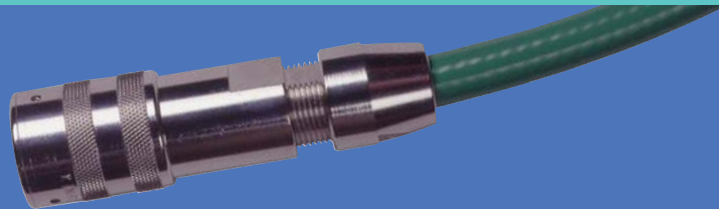
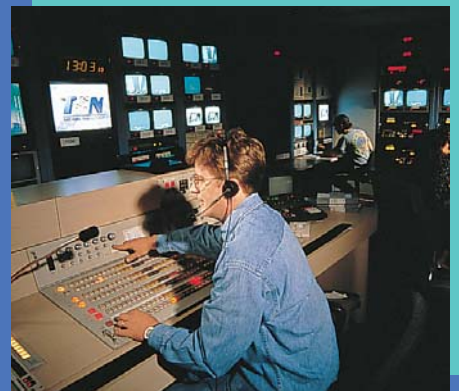


NEMAL

E L E C T R O N I C S



BROADCAST



PRODUCTS





TRIAXIAL VIDEO CABLES

EXTRA FLEXIBLE 3/8" TRIAXIAL VIDEO CABLE -Part Number 1835F

Center Conductor:	20 awg solid bare copper, 10.2 ohms/1000 ft (33.5/km)
Dielectric:	foam polyethylene .146" (3.7mm)
Inner Braid:	95% coverage bare copper, 2.6 ohms/1000 ft (8.5/km)
Inner Jacket:	flexible PVC
Outer Braid:	95% coverage bare copper, 2.0 ohms/1000 ft (6.6/km)
Outer Jacket:	.360" (9.5mm) TPE, 105C
Weight:	80 lbs/1000 ft (119kg/km)

UL Rating
CM
FT-4

Electrical Characteristics

Impedance:	75 ohms nom.
Capacitance:	17pf/ft (56pf/mtr)
Velocity:	79%

Attenuation

MHZ	db/100ft	db/100 mtr
1	0.30	.98
10	0.90	3.0
100	2.50	8.2
400	5.10	16.7
1000	8.80	28.9

Recommended Connectors:

	Kings	Lemo
Male:	7705-2	FXC4A675CTCC95
Female:	7703-2	PCA4A675CTRC95



STANDARD 3/8" TRIAXIAL VIDEO CABLE -Part Number 1835

Center Conductor:	20 awg solid bare copper, 10.2 ohms/1000 ft (33.5/km)
Dielectric:	foam polyethylene .146" (3.7mm)
Inner Braid:	95% coverage bare copper, 2.6 ohms/1000 ft (8.5/km)
Inner Jacket:	flexible PVC
Outer Braid:	95% coverage bare copper, 2.6 ohms/1000 ft (8.3/km)
Outer Jacket:	.360" (9.5mm) TPE, 105C
Weight:	80 lbs/1000 ft (119kg/km)

Electrical Characteristics

Impedance:	75 ohms nom.
Capacitance:	17.3pf/ft (57pf/mtr)
Velocity:	78%

Attenuation

MHZ	db/100ft	db/100 mtr
1	0.30	.98
10	0.90	3.0
100	2.50	8.2
400	5.60	18.4
1000	9.20	30.2

Recommended Connectors:

	Kings	Lemo
Male:	7705-2	FXC4A675CTCC95
Female:	7703-2	PCA4A675CTRC95



1/2" TRIAXIAL VIDEO CABLE -Part Number 1820

Center Conductor:	14 awg (19/27) bare copper, 3.0 ohms/1000 ft (9.8 ohms/km)
Dielectric:	foam polyethylene .312" (7.93mm)
Inner Braid:	95% coverage bare copper, 1.7 ohms/1000 ft (5.6/km)
Inner Jacket:	flexible PVC
Outer Braid:	95% coverage bare copper, 1.7 ohms/1000 ft (5.6/km)
Outer Jacket:	.520" (13.2mm) TPE, 105C
Weight:	145 lbs/1000 ft (216kg/km)

Electrical Characteristics

Impedance:	75 ohms nom.
Capacitance:	17.3pf/ft (57pf/mtr)
Velocity:	78%

Attenuation

MHZ	db/100ft	db/100 mtr
1	0.14	.50
10	0.45	1.5
100	1.50	4.9
400	3.30	10.8
1000	5.70	18.7

Recommended Connectors:

	Kings	Lemo
Male:	7705-3	FXC4A675CTCC13
Female:	7703-3	PCA4A675CTRC13

AUDIO CABLE

SINGLE PAIR – LINE LEVEL



100% Shielding - Foil + Drain or
(TC braid P/N 2201B spiral shield P/N 2201S)
Polyethylene insulated - Red + Black
Flexible Jacket
Conductors: stranded tinned copper

***EASY STRIP JACKET**

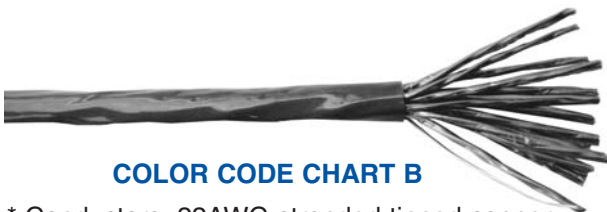
Jacket colors: Brown, Red, Orange, Yellow, Green,
Blue, Violet, Gray, White, Black

PART NO.	AWG	Nom OD	
		(in)	(mm)
1201A	12	.410	10.4
1401A	14	.350	8.9
1601A	16	.310	7.9
1801A	18	.225	5.7
2001A	20	.200	5.1
2201A	22	.138	3.5
2201B	22	.150	3.8
2201S	22	.140	3.6
2401A	24	.125	3.2
2601A	26	.120	3.1

PLENUM RATED (white FR jacket)

Part No.	AWG	Shielding	Nom OD		Rating
			(in)	(mm)	
2201AP	22	Foil + Drain	.120	3.1	UL CL2P
2401AP	24	Foil + Drain	.110	2.8	UL CL2P

MULTIPLE PAIR – INDIVIDUALLY SHIELDED – OVERALL JACKET



COLOR CODE CHART B

- * Conductors: 22AWG stranded tinned copper
- * Polyethylene insulation – color coded
- * Each pair with foil shield and 22AWG tinned copper drain wire* (except 2pr)
- * All shields isolated
- * Flexible PVC jacket 75°C
- * Available in Gray, Black, Red, Violet, Green

Part No.	No. of Conductors	Nom OD		Rating
		(in)	(mm)	
2PR22IS	4+1 drain	.206	5.2	UL-CL2
3PR22IS	6+3 drain	.295	7.5	UL-CL2
6PR22IS	12+6 drain	.375	9.5	UL-CL2
12PR22IS	24+12 drain	.465	11.8	UL-CL2
15PR22IS	30+15 drain	.565	14.4	UL-CL2
19PR22IS	38+19 drain	.620	15.7	UL-CL2
27PR22IS	54+27 drain	.680	17.3	UL-CL2

