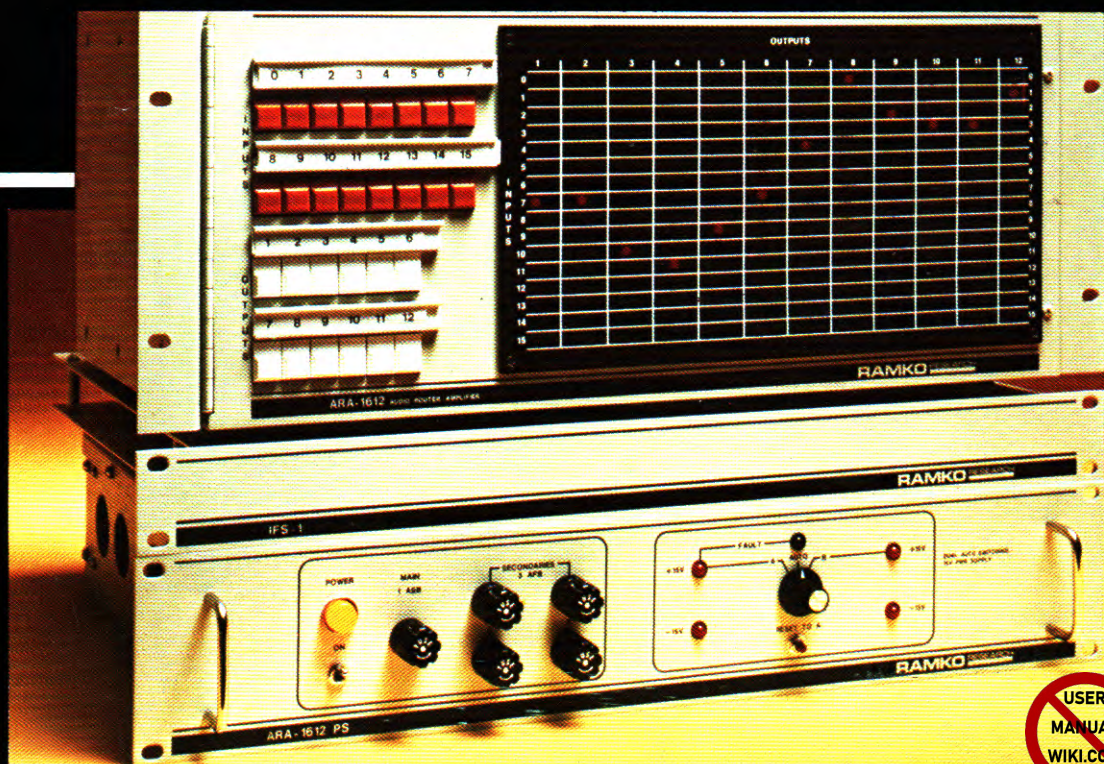


Introducing the electronic patch panel



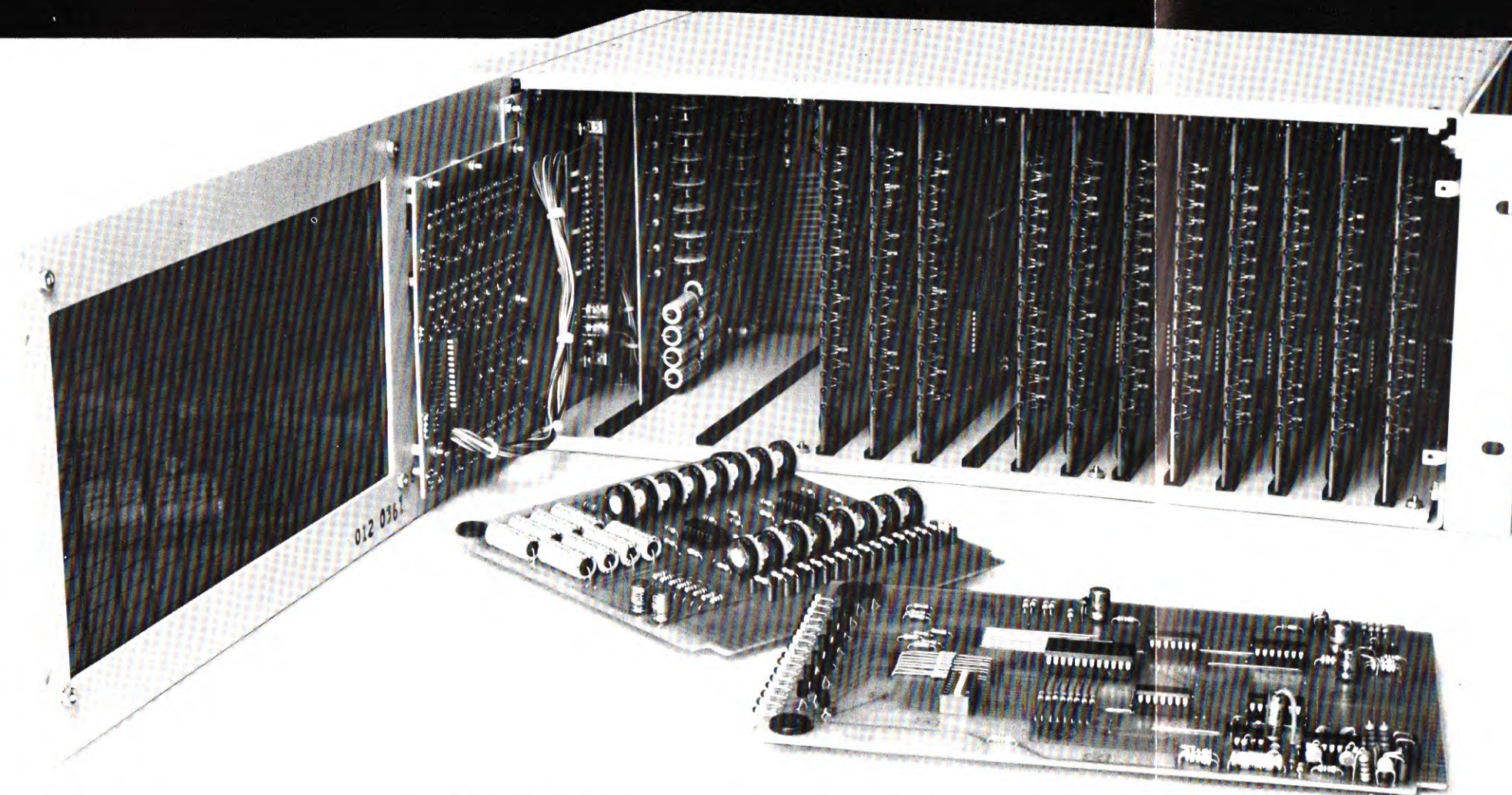
ARA-1612 Audio Router/Amplifier

If You Didn't Get This From My Site,
Then It Was Stolen From...

www.SteamPoweredRadio.Com

RAMKO

Now, audio signal routing is pushbutton easy!



With the Ramko ARA-1612 Audio Router/Amplifier, you use front panel pushbuttons to route 16 inputs to any of 12 outputs, simultaneously or individually, with an instant LED display of what is going where.

And you can stack units for up to 45 in and thousands out, with no source loading and no degradation of signal-to-noise and frequency response.

You've never seen anything like it before.

Getting the most out of today's technology

In the ARA-1612, we take advantage of the latest CMOS and op amp technology to provide your operations with a new dimension in flexibility and performance.

With the basic system, you instantly access 16 different sources and direct them to your choice of 12 different locations.

The audio sources (up to 16 mono or 8 stereo or a combination of both) are fed to two input

cards. Each balanced input has its own gain adjustment so that you normalize levels once and eliminate the noisy pots and the mad scramble to adjust levels when using patch panels.

The normalized signals are fed through the switching network to individual output cards. The balanced outputs are buffered so that you can feed a single input to all twelve outputs with no interaction, even if one of the outputs is a dead short. With stacked units, you

