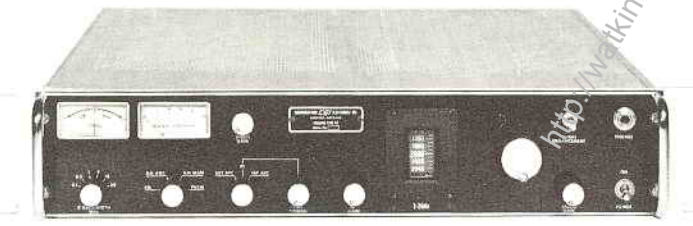
RS-111-1B-12 VHF-UHF RECEIVING SYSTEM



For complete coverage of the frequency range from 30 to 1000 MHz in four bands. AM, FM, CW operation. Displays RF signals with built-in signal monitor which has center frequency crystal marker to aid tuning. Front panel signal strength meter. Four IF bandwidths: 20 kHz, 75 kHz, 300 kHz, and 2 MHz. 2 MHz bandwidth IF operates continuously; others are selectable.

$6,250

112 MICROWAVE RECEIVER



Extremely compact. For reception of AM, FM and pulse signals in 1 to 12 GHz range. Uses 4 modular TH series tuning heads, mounted in the receiver one at a time. TH-120 covers 1 to 2 GHz; TH-240, 2 to 4 GHz; TH-480, 4 to 8 GHz; TH-812, 8 to 12 GHz. Six IF bandwidths: 500 kHz, 1 MHz, 2 MHz, 4 MHz, 10 MHz, 20 MHz.

$22,500

CEI

TUNERS

Shown: Type ST-1045

CEI offers the following series of tuners to be used in a receiving system such as CEI's RS-125 to cover the frequency range from 500 kHz to 12 GHz. These tuners convert the input signals to an IF of 21.4 MHz that can be amplified and demodulated with CEI's DM-4CA or with any IF demodulator centered at 21.4 MHz. The tuners with a prefix S have built-in motor drive to provide either complete or sector scanning of the band in operation.

TUNER SPECIFICATIONS

Model	*Bands*	*Range*	*Noise Figure*	*Bandwidth*	*Price*
HT-10	1	500 kHz-10 MHz	7 db max.	400 kHz min.	$2,000
LT-1020A	1	.95-2.05 GHz	18 db max.	8 MHz. min.	$4,200
SLT-1020A	1	.95-2.05 GHz	18 db max.	8 MHz min.	$5,600
ST-1045	2	.95-2.05 GHz 1.95-4.5 GHz	18 db max. 18 db max.	8 MHz min.	$8,700
SST-1045	2	.95-2.05 GHz 1.95-4.5 GHz	18 db max. 18 db max.	8 MHz min.	$10,500
VT-10	2	10-30 MHz 30-90 MHz	7 db max. 7 db max.	2 MHz min.	$1,800
SVT-10	2	10-30 MHz 30-90 MHz	7 db max. 7 db max.	2 MHz min.	$2,550
VT-11	1	10-30 MHz	6 db max.	2 MHz min.	$1,000
SVT-11	1	10-30 MHz	6 db max.	2 MHz min.	$1,500
VT-30	2	30-60 MHz 54-260 MHz	6.5 db max. 6.5 db max.	3 MHz min.	$2,000
SVT-30	2	30-60 MHz 54-260 MHz	6.5 db max. 6.5 db max.	3 MHz min.	$2,750
UT-1000	2	235-500 MHz 490-1000 MHz	11 db max. 14 db max.	6 MHz min. 8 MHz min.	$2,500
SUT-1000	2	235-500 MHz 490-1000 MHz	11 db max. 14 db max.	6 MHz min. 8 MHz min.	$3,250
CT-4080	1	4-8 GHz	18 db max.	8 MHz min.	$6,500
SCT-4080	1	4-8 GHz	18 db max.	8 MHz min.	$7,250
XT-8012	1	8-12 GHz	18 db max.	8 MHz min.	$6,500
SXT-8012	1	8-12 GHz	18 db max.	8 MHz min.	$7,250