Nom DCR: (52 ohms/km) 16 ohms/1000ft - conductor
(45 ohms/km) 14 ohms/1000ft - shield

Nom Capacitance: 30pf/ft bet conductors
98pf/meter

12 PAIR AUDIO CABLE (DT12) FOR ROUGH FIELD APPLICATIONS P/N 12PR22FC

- * Extra heavy TPR jacket (.515"/14.6mm) resistant to oil, ozone, and U/V
- * Temperature -55°C to 105°C
- * Fits Nemal 37 pin connectors (NE3700 series), Available as complete assembly
- * Excellent durability and flexibility for harsh environments

MICROPHONE CABLES



- * OLEFIN Insulation
- * Extra flexible TPR Jacket 105°C
- * Low Impedance

Color Code: Black, Red, White, Green
Jacket Colors: Brown, Red, Orange, Yellow,
Green, Blue, Violet, Gray, White, Black

Nemal Part No.	Conductor Material	No. of Conductors and Stranding	Nom OD		Nominal Cap
			(in)	(mm)	
MC 424P	Bare Copper	(2/4) 24 Ga. 42 x 40	.245	6.2	39 pf/ft 128 pf/m
MC 220R	Tinned Copper	(2) 20 Ga. 19 x 32	.262	6.6	30 pf/ft 98 pf/m
MC 224R	Tinned Copper	(2) 24 Ga. 42 x 40	.220	5.6	36 pf/ft 118pf/m
MC 222R	Tinned Copper	(2) 22 Ga. 19 x 34	.245	6.2	20 pf/ft 66 pf/m
MC 320R	Tinned Copper	(3) 20 Ga. 19 x 32	.272	6.9	30 pf/ft 98 pf/m
MC 218R	Tinned Copper	(2) 18 Ga. 16 x 30	.290	7.3	40 pf/ft 131 pf/m



UL APPROVED VERSION - 22 AWG

- Conductors: 22 AWG (7/30) Tinned Copper
- PE insulated red & black
- Each pair with 100% foil shield and 22AWG stranded tinned copper drain wire, easy strip jacket, each pair numbered & color coded, overall foil shield, drain, and flexible outer jacket
- Nom. capacitance: 30pf/ft (98pf/m) bet. conductors
58pf/ft (190pf/m) cond-cond/shield
- Nom. D.C.R.: (cond.) 15 ohms/1000ft (49 ohms/km)
(shield) 14 ohms/1000ft (46 ohms/km)

EXTRA FLEXIBLE VERSION – 22AWG

- Conductors: 22 AWG (7/30) Tinned Copper
- PE insulated red & black
- Each pair with 100% foil shield and 22AWG stranded tinned copper drain wire, easy strip flex jacket, each pair numbered or color coded, overall flexible black TPR Jacket
- Nom. capacitance: 30 pf/ft (98pf/m) bet. conductors
58 pf/ft (190pf/m) cond-cond/shield
- Nom. D.C.R.: (cond.) 15 ohms/1000ft (49 ohms/km)
(shield) 14 ohms/1000ft (46 ohms/km)

EXTRA FLEXIBLE VERSION – 24AWG

- Conductors: 24 AWG (7/32) Tinned Copper
- PE insulated red & black
- Each pair with 100% foil shield and 24AWG stranded tinned copper drain wire, easy strip flex jacket, each pair numbered or color coded, overall flexible black TPR Jacket
- Nom. capacitance: 30pf/ft (98pf/m) bet. conductors
55pf/ft (179pf/m) bet. 1 conductor
and other cond connected to shield
- Nom. D.C.R.: Conductor: 23 ohms/1000ft (75 ohms/km)
Shield: 19 ohms/1000ft (62 ohms/km)

PLENUM RATED SNAKE CABLES – 22AWG

- Conductors: 22AWG (7/30) Tinned Copper
- Each pair with foil shield, drain wire, and jacket.
- Overall Fluoropolymer jacket
- UL Rated: CMP
- Nom. capacitance: 30pf/ft (98pf/m) bet. conductors
55pf/ft (179pf/m) bet. 1 conductor
and other cond connected to shield
- Nom. D.C.R.: Conductor: 23 ohms/1000ft (75 ohms/km)
Shield: 19 ohms/1000ft (62 ohms/km)

AUDIO SNAKE CABLE

Nemal Part No.	Number of Pairs	Nominal OD	
		(in.)	(mm)
SN0222UL	2	.195 X .330	5.0 X 8.4
SN0322UL	3	.360	9.1
SN0422UL	4	.390	9.9
SN0622UL	6	.460	11.7
SN0922UL	9	.570	14.4
SN1222UL	12	.620	15.7
SN1622UL	16	.710	18.0
SN2022UL	20	.790	20.1
SN2422UL	24	.875	22.2
SN2822UL	28	.940	23.8
SN3222UL	32	.980	24.9

Nemal Part No.	Number of Pairs	Nominal OD	
		(in.)	(mm)
SN0222	2	.195 X .330	5.0 X 8.4
SN0322	3	.365	9.3
SN0422	4	.410	10.4
SN0622	6	.495	12.6
SN0922	9	.645	16.4
SN1222	12	.695	17.6
SN1622	16	.750	19.0
SN2022	20	.825	20.9
SN2422	24	.925	23.5
SN2822	28	.985	25.0
SN3222	32	1.100	27.9

Nemal Part No.	Number of Pairs	Nominal OD	
		(in.)	(mm)
SN0224	2	.180 X .320	4.60 X 8.1
SN0324	3	.350	8.9
SN0424	4	.365	9.3
SN0624	6	.430	10.9
SN0924	9	.540	13.7
SN1224	12	.555	14.1
SN1624	16	.620	15.7
SN2024	20	.685	17.4
SN2424	24	.760	19.3
SN2824	28	.805	20.5
SN3224	32	.840	21.3
SN5424	54	1.15	28.9

Nemal Part No.	Number of Pairs	Nominal OD	
		(in.)	(mm)
SN0322PL	3	.290	7.4
SN0622PL	6	.390	9.9
SN0922PL	9	.515	13.0
SN1222PL	12	.535	13.6



COAXIAL CABLE – 50 OHM (RF and Microwave)