can feed up to 45 sources to your choice of thousands of outputs with no signal degradation at all.

And LED's on the edges of the output cards let you know what is going where, instantly and accurately.

Remote control at your fingertips

Switching is controlled through a common BCD bus, so remote control is simple and straightforward. With our remote control units each user

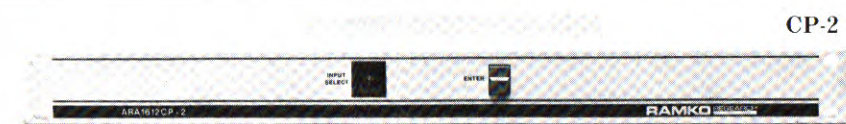
has full access to all inputs, independent of whomever else may be using them. These are available with pushbuttons or

with less expensive thumb-wheel switches, both versions available in rack-mount or table-top configurations.

FEATURES

- Single supply powers up to three mainframes
- Front panel lighted status displays
- Lighted remote controls
- Each output card (16 in by 1 out) has dual outputs for simul-feeds and/or stereo operation
- Each output card may be programmed (onboard switches) for mono or stereo or a combination of mono and stereo feeds

- Front panel input/output select switches
- BCD control allows multiple remote controls
- Optional metering (SSM-3R) for level and phase checks
- Protected dual power supply for 100% on-the-air reliability
- Balanced inputs and outputs
- Optional output mixer allows up to 3 mainframes to be stacked for a total of 45 inputs and 12 outputs.
- Additional main frames may be paralleled for requirements greater than 12 outputs.