FREQUENCY EXTENDERS

Shown: Type FE-1-4.5

SMOOTH-OPERATING, TROUBLE-FREE

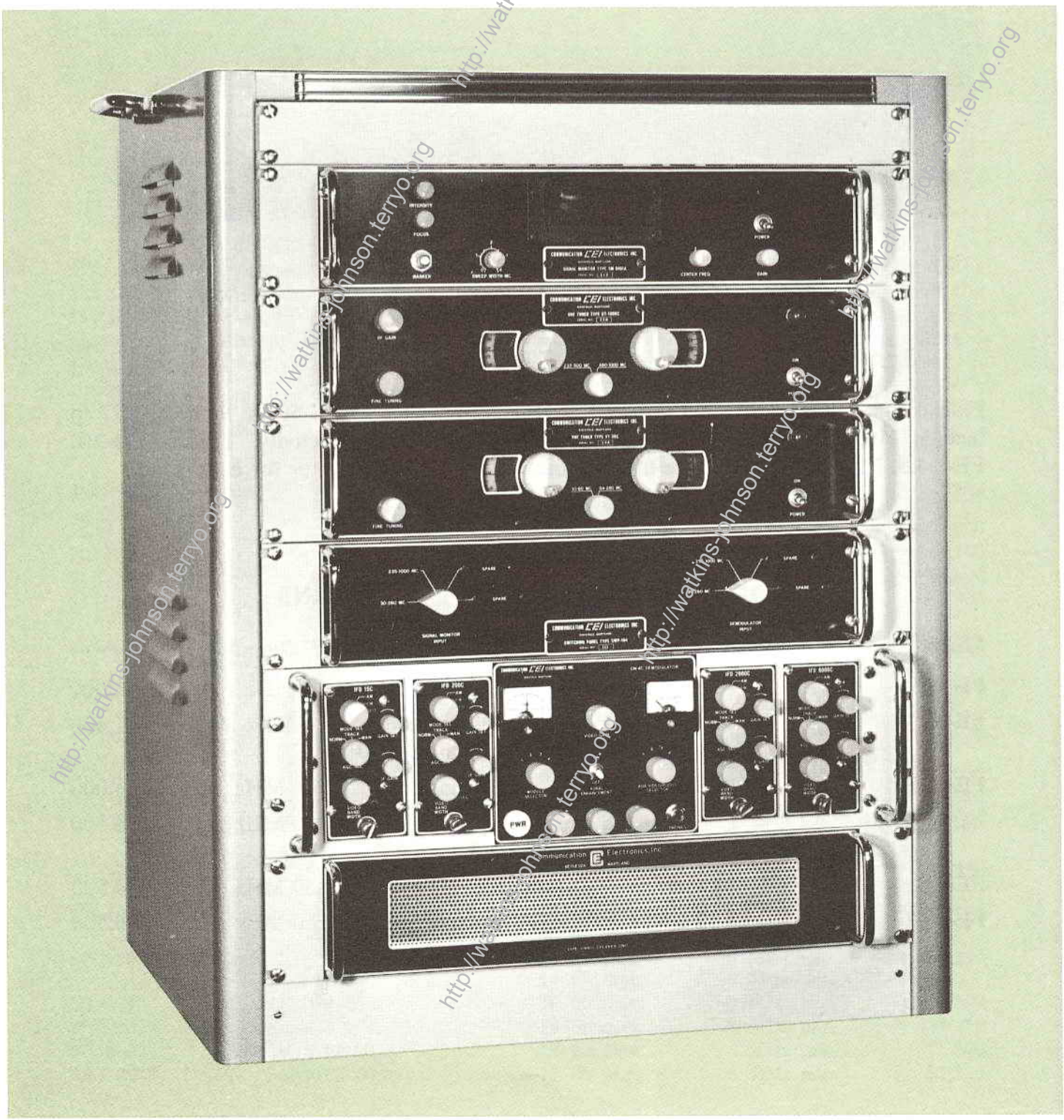
Extend the frequency coverage of CEI VHF receivers such as the 501A, 901B or 977 to include HF, UHF and SHF regions. High stability and selectivity. Types FE-1-2B, FE-1-4.5, FE-4-8, FE-8-12 have tunable four-section YIG preselector for each band.