												Nominal Attenuation DB/100FT		
RG/U Type	Spec	Nemal Part No.	Center Conductor	Dielectric	Velocity (%)	Shielding	Jacket O.D.	Weight		Nominal Capacitance (PF/FT)	Maximum Voltage (Volts/RMS)	Frequency - MHZ		
								Lbs/M	KG/KM			10	100	1000
142B	Mil C-17D	1705	.039 SCCS	PTFE	69	(2) SC 95%	FEP .195 5.0 MM	50	75	29.4	1900	1.2	3.9	13.0
213	Mil C-17D	1130	BC (7 x 38)	PE	66	BC 95%	NCV .405 10.3 MM	99	148	30.8	5000	.66	2.2	9.0
214	Mil C-17D	1140	SC (7 x 38)	PE	66	(2) SC 95%	NCV .425 10.8 MM	126	188	30.8	5000	.66	2.2	9.0
214	Nemal	1150	TC (7 x .0296)	PE	66	(2) TC 95%	NCV .425 10.8 MM	126	188	30.8	5000	.66	2.2	9.0
393	Mil C-17D	1770	.0936 SC (7 x .0312)	PTFE	69	(2) SC 95%	FEP .390 9.9 MM	165	246	29.4	5000	.60	2.1	7.5
	Nemal	1180	.108BC	ASP	89	Al. Foil + 88% TC	PVC .405 10.3 MM	97	145	24.0	600	0.4	1.3	4.5
	Nemal	1181F	19/0234BC	ASP	84	Al. Foil + 88% TC	PVC .405 10.3 MM	100	149	24.0	2100	0.4	1.3	4.5
	Times	SF142B	.0370 SCCS	PTFE	69	Comp SC	FEP .195 5.0 MM	43	64	29.4	1900	1.2	3.8	12.0
	Times	SF214	SC 7/.0296	PE	66	Comp SC	NCV .425 10.8 MM	133	198	30.8	5000	LOW LOSS THRU 13 GHZ		
	Cable Wave	FLC12	CC AL Solid	FP	88	Corr Copper	PE .640 16.2 MM	150	223	23.5	40 KW PEAK	0.2	.68	2.3

COAXIAL CABLE – 75 OHM (Analog Video, Test, CATV Applications)

6	Nemal CATV	1007	18 CCS	FP	78	Al. Foil + 60% Al.	PVC .275 7.0 mm	29	43	16.5	400	.9	2.0	6.5
11	Nemal	1201	14 BC	FP	78	BC 95%	PVC .405 10.3 mm	92	137	17.3	600	.35	1.5	5.4
11A	Mil C-17D	1205	18 TC (7 x 26)	PE	66	BC 95%	NCV .405 10.3 mm	96	143	20.6	5000	.66	2.0	7.1
59	Jan C-17	1500	22 CCS	PE	66	BC 95%	PVC .242 6.1 mm	37	55	21.0	2300	1.1	3.4	12.0
59	Nemal CATV	1508	20 CCS	FP	78	Al. Foil + 60% Al.	PVC .238 6.1 mm	23	34	16.5	300	1.0	2.5	7.9
59	Nemal	1510	22 BC (7 x 30)	FP	78	BC 95%	PVC .242 6.1 mm	27	40	17.3	300	0.9	3.0	10.9
179B	Mil C-17D	1712	30 SCCS (7 x 38)	PTFE	69	SC 95%	FEP .100 2.5 mm	10	15	19.5	1200	5.0	9.8	25.0

MATERIALS USED IN COAXIAL CABLES

Conductors:

AL	–	Aluminum
BC	–	Bare Copper

SCA	–	Silver Copper Alloy
SC	–	Silver Copper
CCS	–	Copper Covered Steel

TC	–	Tinned Copper
SCCS	–	Silver Copper Covered Steel

Jackets:

*FEP (Fluorinated Ethylene Propylene)	-70°C to +200°C
FG (Fiberglass/Silicone Braid)	-70°C to +250°C
HYP (Hypalon)	-20°C to +90°C
LTP (Low temperature plenum)	-20°C to +75°C
NCV (Non-contaminating PVC - Type 2A)	-50°C to +105°C
PE (Polyethylene)	-55°C to +85°C
PFA (Perfluoralkoxy)	-75°C to +260°C
PTFE (Polytetrafluoroethylene)	-250°C to +250°C
PUR (Polyurethane)	-100°C to +125°C
PVC (Polyvinylchloride - Type 1)	-50°C to +105°C
TPR (Thermoplastic Rubber)	-60°C to 80°C

Dielectrics:

	Velocity (%)	Dielectric Constant	Temperature Range
ASP (Air Spaced Polyethylene)	84.0	2.3	-40°C to +80°C
FLP (Fluoropolymer)	78.0	1.5	-75°C to +200°C
FEP (Fluorinated Ethylene Propylene)	69.0	2.1	-70°C to +200°C
FP (Foamed Polyethylene)	78.0	1.4 - 2.1	-65°C to +80°C
PE (Polyethylene)	65.9	2.3	-65°C to +80°C
*PTFE (Polytetrafluoroethylene)	69.0	2.1	-250°C to +250°C

**Varies with compound. Please contact Sales Department for information on our Complete Cable Assembly Design and Fabrication facilities.*

COMPOSITE BROADCAST / ENG CABLES

Available in any configuration (1000ft min) - lead time 2-3 weeks. The following are standard items (no minimum order.)



PART NO.	NO. OF VIDEO	VIDEO TYPE	NO. OF AUDIO	AUDIO TYPE	DIAMETER	
					(IN)	(MM)
BC151PJ	1	1570	1	J	.480	12.1
BC152P	1	1570	2	U	.480	12.1
BC152PJ	1	1570	2	J	.490	12.4
BC153P	1	1570	3	U	.485	12.3
BC153PJ	1	1570	3	J	.527	13.1
BC252P	2	1570	2	U	.560	14.0
BC252PJ	2	1570	2	J	.588	14.7
BC253P	2	1570	3	U	.560	14.0
BC253PJ	2	1570	3	J	.570	14.1
BC254PJ	2	1570	4	J	.660	16.5
BC253PF (FLAT)	2	1570	3	U	.240 X .620	6.1 X 15.8
BC255P	2	1570	5	U	.560	14.0
BC256P	2	1570	6	U	.565	14.3
BC354PJ	3	1570	4	J	.770	19.3
BC591P	1	RG59	1	U	.455	11.5
BC593P	1	RG59	3	U	.475	12.0
BC113P	1	1190	3	U	.320	8.1
BC213P	2	1190	3	U	.410	10.4
BC213PJ	2	1190	3	J	.557	13.9
BC214PJ	2	1190	4	J	.565	14.3

* Flexible Jacket - Blue Standard
Other colors on request

* Please contact our sales engineers for custom applications

* Available on reels and terminated or in bulk lengths

* Choice of video
1. 1570 - Precision .240"
2. RG59 - Normal .240"
3. 1190 - Mini .150"
4. 1195 - Submini .102"
(See detailed specifications)

* Choice of Audio - 22 AWG
Conductors Red & Black with foil and drain. All pairs isolated from each other
1. With inner jacket - Type J
2. No inner jacket - Type U

* Available with additional conductors for power

REMOTE CONTROL CABLE (Sony Type RCC9)

Part No. CC0914P

Includes remote cable (no video), 4 jacketed audio pair, and 1 mini video coax, overall flexible jacket. Available terminated with BNC, XLR, and circular 6 pin connector.

CONSIDERATIONS FOR COMPOSITE CABLE FIELD USE

To maintain cable performance and prolong usable life, we suggest using reelers. If this is not possible, we can modify the jacketing on any of our products to withstand excessive coiling and abuse. This "full pressure" jacket will however increase cable diameter and weight, and slightly reduce flexibility.