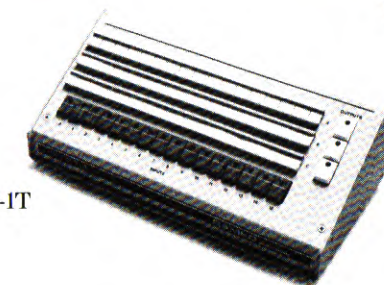
CP-2



CP-1



CP-2T



CP-1T

Remote Control Units

Broadcast level performance and cost effectiveness

Frequency response is 20Hz to 20 kHz ± 0.5 dB. Signal-to-noise is 75 dB below +8 dBm out. THD is a maximum of 0.3%.

The flexibility and convenience of the ARA-1612 make it an ideal choice for upgrading your current facilities, new installation or AM stereo.

Installation is fast and easy, with less chance of error.

You need only a single shielded twisted pair to make all 16 inputs available at a remote location, saving the time and cost of the other 15 pairs.

Output buffering eliminates the cost and complexity of distribution amplifiers, patch panels and switches.

And you get all this for about the price of a good patch panel system.

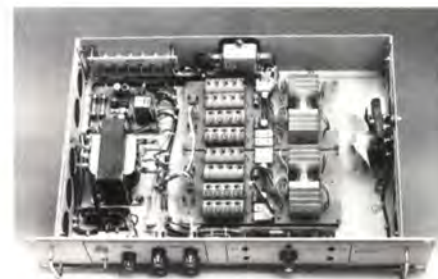
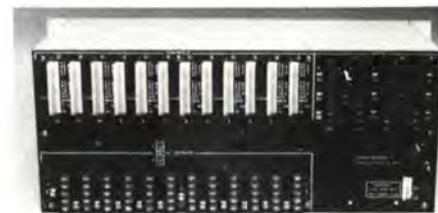
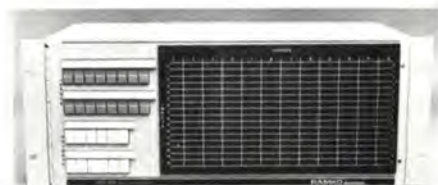
Sounds too good, doesn't it?

We understand your skepticism if you've been working with patch panels and their bad connections, phase reversals, lack of remote capability, sensitivity to loading and RF and hum pickup.

So we back the ARA-1612 with a two-year warranty. And we'll be glad to lend you a unit free for two weeks (with prior credit approval) so that you can put it through its paces.

Order today. Find out not only how much better your sound can be, but also how much more flexible your opera-

tion can become. Contact your nearest rep or call collect, Ramko Research, 11355 Folsom Blvd., Rancho Cordova, CA 95670. (916) 635-3600.



SPECIFICATIONS

INPUTS	High impedance balanced, bridging
OUTPUTS	125/600 ohm balanced
RESPONSE	20Hz-20 kHz ± 0.5 dB
DISTORTION	0.3% THD maximum
GAIN	Variable (each input) to +15 dB
INPUT LEVELS	+21 dBm maximum
OUTPUT LEVELS	+21 dBm maximum
S/N RATIO	75 dB below +8 dBm out
SIZE	7" H x 19" W rack mount (main frame)
	3 1/2" H x 19" W rack mount (power supply)
	1 3/4" H x 19" W rack mount (output mixer)
	1 3/4" H x 19" W rack mount (Remote control-CP-2)
	3 1/2" H x 19" W rack mount (Remote control-CP-1)
	4" H x 10 1/2" W (Remote control-CP-1T)
	4" H x 3 1/4" W (Remote control-CP-2T)

Represented By

PACIFIC COAST MARKETING

20 So. Santa Cruz Ave., Suite 309

Los Gatos, CA. 95030

(408) 395-7021

Brochure #ARA-379

Back-up Insurance

The ARA-1612 is driven by a dual power supply designed for 100% on-the-air reliability. Should anything go wrong with the first supply, the back-up is switched in instantaneously. Fan cooling and both thermal and current protection are built-in. An optional battery pack that keeps the logic "live" for up to 10 hours is also available.