FREQUENCY EXTENDER SPECIFICATIONS

Model	*Bands*	*Range*	*Noise Fig.*	*IF Output*	*Price*
FE-103	1	10-30 MHz	6 db max.	60 MHz	$1,000
FE-25-1	2	235-500 MHz 490-1000 MHz	10 db max. 12 db max.	60 MHz	$1,400
FE-1-2B	1	1-2 GHz	18 db max.	160 MHz	$4,000
FE-1-4.5	2	950-2050 MHz 1950-4500 MHz	18 db max. 18 db max.	160 MHz	$8,500
FE-4-8	1	4-8 GHz	18 db max.	160 MHz	$6,500
FE-8-12	1	8-12 GHz	18 db max.	160 MHz	$6,500

AM, FM, CW, PULSE RECEPTION
from .5 MHz to 12 GHz

TYPE RS-125 RECEIVING SYSTEM



Many variations of the RS-125 Receiving System have been supplied. CEI representatives will be glad to assist you in the selection of components for a system to fill your requirements.

The RS-125 Receiving System is a highly versatile arrangement of equipments providing AM, FM, CW, and pulse reception over a frequency range as wide as 500 kHz to 12 GHz utilizing CEI tuners.

It is a modular receiving system in which the user need only obtain those component parts required for the particular monitoring job at hand. A wide selection of tuners, demodulators, bandwidths and ancillary devices is available.

The received signals are processed by a demodulator utilizing plug-in modules which are available in 10 standard bandwidths ranging from 5 kHz to 8 MHz.

Range of the RS-125 Receiving System can be extended on the low end to 1 kHz by adding any of the 300 series receivers.

The system shown at left is typical of those CEI has supplied. 4 plug-in modules were furnished with this system providing IF bandwidths of 15 kHz, 200 kHz, 2 MHz, and 8 MHz. All 4 of the IF modules could be installed simultaneously or any 3 could be used with the pulse-stretching AGC module installed.

The signal monitor input is controlled by the switching panel to monitor the output of other tuners. The switching panel also switches the output of the desired tuner or receiver to the input of the demodulator. The speaker panel monitors the audio output from the demodulator unit.

All tuners can be supplied with internal motor drives which feature sector scan, enabling the operator to adjust the upper and lower frequency limits of the sector in which he is interested.

The units listed at right have been specially designed for use in an RS-125 Receiving System. Specifications and prices will be found in the sections in this catalog in which these equipments are listed by type. Detailed specifications will be sent upon receipt of one of the enclosed business reply inquiry cards.

EQUIPMENTS

TUNERS

Model	*Range*	*Model*	*Range*
HT-10	500 kHz-10 MHz	LT-1020A	.95-2.05 GHz
VT-11	10-30 MHz	SLT-1020A	.95-2.05 GHz
SVT-11	10-30 MHz	ST-1045	.95-2.05 GHz
VT-10	10-30 MHz		1.95-4.5 GHz
	30-90 MHz	SST-1045	.95-2.05 GHz
SVT-10	10-30 MHz		1.95-4.5 GHz
	30-90 MHz	CT-4080	4-8 GHz
VT-30	30-60 MHz	SCT-4080	4-8 GHz
	54-260 MHz	XT-8012	8-12 GHz
SVT-30	30-60 MHz	SXT-8012	8-12 GHz
	54-260 MHz		
SUT-1000	235-500 MHz		
	490-1000 MHz		

DEMODULATORS

DM-4CA—$1,200

IFD-C Series Demodulator Plug-ins

Model	*Price*	*Model*	*Price*
IFD-5C	$800	IFD-500C	$500
IFD-15C	$700	IFD-1000C	$500
IFD-50C	$700	IFD-2000C	$500
IFD-100C	$700	IFD-4000C	$800
IFD-200C	$500	IFD-8000C	$800

SIGNAL MONITORS

Model	*Price*
SM-9403A	$850
SM-9404A	$800
SM-9412	$800
SM-9803A	$850
SM-9804A	$800