Video Cable / Serial Digital Applications - 75 ohms



Nemal Part No.	Center Cond.	Diel	Vel%	Shielding	Jacket	Diameter		WT		CAP PF/FT	Attenuation DB/100 Ft. - MHZ				Conn. Type
						(in)	(mm)	LBS/M	KG/KM		1	10	100	500	
1185	20 BC	PE	66	(2) TC 96%	PE	.304	7.7	73	109	21.0	.25	.78	2.50	6.00	NE8096
1190	26 (7/34)	FP	78	Foil + 93% TC	PVC	.148	3.8	16	24	17.3	.60	1.80	5.50	11.50	NE8092
1195	30 (7/38)	FP	78	Foil + 90% TC	PVC	.100	2.5	6	9	17.3	.80	2.20	8.20	17.20	NE8086
1570	20 BC	FP	82	Foil + 95% TC	PVC	.242	6.1	34	51	16.5	.30	.90	2.50	5.30	NE8094
1580	18 BC	FP	82	Foil + 95% TC	PVC	.275	7.0	45	67	16.3	.25	.75	2.00	4.50	NE8010

PLENUM RATED VIDEO CABLES

1752	20BC	FEP	69	(2) TC 98%	FLP	.270	6.9	92	137	19.5	.25	.78	2.80	7.80	NE8096
1571	20BC	FEP	84	Foil + 95% TC	LTP	.200	5.1	29	43	16.1	.29	1.0	2.70	6.30	NE8094
1581	18BC	FEP	82	Foil + 95% TC	LTP	.235	5.9	48	72	16.2	.25	.72	2.10	5.10	NE8010

Available in multi-contact constructions from 2-75 pins, coaxial, triaxial, and mixed contact types



Cable Plug



Bulkhead Jack



Bulkhead Receptacle



Cable Jack

FIBER OPTIC CONNECTOR-HDTV

SMPTE standard
2 fiber contacts
6 low voltage contacts



Nemal is an authorized distributor for all LEMO audio, video, and broadcast products



FIBER OPTIC CONNECTORS - ST TYPE SINGLE AND MULTIMODE

5-7 minute termination
Durability: $\leq 0.1\text{db}$ change after 1000 mating cycles
Operating temperature: -40°C to $+85^{\circ}\text{C}$
Materials: body and coupling nut: glass polymer: ferrule: zirconia ceramic
Single mode: (9/125 micron) P/N FOS125ST
Multimode: (62.5/125 micron) P/N FOM125ST

Termination kit – P/N CTK-FO – includes all basic tools required for ST fiber optic terminations.

FIBER OPTIC CABLE - INDOOR/OUTDOOR – UL RATED OFNR

Tight buffer, breakout cable, PVC jacket
62.5/125/900 core/clad/buffer, kevlar strength member
Numerical aperture .275
Maximum attenuation db/km@850/1300nm 3.5/1.0
Bandwidth MHZ-KM @850/1300nm=160/500

PART NO.	FIBERS	OUTER DIAMETER		WEIGHT	
		(IN)	(MM)	LBS/1000FT	KG/KM
FO6202P	2	.236	6.0	17	26
FO6206P	6	.363	9.2	53	81
FO6212P	12	.473	12.0	76	114
FO6224P	24	.676	17.2	180	270

min. bending radius: install: 15 x od
long term: 10 x od

BNC CONNECTORS - 75 OHM

Plugs-Crimp Type

Cable Group	Nemal Part No.	Tooling
RG6, Belden 1694A, 1695A, 88281	NE8010	28
RG59, Belden 8241	NE8090	59
1570, Belden 1505A, 1506A, 9259	NE8094	59
1190, Belden 1164B, 8218, 1865A	NE8092	80
Belden 1855A	NE8093	80
Belden 8281	NE8096	28
Belden 7731A	NE8078	14
AT&T 735A	NE8084	59
1195 RG179, Belden 1520A	NE8086	74

Technical Specifications:

Impedance: 75 ohms nom.

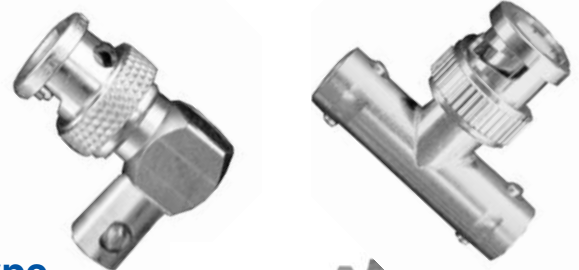
Voltage Rating 500

Frequency Range: 0-2 GHZ

Body: Brass, tarnish resistant nickel plating

Contacts: (M) center: Brass, gold plating
(F) and (M) outer: BeCu, gold plating

Insulator: Teflon™



Angle Plugs-Crimp Type

RG6, Belden 1694A, 1695A, 88281	NE8066	28
Belden 8281	NE8044	28
1190, Belden 1164B, 8218	NE8082	80

Jacks-Cable and Bulkhead Mount-Crimp Type

RG59 (BULKHEAD)	NE8107	59
RG179 (BULKHEAD)	NE885	74
1190, Belden 1164B, 8218 (CABLE MOUNT)	NE8192	80

Receptacles-Bulkhead and PC Mount

Mounting Type	Nemal P/N
Bulkhead-front mount	NE8240
Printed circuit	NE887

Adapters & Terminations

Type	Nemal Part No.
Jack-Jack	NE8333
Jack-Jack, Bulkhead Mount	NE8325
Jack-Jack, Bulkhead Mt, Isolated	NE8327
Angle, Plug-Jack	NE8331
"T" Jack-Plug-Jack	NE8329
Termination, 1/2W 0.1%	TR75B-75



RGB / VIDEO SNAKE CABLE

No. of coax	Series 1195* Sub-Miniature			Series 1190* Miniature			Series 1570* Standard		
	Part No.	NOM OD (in)	(mm)	Part No.	NOM OD (in)	(mm)	Part No.	NOM OD (in)	(mm)
3	BC0395	.289	7.3	VC3148	.400	10.2	BC0357	.640	16.3
4	BC0495	.316	8.0	VC4148	.460	11.7	BC0457	.700	17.9
5	BC0595	.345	8.8	VC5148	.502	12.8	BC0557	.774	19.6
6	BC0695	.376	9.6	VC6148	.547	13.9	BC0657	.816	21.5
10	BC1095	.478	12.1	VC1048	.696	17.7	BC1057	1.09	27.6

* See detailed cable specifications on page



- Overall flexible black or blue jacket (other colors on request)
- Available in custom lengths, terminated with 75 ohm BNC connectors

CAMERA CABLE

(Sony, Ikegami, Hitachi, Panasonic, JVC)



CONNECTORS

NO. OF PINS	MALE	FEMALE
10	CC10P	CC10F
14	CC14P	CC14F
26	CC26P	CC26F

TYPE	NEMAL P/N	CONNECTOR	OD	
			IN	MM
CCJ	CC100	10/14	.375	9.5
CCQ-AR	CC1400	14	.425	10.5
CCQ-AM	CC2600	26/14	.425	10.8
CCQ-BRS	CC2610	26/14	.490	12.4
CCZ-A/M	CC2620	26	.490	12.4

* AVAILABLE IN ROLLS OR WITH CONNECTORS INSTALLED

REELERS

Portable cable storage reels.