RAMKO RESEARCH

11355 Folsom Blvd. Rancho Cordova, CA 95670. Telephone (916) 635-3600.

If You Didn't Get This From My Site,
Then It Was Stolen From...
www.SteamPoweredRadio.Com

RAMKO RESEARCH

11355-A Folsom Blvd. / Rancho Cordova, CA / 95670-6286
(916) 635-3600

PRICE LIST PROFESSIONAL AUDIO PRODUCTS

September 23, 1981

STOCK #	MODEL #	PRICE	DESCRIPTION
CONSOLES AND CONSOLE ACCESSORIES			
001-0045	SC-5M	\$1808	Audio console, single channel, 5 mixer, 12 inputs (mono)
001-0046	SC-5R	\$1702	Same as above only rack mount
001-0049	DC-5M	\$2244	Audio console, dual channel, 5 mixer, 12 inputs (mono)
001-0050	DC-5MS	\$2993	Same as above but stereo with mono output
001-0051	DC-8M	\$2740	Audio console, dual channel, 8 mixer, 18 inputs (mono)
001-0052	DC-8MS	\$3509	Same as above but stereo with mono output
001-0043	LC-2	\$299	2 channel remote control accessory for RAMKO audio consoles
001-0044	LC-4	\$414	Same as above but 4 channel
003-0038	SQ-4L	\$85	Simul-Q latching option for push on/off operation. For use with SC series & older DC-5 & 8 series consoles.
003-0091	SQ-L4	\$56	Same as above but for use with DC-5 & 8 series consoles.
001-0074	DC-12MR	\$6423	Audio console, dual channel, 12 mixer, slide attenuators, mono, 2 inputs per mixer. Remote control electronics. Complete
001-0075	DC-12SR	\$7998	Same as above but stereo with mono output Note: DC-12MR & DC-12SR may be ordered with less than 12 mixers. To price these units subtract the cost of 1 DC-12MOD and one DCMP (Mono) or one 2INS (stereo) for each mixer less than 12 that is desired.
001-0061	DC-12MOD	\$198	Mixing and switching module for DC-12 series consoles. Use for mono or stereo consoles.
003-0240	DC-12FP	\$23	Filler panel for DC-12 when using less than 12 DC-12MOD's. (Same size as DC-12MOD).
003-3019	DCMP	\$79	Channel input card for DC-12RE/M (mono).
003-3030	2INS	\$144	Channel input card for DC-12RE/S (stereo).
003-2100	CABLE	\$14/ft.	Extra cable to interconnect console to rack electronics. 6 foot of cable is supplied standard.
001-0055	DC38-5M	\$3632	Audio console, dual channel, 5 mixer, 4 inputs per mixer, (mono), 20 inputs total. Lighted status indicators, up to 5 million operations on mixers and switches.
001-0056	DC38-5S	\$4375	Same as above but stereo with mono output. 3 meters; left, right and mono/phase.
001-0057	DC38-8M	\$4650	Same as DC38-5M but 8 mixers. 32 inputs (mono).
001-0058	DC38-8S	\$5664	Same as DC38-5S but 8 mixers. 32 inputs (stereo).
001-0059	DC38-10M	\$5568	Same as DC38-5M but 10 mixers. 40 inputs (mono).
001-0060	DC38-10S	\$6762	Same as DC38-5S but 10 mixers. 40 inputs (stereo).

PORTABLE REMOTE MIXERS WITH LIMITING

001-0030	DML-2M/B	\$311	Light weight 2 channel portable audio console featuring 2 mic inputs with independent limiting, built-in tone generator, dual battery supply, metering, and headphone amplifier with talkback capability. Weight: less than 2 lbs.
001-0077	DML-2M/AB	\$408	Same as above but includes DML-PS for battery & AC operation.
001-0031	DML-PS	\$97	General purpose power supply. Plus & minus 9VDC at 200 ma.

CLOCK/TIMERS

003-3070	DC-38CT	\$288	Optional built-in digital clock-timer (6 digit) for DC38 series consoles. Clock runs continuously, display switched between clock & timer functions. Line frequency accuracy.
001-0073	DC-38CT/C	\$483	Same as above mounted in case w/power supply. 115VAC. Controls may be remoted thru rear mounted connector.
003-0102	XTAL	\$70	Crystal time base option for DC38CT and DC38CT/C, 0.0005% accuracy, includes trimmer for exact set.

SOLID STATE METERS

001-0033	SSM-2C	\$300	Solid state LED "VU" meter, stereo, 8 ohm headphone, output, and 150 K ohm unbalanced bridging input. Instantaneous reading on the way up and VU ballistics on the way down. Table top.
001-0034	SSM-3R	\$369	Solid state LED "VU" meter, rack mount. 3 meters; left channel, right channel and phase meter. 150 K ohm balanced bridging input. Instantaneous reading on the way up and VU ballistics on the way down. 19" W X 1 3/4" H X 6 1/2" D.