AGC MODULES

AGC-BC Box Car AGC	$1,200
AGC-PS Pulse Stretching AGC	$650

SPEAKER PANELS

Model	*Price*
S-9203	$160
S-9903D	$160
S-9908B	$225

SWITCHING MODULES

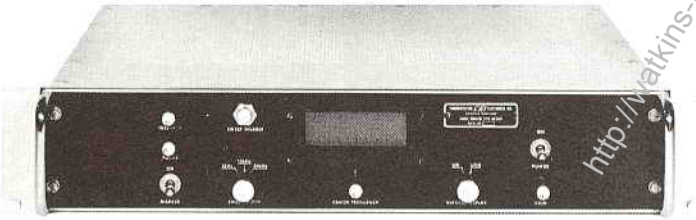
SWP-104—3.5″ high by 19″ wide	$300
SWP-602—3.5″ high by 7.9″ wide	$150

NOISE SILENCER

NS-101	$800

SIGNAL MONITORS

SM-8421 SIGNAL MONITOR



Operates from a 2 MHz IF output to provide visual display of signals in a band around the received signal. Sweep widths: 3 kHz, 15 kHz, 50 kHz. Operating accessory for CEI receivers such as types 354, 355, 357.

$2,500

SM-8511 SIGNAL MONITOR

For use with HF receivers having a 500 kHz IF center frequency such as Collins 51S1. Provides visual display of signals in a band around the received frequency. Sweep widths: 5, 20, 50, 200 kHz.

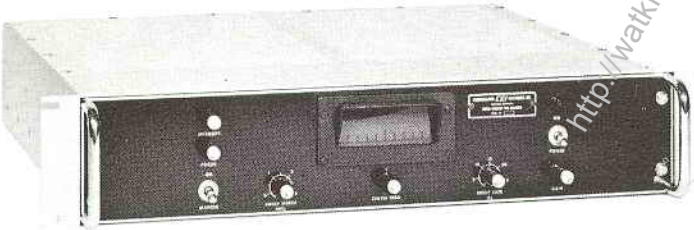
$1,600

SM-8512 SIGNAL MONITOR

For use with HF receivers having a 455 kHz IF center frequency such as the R-390. Provides visual display of signals in a band around the received frequency. Sweep widths: 5, 20, 50 kHz, switch selectable.

$1,400

SM-9303A, SM-9304A SIGNAL MONITORS

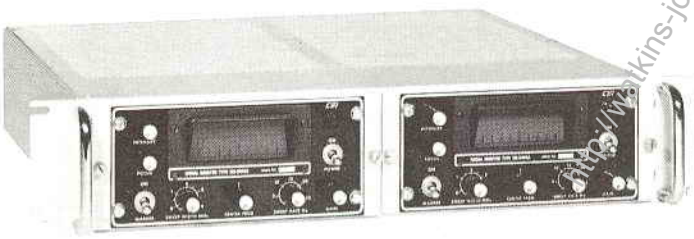


For use with CEI VHF and UHF receivers having a 21.4 MHz IF. Provides visual display of signals in a band around the received signal. Both have maximum sweep width of 3 MHz. SM-9303A is 3½″ high by 19″ wide. SM-9304A is half-rack size, 3½″ high by 7.9″ wide.

SM-9303A—$850
SM-9304A—$800

SIGNAL MONITORS

SM-9403A, SM-9404A SIGNAL MONITORS



For use with CEI tuners (HT, VT, UT, LT, ST, CT, XT series) installed in a receiving system such as CEI's RS-125. Provide visual display of signals in a band around the received signal. Both have maximum sweep width of 4 MHz. SM-9403A is 3½″ high by 19″ wide. SM-9404A is half-rack size, 3½″ high by 7.9″ wide.

