

MOGAMI

PATCH CORDS

MICROPHONE CABLES

SNAKE CABLES (MULTICORE MIC. CABLES)

CONSOLE INTERNAL/EXTERNAL WIRING CABLES

SPEAKER CABLES

VIDEO CABLES & HIGH FREQUENCY COAX. CABLES

DIGITAL INTERFACE CABLES

GUITAR CABLES

MULTI-CORE CABLES WITH & WITHOUT SHIELD

ULTRAFLEXIBLE MINIATURE CABLES

OGAMI cable products listed in this brochure are mostly comprised of major products designed by current President of Mogami Wire & Cable Corp., Koichi Hirabayashi, as a result of his own inventions, compromises and rediscoveries of past great works done by many predecessors step by step for 37years of his career while being tossed about with economic strife, who could achieve deeper understanding of science and practical production technologies being affected by many attractive and emotionally impressive scientists such as Richard P. Feynman in a country called Japan where manufacturing industries have rapidly developed, depending heavily on the huge and flourishing American market and technologies introduced after World War II when the industrial world was greatly developed in so-called Western Countries, being supported by rapidly developing technology in electronics and petroleum chemical industries.

These products not found in standardized goods may certainly embody a side of the present condition of Japanese manufacturing industries, because there are now few items from Japan which are still competitive in the world market in the 2000s.

Most of the products listed in this brochure are centered around the professional audio, video and digital interface market such as recording studios, broadcast stations, theatres, halls etc. The basic design idea puts importance on sound quality for audio applications and on economy for other applications. There are some items which are available only from MOGAMI, and a common design idea through the whole line lies in the flexibility of the cable, considering handiness and efficiency for wiring and installation.

October, 2002



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PATCH CORDS

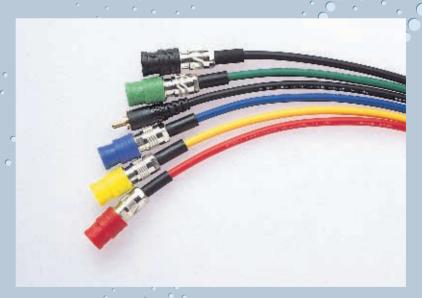


MOGAMI BANTAM AND LONGFRAME PATCH CORDS are the first high definition audio cables specifically designed for recording studio engineers and broadcast professionals, and offer the following outstanding features:

Super-flexible Quad-Balanced NEGLEX OFC wiring and Overall Served (Spiral) Shield
provide maximum definition, detail and signal transparency in addition to giving
excellent protection from electro-magnetic noise.
Both analog audio and digital audio patch cables are available.
Maintenance free with durable nickel plated tip / ring / sleeve connector preventing from
tarnishing. Degradation of the sound quality caused by secular change becomes
extremely low on account of it.
Compact refined mold design permits use in high density jack fields.
BANTAM PLUG: Overall Diameter 7.8mm (0.307") LONGFRAME PLUG: Overall
Diameter 10.6mm (0.417")
Interchangeable colour rings for easy patch cord identification.
Choice of five attractive colours for Bantam Patch Cord Only: Black • Red • Yellow •
Green • Blue Available standard colour for longframe patch cord is Black only.
Adaptor cable of bantam plug or longframe plug to other connector available to
special order.
Neglex OFC bulk cable also available in $50m$ (164Ft), $100m$ (328Ft) and $200m$ (656Ft) rolls:
Analog cable: Part No.2893
Digital cable: Part No.3228

HIGH DEFINITION 75Ω AUDIO VIDEO PATCH CABLES AND BALANCED 1/4 " PLUG PATCH CORDS



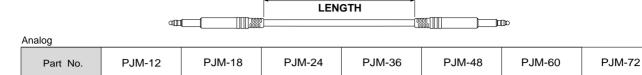


MOGAMI's PUROFLEX II series of molded cable assemblies was redesigned to give superior performance when compared with existing Audio & Video cables. Using Neglex cable technology and advanced two stage molding technique (1/4" plug), these cables offer the following advantages:

☐ Low capacitance 65pF/m (19.8pF/Ft). NEGLEX OFC conductor and served (spiral) shield
are perfectly matched for High Definition Audio.
\square 75 Ω Coaxial Design is impedance matched for video and digital audio transmission.
☐ Compact cable O.D. of 4.8mm (0.189") with superflexible rubber like PVC jacket and
attractive satin finish. 1/4"stereo version uses Quad wiring for maximum electro-
magnetic noise reduction as well as Bantam and Longframe Patch Cords.
$\hfill\square$ Low contact pressure RCA phono plugs are non-magnetic with gold plate. High
contact pressure 1/4" phone plugs are plated with hard bright nickel.
$\hfill\square$ Refined mold desigh with improved strain relief design for strength, durability, and longer
flex life. 1/4"phone plugs are two stage mold for maximum strength.
☐ Interchangeable colour rings for easy patch cord identification.
$\hfill \Box$ Choice of five attractive colours for standard stock items except for dual (stereo)
version : Black • Red • Yellow • Green • Blue
$\hfill\square$ Customised lengths, colours or connector combinations are available to special order.
☐ Neglex OFC bulk cable also available.
SINGLE: Part No.2964 Black/Red/Yellow/Green/Blue 50m/100m/200m (164Ft/328Ft/656Ft)
DUAL: Part No.2965 Black Only 77m/153m (250Ft/500Ft)

PATCH CORDS

Bantam Patch Cord



24"

60cm

45cm Cable: Part No. 2893 standard Colour: Black • Red • Yellow • Green • Blue

18"

Digital

Length

Part No.	PJD-12	PJD-18	PJD-24	PJD-36	PJD-48	PJD-60	PJD-72
Length	12"	18"	24"	36"	48"	60"	72"
	30cm	45cm	60cm	90cm	120cm	150cm	180cm