E MARINA TURN OFF

R ON 2ND SIGNAL

ELVARADO

Represented by:

3000 ELVARADO

ON LEFT

20th BEATRIZ BAR MOTOR 82-181148

1.05 ON OFF SWITCH LOWER 82-176136

286

236-1021

337 1150

AUDIO DISTRIBUTION AMPLIFIERS

001-0013	DA-2080MF	\$689	Main frame including meter, power supply and extender card. For up to 10 DA-2080MOD's.
001-0065	DA-2080MOD	\$224	Distribution amp. plug in module, 2 in 8 out, individual controls.
—	DA-2080FP	\$17	Filler panel for DA-2080MF when using less than 10 modules. Please specify number of spaces to be filled.
003-3036	DA-2080PS	\$259	Power supply for DA-2080.
001-0008	DA-6/E	\$184	Distribution amp. 1 in 6 out, table top/bracket mount.
001-0009	DA-6R/E	\$223	Distribution amp. 1 in 6 out, rack mount.
001-0010	DA-6BR/E	\$233	Distribution amp. 1 in 6 out, rack mount, individual controls.
001-0011	DA-6RS/E	\$302	Distribution amp. 2 in 12 out, rack mount, stereo/dual mono.
001-0012	DA-16BR/E	\$498	Distribution amp. 2 in 16 out, rack mount, individual controls, with LED VU meter.
001-0014	DA-X30	\$196	Audio distribution amp. Low impedance out. Balanced in & out. Up to 30 balanced or unbalanced 600 ohm loads may be used. Table top.
001-0015	DA-X30R	\$245	Same as above, only rack mounted.
001-0016	DA-X30R/S	\$343	Same as above, only stereo.

MICROPHONE/LINE AMPLIFIERS

001-0004	MLA-1/E	\$169	Mic/line amp. (mono) table top/bracket mount.
001-0005	MLA-1R/E	\$213	Same as above, only rack mount.
001-0006	MLA-2/E	\$239	Mic/line amp. (stereo/dual mono) table top/bracket mount.
001-0007	MLA-2R/E	\$292	Same as above, only rack mount.

MICROPHONE DISTRIBUTION AMPLIFIER

001-0017	MDA-6BR/E	\$244	Mic distribution amp. 1 balanced mic in & 6 balanced line levels out. Rack mount with individual output level controls.
----------	-----------	-------	---

LINE AMPLIFIERS

001-0025	LA-2/E	\$155	Line amp (stereo/dual mono) table top/bracket mount.
001-0026	LA-2R/E	\$198	Same as above, only rack mount.
001-0027	LA-5S/10M	\$344	Line amp main frame, rack mount with one module installed. Each module may be used for 1 stereo or 2 mono input(s)/output(s). Main frame will hold a total of 5 modules. Individual controls for each module.
003-0033	LA-5S/10MMOD	\$70	Plug in module for above. Module has 1 stereo/2 mono, input/output.

EQUALIZED LINE AMPLIFIER

001-0028	LE-3	\$361	Equalized line amp. main frame with one plug in module, one channel. May be expanded to 3 channels using LE-3MOD's.
003-0035	LE-3MOD	\$40	Plug in module for above.

MONITOR AMPLIFIERS

001-0018	SMA-50/E	\$298	Studio monitor amp. (mono) 25 watts RMS, table top.
001-0019	SMA-500/E	\$324	Same as above, only rack mount.
001-0020	SMA-1000/E	\$461	Studio monitor amp. (stereo) 25 watts RMS per channel, rack mount.
001-0021	MA-12	\$147	Monitor amp. (mono) 12 watts RMS.
001-0022	MA-12R	\$209	Same as above, only rack mount.
001-0023	MA-20	\$191	Monitor amp. (stereo) 10 watts RMS per channel.
001-0024	MA-20R	\$261	Same as above, only rack mount.
001-0062	MAS-12/1	\$282	Monitor amplifier with built in speaker and headphone jack. 20k ohm bridging input. Input selector switch for 12 inputs. Table top.

TURNTABLE PREAMPLIFIERS

001-0001	MP-8/E	\$129	Turntable preamp (mono) table top/bracket mount.
001-0002	SP-8/E	\$174	Turntable preamp (stereo) table top/bracket mount.
001-0003	SP-8R/E	\$232	Same as above, only rack mount.
001-0032	ESP-38	\$413	The ultimate turntable preamp. mono/stereo. Super low distortion & S/N ratio. Push button filters & adjustable equalization.
003-3069	ESP-38RA	\$30	Rack adaptor for ESP-38 TT preamp.