SM-9403A—$850
SM-9404A—$800

SM-9412 SIGNAL MONITOR

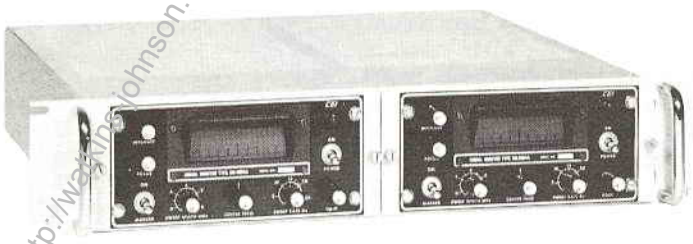
A 24-volt battery-operated unit for use with CEI tuners (HT, VT, UT, LT, ST, CT, XT series), or any battery-operated receiver with a 21.4 MHz IF output. Provides visual display of signals in a band around the received signal. Maximum sweep width: 4 MHz. Half-rack size, 3½″ high by 7.9″ wide.

$800

BP-201 BATTERY PACK. 24 volts, half-rack size, 3½″ high by 7.9″ wide. For operation of SM-9412. Maximum operating time 8 hours. Maximum recharging time 14 hours. Battery included.

$150

SM-9803A, SM-9804A SIGNAL MONITORS



For use with CEI wide bandwidth tuners (UT, LT, ST, CT, XT series) installed in a receiving system such as CEI's RS-125. Provide visual display of signals in a band around the received signal. Both have maximum sweep width of 8 MHz. SM-9803A is 3½″ high by 19″ wide. SM-9804A is half-rack size, 3½″ high by 7.9″ wide.

SM-9803A—$850
SM-9804A—$800

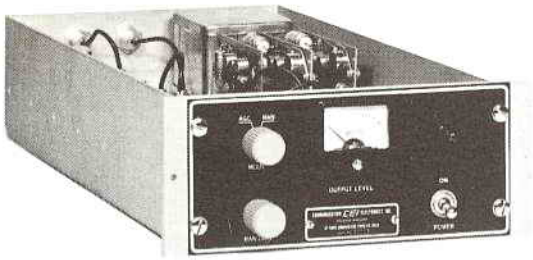
SM-9831, SM-9832 SIGNAL MONITORS

Operate from a 30 MHz IF output from a receiver to provide visual display of signals in a band around the received signal. Both have maximum sweep width of 8 MHz. SM-9831 is 3½″ high by 19″ wide. SM-9832 is half-rack size, 3½″ high by 7.9″ wide.

SM-9831—$950
SM-9832—$900

CEI

PREDETECTION CONVERTERS



FT-101A, FT-201A PREDETECTION CONVERTERS

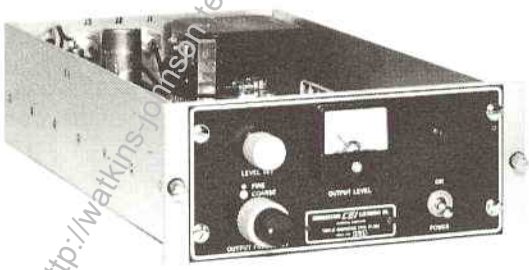
Accept 21.4 MHz IF output from receivers and translate signal to one which can be recorded on a wideband tape recorder. Data bandwidth: 100 kHz to 1.4 MHz. Output center frequency. 750 kHz. FT-101A is 3½″ high by 19″ wide. 201A is half-rack size, 3½″ high by 7.9″ wide.

FT-101A—$1,045
FT-201A—$995

TF-101, TF-201 PREDETECTION CONVERTERS

Translate output signal from a tape recorder up to 21.4 MHz for demodulation. Data bandwidth is 1.3 MHz when input center frequency is 750 kHz. TF-101 is 3½″ high by 19″ wide. TF-201 is half-rack size, 3½″ high by 7.9″ wide.

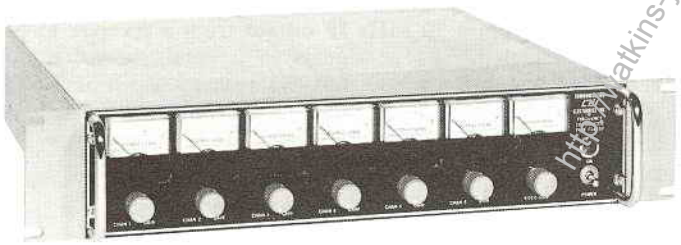
TF-101—$900
TF-201—$850



TF-102, TF-202 PREDETECTION CONVERTERS

Translate output signal from a tape recorder up to 21.4 MHz for demodulation. Data bandwidth is 1.3 MHz when input center frequency is 750 kHz. Front panel tuning control permits maintaining output frequency of 21.4 MHz for input center frequency between 100 kHz and 1.4 MHz. This permits separation of a narrow-band signal from the complete band. TF-102 is 3½″ high by 19″ wide. TF-202 is half-rack size, 3½″ high by 7.9″ wide.