Model	Dimensions D x W x H	Weight		Capacity (.360"/9.5mm)	
		LBS	KG	FT	M
CR160	11 x 8 x 15	10	5	245	75
*CR190	14 x 8 x 19	14	6	500	152
CR200	14 x 12 x 19	12	5	700	213
CR1514	17 x 11 x 18	23	10	550	168

* "A Frame" construction

Reelers with connector mounting plate

CR140MP	12 x 7 x 15	14	6	245	75
CR200MP	18 x 9 x 21	25	11	800	244

- * Durable steel construction
- * Black matte finish
- * Available with custom punched mounting plates or fully wired

DIGITAL AUDIO CABLE - AES/EBU

Single Pair - 24 AWG (7/32)

P/N	Diameter		UL Rating
	(in)	(mm)	
2401D	.180	4.6	cm
2401DP	.164	4.2	cmp (plenum)



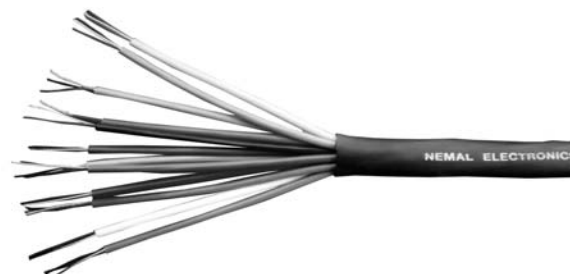
- * 110 ohm
- * Foil shield and TC drain wire
- * 13pf/ft
43pf/mtr

DIGITAL SNAKE CABLES 2-24 PAIR

(each pair with individual shield, drain and numbered jacket)

PART NO.	PAIRS	Diameter	
		(in)	(mm)
SND0224	2	.426	10.8
SND0424	4	.498	12.6
SND0824	8	.762	19.3
SND1224	12	.787	20.0
SND1624	16	.880	22.3
SND2024	20	.982	24.9
SND2424	24	1.09	27.9

- * 110 ohm
- * 13pf/ft
43pf/mtr



AUDIO CONNECTORS AND ADAPTERS

Nemal Part No.	Style
14-2PM	1/4" Plug 2 Cond, Metal
14-2BR	1/4" Receptacle 2 Cond, Metal
14-3PM	1/4" Plug 3 Conductor, Metal
25-1PM	Micro 2.5MM Plug, Metal
35-1PM	Mini 3.5MM Plug, Metal
25-1PS*	Micro 2.5MM Plug-Stereo
35-1PS*	Mini 3.5MM Plug-Stereo
RCA 8	Phono Plug Shielded (metal)
RCA 9	Phono Jack Shielded (metal)
RCA 59C	Phono Plug-Crimp Type



XLR

NO. OF PINS	FOR CABLE		CHASSIS MOUNT	
	MALE	FEMALE	MALE	FEMALE
3	XLR3M	XLR3F	XLR3CM	XLR3CF
4	XLR4M	XLR4F	XLR4CM	XLR4CF
5	XLR5M	XLR5F	XLR5CM	XLR5CF
6	XLR6M	XLR6F	XLR6CM	XLR6CF
7	XLR7M	XLR7F	XLR7CM	XLR7CF
3 -	adapter F-F turnaround XLR 381F			
3 -	adapter M-M turnaround XLR371M			



* for chassis mount "D" type add "D" to Part number
* for black/gold add "BG" to part number

Audio Adapters



Nemal Part No.	Description	Fig. No.
NE 3530	XLR(F) to 1/4" 3 cond plug *	1
NE 3540	XLR(M) to 1/4" 3 cond plug *	2
NE 3550	2.5mm (micro) jack to 3.5mm (mini) plug	3
NE 3560	XLR(F) to RCA phono plug *	4
NE 3580	XLR(M) to RCA to phono plug *	5
NE 3600	Impedance transformer XLR(F) to 1/4" plug	1
NE 3610	XLR(M) to 1/4" 3 cond jack *	7
NE 3620	1/4" 3 cond jack to microphone (screw) conn	8
NE 3650	XLR(F) to 1/4" 3 cond jack *	9
NE 3660	RCA(F) to XLR(M)	N/S
NE 3670	1/4" 2C jack to RCA(M)	N/S
NE 3680	1/4" 2C jack to RCA(F)	N/S
NE 3690	3.5mm 2C jack to 1/4" 2C plug	N/S
NE 9120	RCA phono jack to mini plug	N/S
NE 9140	1/4" jack to mini plug	11

*available wired or unwired (standard)

Audio/video Adapters - BNC, F, RCA, UHF

Nemal Part No.	Description
NE 910	F female - N male
NE 912	F female - BNC male
NE 914	F female - UHF male
NE 916	F female - RCA male
NE 918	BNC female - RCA male
NE 920	BNC female - F male
NE 922	RCA female - BNC male
NE 924	RCA female - F male
NE 926	UHF female - RCA male
NE 928	UHF female - F male
NE 930	F female - RCA female
NE 932	RCA female - UHF male



* Please call for complete Neutrik line including Speak-on®, and Minicon

RG6 Size Plugs

Tooling Group 09

For use in CATV/SMATV/VIDEO

Nickel/Brass Construction Low Cost

Nemal Part No.	Fig. No	Notes
F5612A	2	—
F5612HF	1	Precision - 2GHZ
F56DB	2	Quad Shield
F56PL	2	Plenum
F56TW	6	Twist on
F56WP	2	Water Proof Gasket



RG11 Size Plugs

Nemal Part No.	Fig. No.	Crimp Ring Construction	Crimp Length (in)	Crimp Length (mm)	Tooling
F11	5	Separate	1/4	6.4	05
F1112A	2	Attached	1/2	12.7	09



RG59 Size Plugs and Jacks (Tooling Group 09)

Nemal Part No.	Fig. No	Notes
F5912A	2	—
F59PL	2	Plenum
F59TW	6	Twist on
F59WP	2	Water Proof Gasket
F5912HF	1	Precision - 2GHZ



In Series Adapters

Nemal Part No.	Fig. No	Notes
F59PO	7	Push-On
F59RA	8	Elbow M-F
F71	9	Male-Male
F81	10	Female-Female

Receptacles

Nemal Part No.	Fig. No	Notes
F61NM	11	Middle Mount
F61NE	12	End Mount
F61PC	13	PC Mount
FNW	14	Nut/Washer



Terminations/Attenuators

Nemal Part No.	Fig. No	Notes
TR75F	15	75 Ohm Term
ATT*	N/S	75 Ohm Atten

*Available in 3, 6, 10, 20 db

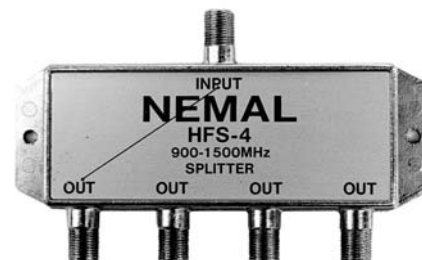
RG179 Size Plugs — separate 1/2" (12.7mm) crimp ring