TURNTABLES

001-0204	SL-1200MKII	\$315	TECHNICS Quartz synthesizer direct drive turntable. 2 speed with pitch control, strobe light, stylus illuminator, tone arm, cartridge shell, base and dust cover. Wow & flutter 0.025% WRMS, Rumble —78dB DIN B. Starting time 0.7 second.
001-0205	SP-25	\$313	TECHNICS Quartz synthesizer direct drive turntable. 2 speed with pitch control. Wow & flutter 0.025% WRMS, Rumble —78dB DIN B. Starting time 0.7 second.
001-0206	SP-15	\$548	TECHNICS Quartz synthesizer direct drive turntable. 3 speed with pitch control and digital LED readout for selected speed and variance. Wow and flutter 0.025% WRMS, Rumble —78dB DIN B. Starting time 0.4 second.
001-0207	SP-10MKII	\$862	TECHNICS Quartz synthesizer direct drive turntable. 3 speed with built in strobe and remote power supply. Wow and flutter 0.025% WRMS, Rumble —78dB DIN. B. Starting time 0.25 second.
001-0208	SH-15B2	\$219	Mounting base with dust cover for SP-15 and SP-25 turntables. Simulated rosewood veneer.
001-0209	SH-15B3	\$219	Mounting base with dust cover for SP-15 and SP-25 turntables. Black.
001-0210	SH-10B3	\$407	Mounting base with dust cover for SP-10MKII turntable. Black.

AUDIO ROUTER/AMPLIFIERS (ELECTRONIC PATCH PANEL)

001-0071	ARA-1612	\$3954	Audio router (switcher) system. Will accommodate 16 mono or 8 stereo in to 12 outputs. System includes ARA-1612MF, 2 ARIM-8, 12 ASOM-162, ARA-1612PS, and ARA-1612 IFS. May be expanded to 45 in and as many outputs as required. 19" W X 12 1/4" H X 12" D.
001-0036	ARA-1612MF	\$863	Audio Routing Amplifier main frame. Will accommodate 2 ARIM-8 & 12 ASOM-1612. Size 19" rack mount X 7" H X 11" D. Requires ARA-1612PS power supply.
003-0170	ARIM-8	\$86	Audio Router Input Module for 8 mono inputs. Input is 80K ohms balanced bridging. May be changed to any lower input impedance by placing appropriate resistor across input terminals. When using router in stereo configuration 2 ARIM-8 modules are required. Gain variable to +15db (each input).
003-0162	ASOM-162	\$174	Audio Switching & Output Module. May be used stereo or mono. Output is 125/600 ohms balanced. One ASOM-162 required for each output. With LED status display.
001-0037	ARA-1612PS	\$738	Power supply for ARA-1612MF. 19" rack mount X 3 1/2" H. Unit will supply power for up to 3 main frames. Dual automatic switch over.
001-0063	ARA-1612BP	\$283	Battery pack for ARA-1612. Will hold switching logic for up to 30 hours on one main frame during power outages. Uses Gel Cell batteries with automatic charging. Battery life is 8 years.
001-0042	ARA-1612OM	\$574	Output mixer for expanding ARA-1612 system. This unit is used with up to 3 main frames to expand the system to 45 inputs and 12 outputs.
001-0038	ARA-1612CP-1	\$553	Remote control panel for ARA-1612. Enables user to remotely control one output feed. Rack mounted unit has 16 illuminated push button switches & 3 enter push buttons for use with up to 3 ARA-1612 main frames.
001-0040	ARA-1612CP-2	\$171	Remote control panel for ARA-1612. Enables user to remotely control one output feed. Rack mounted unit has a thumb wheel select switch and an enter push button.
001-0039	ARA-1612CP-1T	\$593	Same as ARA-1612CP-1, only table top.
001-0041	ARA-1612CP-2T	\$162	Same as ARA-1612CP-2, only table top.
001-0072	ARA-1612-IFS	\$93	Interference shield. Used when mounting ARA-1612MF near interference generating equipment.
001-0034	SSM-3R	\$369	Solid State LED "VU" meter, rack mount. 3 meters; left channel, right channel and phase meter. May be used in conjunction with ARA-1612 by dedicating one output card to feed this meter. User then can check all 12 output levels and if used as a stereo system the stereo phasing.

PHASEMASTER CARTRIDGE/CASSETTE RECORDING/DUPLICATING SYSTEM

001-0078	RD-21S	\$4700	PhaseMaster Cart/Cassette Recording/Duplicating System (stereo). Includes 2—RS-1 A/B cart decks, CD-1 cassette deck, CC-1 record/duplicate control center, and 19" W x 10 3/4" H x 15 3/4" D rack mount frame.
001-0079	RD-30S	\$5194	PhaseMaster Cart Recording/Duplicating System (stereo). Includes 3—RS-1 A/B cart decks, CC-1 record/duplicate control center, and 19" W x 10 3/4" H x 15 3/4" D rack mount frame.
001-0080	RS-1	\$1291	PhaseMaster Stereo Record/Play Cart Deck. For use with CC-1 Recording/Duplicate Control Center only. 8 5/8" W x 5 1/4" H x 14 3/4" D.
001-0081	CD-1	\$797	PhaseMaster Stereo Record/Play Cassette Deck. For use with CC-1 Recording/Duplicate Control Center only. 8 5/8" W x 5 1/4" H x 14 3/4" D.
001-0082	CC-1	\$1321	PhaseMaster Stereo Record/Duplicate Control Center. Will control 2—RS-1 cart decks and 1—CD-1 cassette deck or 3—RS-1 cart decks. 8 5/8" W x 5 1/4" H x 10 3/4" D.