TF-102—$950
TF-202—$900

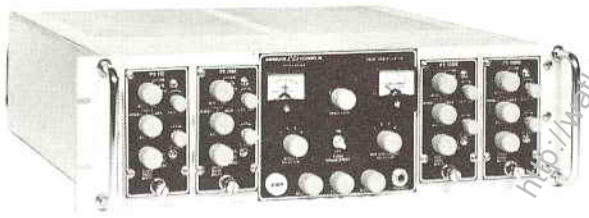


TYPE FT-4557 FREQUENCY TRANSLATOR

Designed for predetection recording from receivers having a 455 kHz IF. Simultaneously accepts IF outputs from as many as six receivers and converts them to six staggered frequencies between 580 kHz and 1.33 MHz. Each of the six input channels has a data bandwidth of 50 kHz. An additional video input is provided which is not translated, having the same output frequency as the input.

FT-4557—$2,900

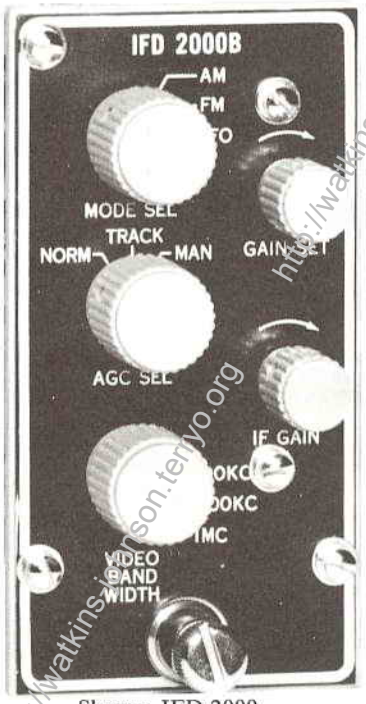
DEMODULATORS AGC UNITS



DM-4CA DEMODULATOR

Used with plug-in modules to provide AM, FM, CW, and pulse reception from a tuner providing a 21.4 MHz IF input signal (such as CEI's HT, VT, UT, LT, ST, CT, XT series). Accepts 4 IFD modules or 3 IFD and 1 AGC or 3 IFD and noise silencer. 5 video and 3 audio output signals.

$1,200



Shown: IFD-2000

IFD-C SERIES IF DEMODULATORS

For operation in DM-4CA demodulator. 10 modules range from 5 kHz to 8 MHz. Provide AM, FM, CW, and pulse reception from an incoming 21.4 MHz IF signal.

SPECIFICATIONS

Model	*Bandwidth*	*Bandpass Filter & FM Discriminator*	*Price*
IFD-5C	5 kHz	Crystal	$800
IFD-15C	15 kHz	Crystal	$700
IFD-50C	50 kHz	Crystal	$700
IFD-100C	100 kHz	Crystal	$700
IFD-200C	200 kHz	LC	$500
IFD-500C	500 kHz	LC	$500
IFD-1000C	1 MHz	LC	$500
IFD-2000C	2 MHz	LC	$800
IFD-4000C	4 MHz	LC	$800
IFD-8000C	8 MHz	LC	$800

AGC UNITS

BC

PS

AGC-BC BOX CAR AGC

Plug-in unit for DM-4CA demodulator. Provides sample-and-hold, peak-type AGC voltage from incoming pulse video signal, or averaged-type AGC voltage from incoming AM or CW signal. AGC voltages derived from video input signal furnished by an IFD-C series demodulator and fed back to the same IFD. **$1,200**

AGC-PS PULSE-STRETCHING AGC

Used with type DM-4CA demodulator to automatically provide peak-type AGC voltage from incoming pulse signals and averaged-type AGC from CW signals. AGC voltages derived from video signal input supplied by an IFD-C series demodulator and fed back to the same IF. **$650**

DIGITAL READOUTS

DRO-50 DIGITAL READOUT

Companion unit for Hammarlund SP-600 receiver, which tunes from 0.54 to 54 MHz. 6-digit display of received frequency. Receiver-readout combination provides a means for very accurate readout (± 100 Hz) of receiver tuning.