Nemal Part No.	Fig. No	Tooling
F17912A	5	79



Signal Splitters - 75 Ohm, 5-900 Mhz

Nemal Part No.	No. of Outputs	Insertion Loss
SP2	2	3.5 db
SP3	3	6.5db
SP4	4	7.0 db
SP8	8	10.5 db
HFS4	4 950 - 1450 MHZ	7.0 db



*Also available in 2500 Mhz version



CABLE PLUG



CABLE JACK

VIDEO TRIAX CONNECTORS (KINGS - LEMO - FISCHER)



BULKHEAD PLUG



BULKHEAD JACK

Contact Sales for assembly information

Cable Group	Cable Types	Cable	OD	Cable Mount		Bulkhead Mount			Retro Fit Kit		Tooling (die or tool)
		(in.)	(mm)	Plug	Jack	Plug-Front	Jack-Front	Jack-Rear	Plug	Jack	
70	Belden 8233 Nemal 1810	.475	12.0	KP7705-1	KP7703-1	KP7702-1	KP7702-4	KP7702-7	KP7708-1	KP7708-4	KTH2040
73	Belden 9267 Nemal 1835	.360	9.5	KP7705-2	KP7703-2	KP7702-2	KP7702-5	KP7702-8	KP7708-2	KP7708-5	KTH2002 or CT3600
74	Belden 9232 Nemal 1820	.520	13.2	KP7705-3	KP7703-3	KP7702-3	KP7702-6	KP7702-9	KP7708-3	KP7708-6	KTH2041
76	Belden 8232	.315	8.0	KP8010-76	KP8020-76	—	—	—	KP010-076	KP020-076	KTH2002 or CT3600



MALE RECEPTACLE



FEMALE RECEPTACLE



F-F ADAPTER B/H



F-F ADAPTER

Receptacles and Adapters

Part No.	Description	Mounting Hole
KP7704-6	Male Receptacle	1" D
KP7704-2	Female Receptacle	1" D
KP7709-6	Male-Male	
KP7709-1	Female-Female	
KP7709-3	Female-Female Bulkhead	1.25" D
KP7709-5	M-F Bulkhead Adapters	1.25" D
NE8635	BNC(J) - TRIAX PLUG	
NE8640	BNC(J) - TRIAX JACK	



ADAPTER BNC – TRIAX



TRIAX ASSEMBLIES

Available with Nemal or Belden Cable and Kings, Lemo, or Fischer connectors

Cable Mount Plug-Jack: JTX-C-L
Cable Plug – Bulkhead Jack: JTXA-C-L
Cable Jack – Bulkhead Plug: JTXB-C-L
C=cable type
L=length in meters

37 PIN (12 CHANNEL) AUDIO CONNECTOR

- * Compatible with industry standard DT12, Canon FK37, Canare, and Litton
- * Extra strong mil spec plating
- * **Exclusive Nemal design for use in harsh environments and field applications**
- * Heavy duty, single piece machined body
- * Waterproof insert, available with either crimp or solder contacts
- * Insert locks into place to prevent conductor breakage during mating
- * Wide selection of strain reliefs available for cables up to .625"
- * Dust caps attach directly to connector when not in use



Molded strain relief and solder contacts are standard

Available as complete assembly using either standard or heavy duty cable

Includes male-female terminations and dust caps

Assembly Part No.s

L=length

P/N J3712MF-L (using standard 12 pair cable)

P/N J3712HD-L (using heavy duty 12 pair cable)

DESCRIPTION	PART NO.
CABLE MALE	NE 3700 M
CABLE FEMALE	NE3710 F
PANEL MALE	NE3720 MP
PANEL FEMALE	NE3730 FP
MALE CAP	NE3740 MC
FEMALE CAP	NE3750FC

FAN-OUTS



- * Available in any length and connector type (4 Ft standard)
- * All channels numbered for easy identification

Description

MALE 37 pin to 12-XLR FEMALE

FEMALE 37 pin to 12-XLR-MALE

Part No.

FO37M

FO37F

*for black/gold XLR specify "BG"

BREAK-OUT BOXES

- * Available with any combination of connectors and/or hard wired
- * Stainless steel construction available (custom only)

STANDARD 12 CHANNEL BREAK-OUT INCLUDES

37 pin male input to either 12 or 24 XLR

TO ORDER SPECIFY CONNECTOR QUANTITY, GENDERS, AND
OPTIONAL FEED THRU CONNECTOR (IF REQUIRED)

BB37	—		—		—	
		INPUT		No. of		No. of
		M-Male 37 pin		Male XLR		Female XLR
		F-Female 37 pin				
		FT-Feedthru M-F				



HEAT SHRINK TUBING

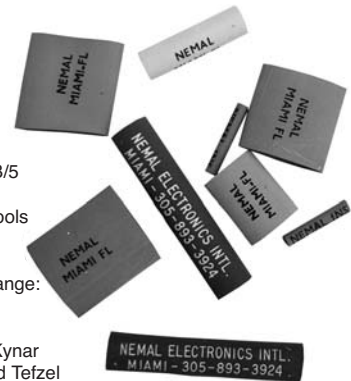
Nemal Part	Preshrink Min ID (in)	Preshrink Min ID (mm)	Recovered ID after (in)	Recovered ID after (mm)	Recovered Wall thick (in)	Recovered Wall thick (mm)	MIL-I-23053B /5-1
HS364	0.046	1.2	0.023	0.6	0.016	0.4	101
HS116	0.063	1.6	0.031	0.8	0.017	0.4	102
HS332	0.093	2.4	0.046	1.2	0.020	0.5	103
HS18	.125	3.2	0.062	1.6	0.020	0.5	104
HS316	.187	4.7	0.093	2.4	0.020	0.5	105
HS14	.250	6.4	0.125	3.2	0.025	0.6	106
HS14AD	.250	6.4	0.083	2.1	0.047	1.2	Meltable Adhesive
HS38	.375	9.5	0.187	4.7	0.025	0.6	107
HS12	.500	12.7	0.250	6.4	0.025	0.6	108
HS12AD	.500	12.7	0.167	4.2	0.055	1.4	Meltable Adhesive
HS34	.750	19.1	0.375	9.5	0.030	0.8	109
HS34AD	.750	19.1	0.250	6.4	0.065	1.7	Meltable Adhesive
HS01	1.000	25.4	0.500	12.7	0.035	0.9	110
HS1100	1.100	27.9	0.370	9.4	0.080	2.0	Meltable Adhesive
HS112	1.500	38.1	0.750	19.1	0.040	1.0	-
HS1700	1.700	43.2	0.560	14.2	0.080	2.0	Meltable Adhesive

COLOR CODE:

Black: 0 Yellow:4
Red:2 Clear:C
White:9 Blue:6

Irradiated Polyolefin
2:1 Shrink Ratio
(3:1 Ratio-Adhesive Type)
Conforms to MIL-I-23053B/5
UL/CSA Listed
Available on 1000-foot spools
or in 4-foot lengths
Custom Print Available
Operating Temperature Range:
-55°C to + 135°C
*Also available in Teflon;
Semirigid, Extra Flexible Kynar
Neoprene; PVC EPR and Tefzel

USE HEATGUN
MODEL HG1
FOR ALL TUBING SIZES.