PHASEMASTER PLAYBACK CART DECKS

001-0083	PM-1	\$1091	PhaseMaster Mono Playback Cart Deck. 8 5/8" W x 5 1/4" H x 14 3/4" D. Three cue tones.
001-0084	PS-1	\$1399	PhaseMaster Stereo Playback Cart Deck. 8 5/8" W x 5 1/4" H x 14 3/4" D. Three cue tones.

PHASEMASTER RECORD/PLAY CART DECKS

001-0085	RPM-1	\$2000	PhaseMaster Mono Record/Play Deck. Completely self-contained. 8 5/8" W x 5 1/4" H x 14 3/4" D. Three cue tones and digital timer.
001-0086	RPS-1	\$2600	PhaseMaster Stereo Record/Play Deck. Completely self-contained. 8 5/8" W x 5 1/4" H x 14 3/4" D. Three cue tones and digital timer.

PHASEMASTER OPTIONAL ACCESSORIES

001-0087	SMU-1	\$195	Stereo Matrix Decoding Unit for use with other than PhaseMaster playback decks.
001-0088	PPH-M	\$10.50	Premium head for mono playback cart deck.
001-0089	PPH-S	\$27	Premium head for stereo playback cart deck.
001-0090	RPPH-M	\$21	Premium heads (2) for mono record/play cart deck.
001-0091	RPPH-S	\$54	Premium heads (2) for stereo record/play cart deck.
001-0092	CMP-PM	\$102	Companding noise reduction system for mono playback cart deck, plug-in.
001-0093	CMP-PS	\$192	Companding noise reduction system for stereo playback cart deck, plug-in.
001-0094	CMP-RPM	\$192	Companding noise reduction system for mono record/play cart deck, plug-in.
001-0095	CMP-RPS	\$334	Companding noise reduction system for stereo record/play cart deck, plug-in.
001-0096	CMP-RS	\$217	Companding noise reduction system for use with model CC-1 stereo record/duplicate control center, plug-in.
	Contact Factory		Remote Start/Stop Controls.

NOTES:

- Prices on Premium heads are additional cost.
- All stereo units include PhaseMaster Matrix System.

All Ramko Equipment Available for 240VAC, 50 Hz operation. Add \$25.00 per unit.

TECHNICS "PROFESSIONAL SERIES" BY PANASONIC

—	TURNTABLES	—	See separate listing under turntables.
001-0230	ST-S4	\$227	Quartz Synthesizer FM-AM Digital Stereo tuner with preset memory and automatic scan.
001-0231	ST-S6	\$308	Quartz Synthesizer FM-AM Digital Stereo tuner with preset memory and automatic scan. DC tuner with sampling hold multiplex circuit, preset memory, automatic memory and digital display. Laboratory-grade metering system.
001-0203	SH-9020	\$282	Quartz-locked direct-drive stereo cassette deck with metal tape recording capability and FL peak meters. Rack mount.
001-0212	RS-M85MK2	\$588	Quartz phase-locked direct-drive stereo cassette deck with Microprocessor tension control, 3 heads, metal tape capability, digital counter, and FL peak meters. Rack mount.
001-0213	RS-M95	\$1097	Quartz-locked, isolated loop open-reel tape deck with 3-motor direct drive. 2-track 2-channel record/playback with 3 speeds.
001-0215	RS-1500US	\$1254	Same as RS-1500US but 4-track 2-channel record/playback.
001-0216	RS-1506US	\$1254	Same as RS-1500US but with fine adjustment controls for bias and equalization, test oscillator, and balanced input/output with cannon connectors.
001-0217	RS-1520	\$1645	Same as RS-1506 but plays & records in both directions and has auto-reverse.
001-0218	RS-1700	\$1645	Micro size linear phase 2-way bookshelf speaker system. Input power, 40W DIN. 8.3"H x 4.6"W x 5"D.
001-0232	SB-F1	\$157 pr.	Micro size linear phase 2-way bookshelf speaker system. Input power, 50W DIN. 10"H x 5.4"W x 6.2"D.
001-0233	SB-F2	\$202 pr.	Micro size linear phase 2-way bookshelf speaker system. Input power, 60W DIN. 12.6"H x 7"W x 7.5"D.
001-0234	SB-F3	\$242 pr.	Linear phase speaker system. 3-way 3-speaker rated 150 watts music.
001-0219	SB-6060	\$228	Linear phase speaker system. 4-way 4-speaker rated 180 watts music.
001-0220	SB-7070	\$294	19" rack mount kit for RS-1500, 1506, 1520 & 1700.
001-0224	RP-9130-P	\$28	Remote control unit for RS-1500, 1506, 1520, 9900, M-85MK2, and M-95.
001-0225	RP-9690P	\$83	Infrared, wireless remote control unit for RS-1500, 1506, 1520, 9900, M-85MK2 and M-95.
001-0226	RP-070	\$167	