$2,500

DRO-290A DIGITAL READOUT

Companion unit for CEI type 521B receiver. 6-digit display of received frequency. Features dual DAFC (digital automatic frequency control) when used with either receiver. Compact—occupies 1.75 inches of vertical space.

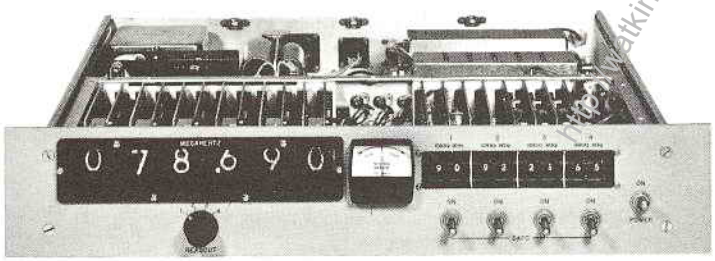
$2,800

DRO-302A, DRO-302A-2 DIGITAL READOUTS

Indicate tuned frequency of CEI receivers having a 21.4 MHz IF over the frequency range of 30 MHz to 300 MHz. 6-digit display. Provisions for changing internal preset so that tuned frequency of HF receivers can be indicated down to 10 kHz. 302A-2 has BCD output. Resolution of ± 100 Hz in 10 kHz to 30 MHz range; ±1 kHz, 30-300 MHz range. Features digital automatic frequency control (DAFC). For use with CEI VHF receivers. Half-rack size, 3½″ high by 7.9″ wide.

DRO-302A—$2,800
DRO-302A-2—$2,800

DRO-306 DIGITAL READOUT

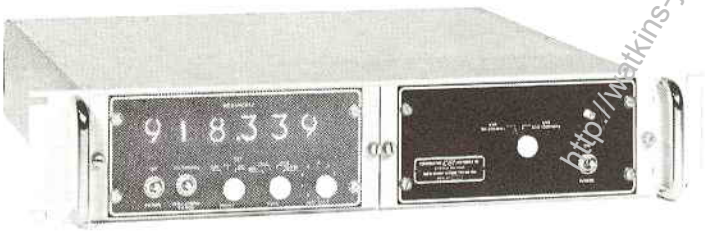


Time-shared counter for readout of up to 4 CEI VHF receivers. 6-digit display. DAFC voltages from last two digits available for all receivers. Continuously updated BCD output of tuned frequency of each receiver available on command.

$5,000

ANCILLARY EQUIPMENT

DRX-1000 DIGITAL READOUT EXTENDER



Extends range of DRO-302A digital readout to 1000 MHz when used with CEI UHF receivers. Also extends DAFC capability. Half-rack size, 3½" high by 7.9" wide. DRO-302A and DRX-1000 can be used together in equipment frame EF-201 for standard 19-inch rack mounting.

$1,700

IFD-LOG LOGARITHMIC IF AMPLIFIER

Plug-in module for use with CEI's DM-4CA demodulator to facilitate reception of pulse-type signals having wide dynamic range. Employs successive video detection technique. Requires no video delay lines or tuned circuits. Rise time: 100 nanoseconds, approximately. Bandwidth: 10 MHz.

$700

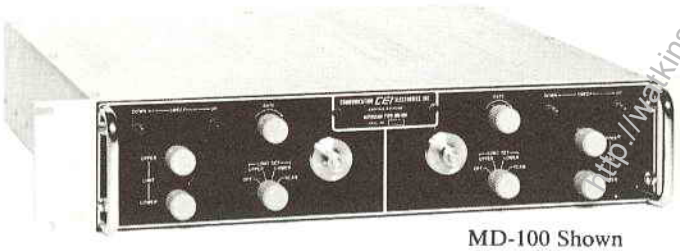
DA-5 AUDIO DISTRIBUTION AMPLIFIER

Provides five isolated outputs from common audio input. Outstanding gain stability over wide temperature range, as well as extremely high isolation between outputs and between the input and the outputs. Internally adjusted gain controls set amplitude of each output signal.