Digital Audio Adapter – Impedance Transformer AES/EBU

2 modules: 110 ohm XLR (M) to 75 ohm BNC (F) P/N NE3510 Insertion loss: <0.3db thru 10MHZ
110 ohm XLR (F) to 75 ohm BNC (F) P/N NE3520 Max power/v: 5v p-p/250mw
Frequency: 0.1 – 15 MHZ

STRAIN RELIEF BOOTS

Fits Cable	Nemal P/N
RG58	SRB58
RG59	SRB59



Colors, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black

CABLE TIES

See Application Tooling Section for Hand Tensioning Tools



* Military Specification:
MIL-S-23190D, Type 1, Class 1
* Standard Material:
Natural Nylon (85°C)
For Ultraviolet Resistant Black
(Heat Stabilized) Add "B" Suffix
to Part No.

*Available with Mounting Hole

Nemal Part No.	Military Ref.	Minimum Tensile Strength		Maximum Bundle Diameter		Length		Width		Notes
		(lbs)	(kg)	(in)	(mm)	(in)	(mm)	(in)	(mm)	
CAT 4	MS 3367-4	18	8	3/4	19	4	102	.10	2.5	
CAT 4 ID	MS 3368-5-E	18	8	3/4	19	4	102	.10	2.5	Ident Tag
CAT 5	MS3367-4	18	8	1-1/4	32	5	127	.10	2.5	
CAT 8	MS 3367-1	40	18	2	51	8	203	.15	3.8	
CAT 11	MS 3367-7	40	18	3	76	11	279	.18	4.6	
CAT 14	MS 3367-2	40	18	4	102	14	356	.15	3.8	
CATH 8	—	50	23	2	51	8	203	.15	3.8	Mount Hole
CATH 15	—	120	55	4	102	15	381	.30	7.6	Mount Hole
CAT 33B	—	175	80	10	254	33	838	.35	8.9	UV Res.

Crimping Tools - RF Coaxial Connectors

Tool Selection Chart

Tooling Group	Die Part No. (Fits CT2000R)	Tool No. (Fixed Die)	Cross Ref. Kings Die
05	-	CTF5/CT 6270	
06	-	CTF4/CT 6270/CT 3150	
08	-	CTF5/CT 6270/CT 3150/CT 3800	
09	-	CTF4/CT 6270/CT 3150	
11	-	CTF11	
13	CTD213	*CT 3150/CT 6270/CT 3800	KTH2003
14	CTD214	CT 6270/CT 3400	KTH2004
23	CTD923	*CT 6270	KTH2041
26	CTD926	*CT 6270/*CT 3150	KTH2040
28	CTD828	*CT 3600/CT 6270	KTH2012
41	CTD141	*CT 6270	KTH2025
42	CTD142	CT 3155	KTH2113
47	CTD147	-	
52	CTD152	-	
56	CTD056	*CT 6270	KTH2027
57	CTD057	*CT 6270	KTH2061
58	CTD058	CT 3500/CT 6270/CT 3700	KTH2001
59	CTD059	CT 3500/CT 6270/CT 3700	KTH2002
61	CTD061	-	KTH2062
74	CTD174	CT 6270/CT 3155/CT 3700	KTH2032
79	CTD179	*CT 6270	KTH2082
80	CTD180	CT 6270/CT 3700	
85	CTD085	-	



CT 3600 / CT 3150

CT 3700

CT 6270

Tool Specifications

Nemal Part No.	Fits Group	Hex Sizes	
		Braid (In.)	Contact
CT 3150	06", 08", 09", 13"	.262 / .324 / .382	-
CT 3155	42, 58, 74	.128/.115/.178/.213	.042/.068
CT 3400	14	.429	.068/.100
CT 3500	58, 59	.213/.255	.069/.100
CT 3600	59, 06, 28	.255/.324	.069/.100
CT 3700	58, 59, 74, 80	.78/.213/.255	.052/.068/.100
CT 3800	13	.384	.068/.100
CT 6270	13, 14, 28, 58, 59, 74, 80	.128/.178/.384/.429	
CT 6270B		.213/.255/.324	.068/.098
CT 6270R			
CT 2000R	Uses Interchangeable Dies – See Tool Selection Chart		

* crimps braid only

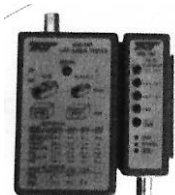
BNC REMOVAL TOOL



Part No. RT1B

Length (standard) 12" (30mm) also available in 6" (RTIS) and 22" (RTIXL) lengths

LAN and Voice Cable Tester Part # TST450



- Cable testers for RJ-45 (EIA/TIA 568A, 568B (AT&T 258A), 356A, 10Base-T, 100Base-TX, Token Ring, ISDN, and ATM), RJ-11/12 (USOC 4 and 6 wire), Coaxial (BNC), Shielded RJ-45 for Shielded Contacts.
- Test for continuity, miss-wiring, polarization, short and open.
- Detachable master and remote unit.

- Pouch and battery included
- Clear wiring information and jack/plug pin number on the unit

STRIPPING TOOLS

3 - step, strips jacket, braid, and dielectric. Adjustable for coax diameters

.100" to .315" (2.5 - 8mm)
strip dimensions (standard)
exposed braid .295" exposed dielectric .137"
replacement blade : CT1208-RBL



CT1208

RJ11/RJ45 Crimping Tool

MODEL CT1645



- 4-6-8 pins
- ratchet design
- heavy duty
- all metal construction
- cuts, strips and crimps

Standard lengths: 3, 6, 10, 25, 50, 100, 164, and 328ft (1, 2, 3, 8, 16, 30, 50, 100m)

We will gladly build cables to any custom length

Audio

L=Length
Specify (ft or m)

Video

XLR: Neutrik

For black/gold add "-BG" to P/N

BNC: Amphenol or Kings 75 ohm

Gold pin, teflon, strain relief boot



XLR 3 pin male-female
male-male
female-female



P/N JX220R-L
P/N JX220M-L
P/N JX220F-L



BNC male-male JB1510-L • RG59 stranded, copper braid



XLR 3 pin male - 1/4" 2 cond
XLR 3 pin female - 1/4" 2 cond
XLR 3 pin male - 1/4" 3 cond
XLR 3 pin female - 1/4" 3 cond



P/N JXP220M-L
P/N JXP220F-L
P/N JXP221M-L
P/N JXP221F-L



3 BNC male-male
4 BNC male-male
5 BNC male-male



P/N JB3148-L
P/N JB4148-L
P/N JB5148-L



XLR 3 pin male - RCA plug
XLR 3 pin female - RCA plug



P/N JXR220M-L
P/N JXR220F-L



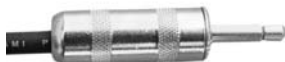
SVHS 4 pin male-male
SVHS 4 pin male-female
SVHS 4 pin female-female