Price and technical specifications are subject to change without notice

TERMS AND CONDITIONS OF SALE

CREDIT TERMS: Open account shipments will be made to all firms approved by RAMKO. A minimum of 3 business references and your bank will be required before an open account may be established. All other orders will be shipped only with payment in advance or C.O.D. C.O.D. orders require 20% payment in advance unless customer is well known to us. Payment terms are net 20 days on open accounts. A finance charge of 1 1/2% per month (annual = 18%) may be levied on past due accounts. All sales on open accounts are subject to approval by RAMKO RESEARCH.

SHIPMENTS: All shipments are F.O.B. Rancho Cordova, Calif. Accessories and other items not manufactured by RAMKO may be drop shipped F.O.B. vendors plant. Unless specifically stated by the buyer, we will exercise our best judgment as to method of shipment. A full range of shipping services is available.

TWO WEEK FREE TRIAL PERIOD: All items manufactured by Ramko Research are offered for evaluation on a free 2 week trial basis with prior credit approval. The trial period begins upon customers receipt of item. Any extended use can be subject to a restocking charge. Customer is responsible for shipping charges.

RETURN OF GOODS: Equipment in "like-new" condition of current manufacture may be accepted for return within 90 days of purchase subject to a 15% restocking and handling charge. (Exception—see 2 week free trial offer). Liability for a safe, insured, prepaid return rests with the shipper. Do not return any equipment without prior approval from the customer service department.

LEASING: Leasing and time payment plans on request. Please contact us for details.

TELEPHONE SERVICE: Our order department number is (916) 635-3600. Feel free to call collect for technical assistance or to place an order.

WARRANTY: All equipment designed and manufactured by RAMKO RESEARCH INC. is warranted against defects in workmanship and material that develop under normal use within a period of 2 years (4 years on some items) from the date of original shipment, and is also warranted to meet any specifications represented in writing by RAMKO so long as the purchaser is not in default under his contract of purchase and subject to the following additional conditions and limitations:

1. The sole responsibility of RAMKO RESEARCH INC. for any equipment not conforming to this warranty shall be, at its option:
 - A. To repair or replace such equipment or otherwise cause it to meet the represented specifications either at the purchaser's installation or upon the return thereof f.o.b. Rancho Cordova, Calif., as directed by RAMKO; or
 - B. To accept the return thereof f.o.b. Rancho Cordova, Calif., credit the purchaser's account for the unpaid portion, if any, of the purchase price theretofore paid; or
 - C. To demonstrate that the equipment has no defect in workmanship or material and that it meets the represented specifications, in which event all expenses reasonably incurred by RAMKO, in so demonstrating, including but not limited to costs of travel to and from the purchaser's installation and subsistence, shall be paid by purchaser to RAMKO.
2. In case of any equipment thought to be defective, the purchaser shall promptly notify RAMKO giving full particulars as to the defects. RAMKO will give instructions respecting the shipment of the equipment, or such other manner as it elects to service this warranty as above provided.
3. This warranty extends only to the original purchaser and is not assignable or transferable, does not extend to any equipment which has been subjected to abuse, misuse, physical damage, alteration, operation under improper conditions or improper installation, use or maintenance, and does not extend to equipment not manufactured by RAMKO, and such equipment is subject to only such adjustments as are available from the manufacturer thereof.
4. No other warranties, express or implied, shall be applicable to any equipment sold by RAMKO and no representative or any other person is authorized to assume for it any liability or obligation with respect to the condition or performance of any equipment sold by it, except as provided in this warranty. This warranty provides for the sole right and remedy of the purchaser and RAMKO shall in no event have any liability for consequential damages or for loss, damage or expense directly or indirectly arising from the use of equipment purchased from RAMKO RESEARCH.

NOTE: Freight Charges on All Equipment sent to the Factory for Warranty Service are the Responsibility of the Purchaser.

RAMKO RESEARCH will return the equipment Freight Prepaid.