$595

ANCILLARY EQUIPMENT

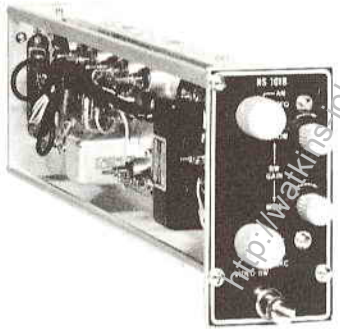
MD-50, MD-100 AUTOSCANS



MD-100 Shown

Used to externally drive tuning knobs on receiver. MD-100 has 2 channels, each controlling one driving pulley. MD-50 is single channel for receivers with single tuning knob. Independent variable speed control and sector scan for each channel. For use with CEI's 354-2 receiver. MD-100 for use with CEI's 775-3, 901B-1 receivers. Analog positioning input required from receivers.

MD-50—$850
MD-100—$1,500



NS-101 NOISE SILENCER

Special plug-in module for use with DM-4CA demodulator. AM and CW reception from 21.4 MHz center frequency input. Removes pulse-type noise interference by using 2 MHz and 15 kHz bandwidth IF's separated by shunt limiters. Contains internal 21.4 MHz beat frequency oscillator.

$800

S-9203 SPEAKER PANEL

Integral, five-watt output, solid-state amplifier and power supply. Nominal input impedance: 10,000 ohms, used to bridge rather than terminate output of receiver or line. Seven selectable inputs. 3 x 5-inch speaker for high quality audio reproduction and response. Half-rack size, 3½″ high by 7.9″ wide.

$160

S-9903D, S9908B SPEAKER PANELS

Integral, five-watt output, solid-state amplifier and power supply. Nominal input impedance: 10,000 ohms, used to bridge rather than terminate output of receiver or line. S-9903D has 7 inputs. S-9908B has an additional input labeled microphone. 3½″ high by 19″ wide.

S-9903D—$160
S-9908B—$225

MP-101 Shown

METER PANELS

TYPE MP-101

An accessory to adapt receivers having a 21.4 MHz IF output for use as a selective comparison voltmeter. Either peak or average carrier level response can be selected by a front-panel switch. For observing the amplitude of pulse signals, a video amplifier is provided from the output of the AM detector. To display pulse signals with a minimum amount of base-line noise, a variable slide-back-gate feature has been included in the video amplifier.

$750

TYPE MP-102

An accessory for measuring the frequency deviation of an FM signal. A front-panel tuning meter centered at a 21.4 MHz frequency indicates any input signal drift. A deviation meter, also mounted on the front panel, provides accurate indications of the peak deviation of sine-wave modulation. Deviation ranges are 0-30, 0-100, 0-300 kHz. The meter indications for modulation other than sine wave are proportional to the average value of the peak-to-peak deviation.

$900

EQUIPMENT FRAMES

For mounting CEI equipments in standard 19-inch racks

Model	*Openings*	*Dimensions*	*Price*
EF-101	1	3¼″x8″	$75
EF-201A	2	3¼″x8″	$100
EF-301	1	5″x4½″	$75
EF-302	2	5″x4½″	$75
EF-303	3	5″x4½″	$75
EF-401	1	6¾″x3¾″	$75
EF-402	2	6¾″x3¾″	$75
EF-403	3	6¾″x3¾″	$75
EF-404	4	6¾″x3¾″	$75
EF-501	1	5″x3″	$25
EF-502	2	5″x3″	$25
EF-503	3	5″x3″	$25
EF-504	4	5″x3″	$25
EF-505	5	5″x3″	$25
EF-506	6	2½″x4½″	$350

PEC-401—For portable operation of 440 and 441 receivers—$300

COMMUNICATION ELECTRONICS, INC.

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