P/N JSV4MM
P/N JSV4MF
P/N JSV4FF



XLR 3 pin male
3.5mm 3 cond male



P/N JXM22-L



BNC male - RCA male
BNC male - RCA female



P/N JBR1510-L
P/N JBR1510F-L



XLR 4 pin power cables
male-female



P/N JX4220-L



CCZA type Sony camera cable
26 pin male-female CC2620-L



switchcraft mini XLR 3pin
male-female



P/N JMX22-L



1/4" 2 cond plug - RCA
1/4" 3 cond plug - RCA



P/N JPR220-L
P/N JPRS220-L

CUSTOM 24 HOUR DELIVERY

We will custom build any combination of cable/connectors to your specifications. No minimum order

See also: Audio + Video patch cables and triax assemblies
Please call for "y" cables

All cables available in choice of colors except RGB and camera type

All cables available with printed, color coded shrink tube and ID labels

PATCH PANELS - AUDIO/VIDEO

Video



Model PAN4858V (standard)



Model PAN6412V



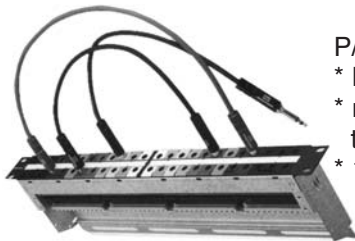
Model PAN20B

- * serial digital compatible
- * 48 position, normal through (available non-normalled)
- * self terminating (available non-terminated)
- * minimum 50,000 cycles guaranteed
- * also available in 52 position
- * 19" x 3 1/2" (48cm x 9cm) 2RU with ID strips
- * plug diameter .37" (9.3mm)

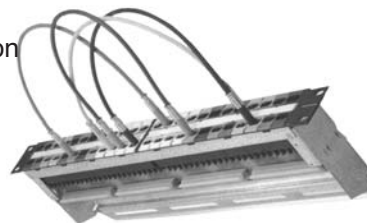
- * miniature, high density jacks
- * 64 position, normal through (available non-normal)
- * plug diameter .30" (7.6mm)
- * self terminating (available non-terminating)
- * 19" X 1 3/4" (48cm x 4.5cm) 1RU

feed through BNC panel-isolated, 75 ohm
20 position 1 3/4" (45mm) model PAN20B
40 position 3 1/2" (90mm) model PAN40B

Audio – Available in a wide variety of configurations, digital compatible



P/N AP48NO
* longframe standard 48 position
* normals out to punch down terminals
* 19" x 3 1/2" (48cm x 9cm) 2RU



P/N AP96TT
* bantam (TT) 96 position
* normals programmable by jumper
* 19" x 1 3/4" (48cm x 4.5cm) 1RU
* spring loaded push terminals

Audio



longframe P/N JA51-L
L=length, 2ft (66 cm) standard



bantam P/N JATT-L

PATCH CABLES



longframe plug PJ51
bantam plug TT173

Video



standard JP1510-L
L=length 3ft(1m) standard



Mini JPM1510-L



standard plug: NE8660
mini plug: NE8670
adapter patch - BNC:AD1W

- * flexible, 75 ohm
- * color coded strain relief boots
- * available in any length

<u>Cable</u>	<u>Page</u>		<u>Page</u>
Audio-Digital	8	<u>Break-out Boxes/Fan-outs</u>	12
Audio-1 pair	2		
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CORPORATE PROFILE

Nemal Electronics International, Inc. is a manufacturer and distributor of a wide range of electronic cable, connectors, cable assemblies, and interconnect products for broadcast, communications, data, and electronic control applications. In addition to the products we manufacture, Nemal is an authorized distributor for many other major manufacturers of interconnect products including Cablewave Systems, Kings Electronics, Amphenol, Times Microwave, Belden, Lemo, Switchcraft, Neutrik and General Cable.

Since 1977, Nemal has served thousands of customers throughout the world including all major U.S. broadcast networks, many Fortune 500 companies, numerous U.S. and foreign government agencies, and many others. Some of our major customers are ABC, Cable and Wireless, CNN, Ericsson, Hewlett Packard, HBO, IBM, Lockheed Martin, Motorola, NBC, Scientific Atlanta, Sony, TRW, TV Globo, the United Nations, and the United States Navy.

Our factory, located in Miami, contains approximately 18,000 square feet of manufacturing space and is capable of producing standard and custom cables up to 30 mm (1.2") in diameter. This facility includes a complete design and test laboratory as well as multiple extrusion lines, cabling, shielding, and special process equipment. Our plant has received multiple approvals from UL (Underwriters Laboratories) for hundreds of cable designs, and operates under a strict quality control system with frequent independent inspections.

Our main building, located in North Miami, houses our worldwide administrative headquarters. In this building, we stock more than 3000 cable and connector products and also produce cable assemblies, patch panels and cable identification products. This facility contains approximately 14,000 square feet and also houses our RF and microwave test laboratory. Nemal do Brasil, Ltda., located in Sao Paulo, Brazil, is our primary stocking and administrative facility for the Mercosur countries.

PLEASE CALL IF YOU WOULD LIKE A COPY OF OUR GENERAL LINE CATALOG OR CORPORATE VIDEO.

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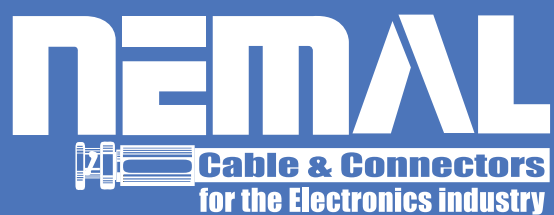
IN ADDITION TO THE PRODUCTS WE MANUFACTURE, NEMAL IS ALSO AN AUTHORIZED STOCKING DISTRIBUTOR FOR THE FOLLOWING LINES:

AMPHENOL **TYTON**
CABLEWAVE **HAR-KEN**
KINGS **LEMO**
TIMES MICROWAVE **TRIPLITE**
BELDEN **NEUTRIK**
GENERAL CABLE **SWITCHCRAFT**
BLONDER TONGUE

COLOR CODE CHART A (multi-conductor cables)	COLOR CODE CHART B (multiple pair cables)	
1-Black	1-Black/Red	15-Green/Blue
2-White	2-Black/White	16-Green/Yellow
3-Red	3-Black/Green	17-Green/Brown
4-Green	4-Black/Blue	18-Green/Orange
5-Brown	5-Black/Yellow	19-White/Blue
6-Blue	6-Black/Brown	20-White/Yellow
7-Orange	7-Black/Orange	21-White/Brown
8-Yellow	8-Red/White	22-White/Orange
9-Purple	9-Red/Green	23-Blue/Yellow
10-Grey	10-Red/Blue	24-Blue/Brown
11-Pink	11-Red/Yellow	25-Blue/Orange
12-Tan	12-Red/Brown	26-Brown/Yellow
	13-Red/Orange	27-Brown/Orange
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