36"

90cm

48"

120cm

60"

150cm

72"

180cm

Cable: Part No. 3228 standard Colour: Black only

12"

30cm

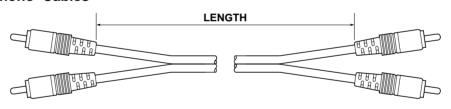
Longframe Patch Cord



Part No.	LF-18	LF-24	LF-36	LF-48	LF-72
Length	18"	24"	36"	48"	72"
	45cm	60cm	90cm	120cm	180cm

Cable: Part No. 2893 Standard Colour: Black

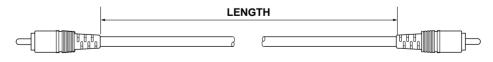
Stereo RCA Phono Cables



Part No.	WR-01	WR-03	WR-06	WR-10	WR-15	WR-20
Length	1 Ft	3 Ft	6 Ft	10 Ft	15 Ft	20 Ft
	30cm	90cm	1.8m	3m	4.5m	6.1m

Cable: Part No. 2965 Colour: Black only

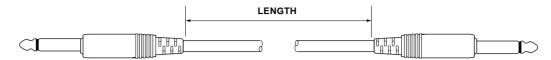
RCA Plug to RCA Plug



Part No.	RR-01	RR-03	RR-06	RR-10	RR-15	RR-20
Length	1 Ft	3 Ft	6 Ft	10 Ft	15 Ft	20 Ft
	30cm	90cm	1.8m	3m	4.5m	6.1m

Cable: Part No. 2964 Standard colour: Black

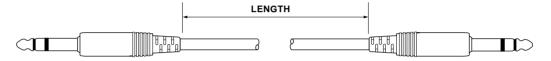
1/4" Plug to 1/4" Plug (2P/Mono)



Part No.	PP-01	PP-03	PP-06	PP-10	PP-15	PP-20
Length	1 Ft 30cm	3 Ft 90cm	6 Ft 1.8m	10 Ft 3m	15 Ft 4.5m	20 Ft 6.1m

Cable: Part No.2964 Standard colour: Black

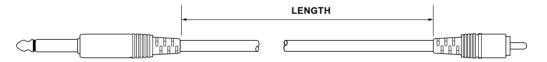
1/4" Plug to 1/4" Plug (3P/Stereo/TRS)



Part No.	SS-01	SS-03	SS-06	SS-10	SS-15	SS-20
Length	1 Ft	3 Ft	6 Ft	10 Ft	15 Ft	20 Ft
	30cm	90cm	1.8m	3m	4.5m	6.1m

Cable: Part No.2893 Standard colour: Black

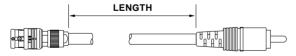
1/4" Plug to RCA Plug



Part No.	PR-01	PR-03	PR-06	PR-10	PR-15	PR-20
Length	1 Ft	3 Ft	6 Ft	10 Ft	15 Ft	20 Ft
	30cm	90cm	1.8m	3m	4.5m	6.1m

Cable: Part No.2964 Standard colour: Black

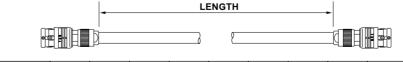
BNC to RCA



Part No.	BR-03	BR-06	BR-10	BR-16
Length	3Ft	6Ft	10Ft	16Ft
	0.9m	1.8m	3.0m	4.8m

Cable: Part No. 2964 Standard Colour: Black

BNC to BNC



F	Part No.	BB-01	BB-02	BB-03	BB-06	BB-10	BB-16	BB-25	BB-33	BB-50	BB-66	BB-100
L	Length	1Ft 0.3m	2Ft 0.6m	3Ft 0.9m	6Ft 1.8m	10Ft 3.0m	16Ft 4.8m	25Ft 7.6m	33Ft 10.0m	50Ft 15.2m	66Ft 20.1m	100Ft 30.5m

Cable: Part No. 2964 Standard Colour: Black • Red • Yellow • Green • Blue

CABLE SPECIFICATIONS

Configuration					
Part No.		2964	2965	2893	
No. of Condu	ictor	1(Mono)	2×1(Dual)	4(Quad)	
Conductor	Details	16/0.08 OFC 〈T1000D *1〉 22/0.08 OFC Double Served		30/0.08 OFC	
	Size(mm²)	0.19mm² (i	#25 AWG)	0.15mm² (#26 AWG)	
Ov. Dia.(mm)		2.6ϕ (0.102")		1.0 \(\phi \) (0.039")	
Insulation	Material	XLCPE (Cross-Lir	nked Cellular PE)	XLPE	
	Colours	Clear E		Black/Red/Blue/Clear	
Served Shield	l	Approx.70/0.12 OFC		Approx.73/ 0.12A	
	Ov. Dia.(mm)	4.8 \(\phi \) (0.189")			
Jacket	Material		Flexible PVC		
	Colours	Black/Red/Yellow/Green/Blue Black		Black/Red/Yellow/Green/Blue	
Roll Sizes		50m/100m/200m (164Ft/328Ft/656Ft)	77m /153m (250 Ft /500 Ft)	50m/100m/200m (164Ft/328Ft/656 Ft)	
Weight		5.9kg/200m(656Ft)	8.9kg/153m(500Ft)	7.5kg/200m(656Ft)	

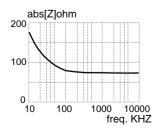
ELECTRICAL & MECHANICAL CHARACTERISTICS

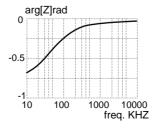
Part No.		2964	2965	2893
DC Resistance at	Inner Cond.	0.083Ω	/m(0.025Ω/Ft)	$0.13\Omega/m(0.040\Omega/Ft)$
20°C	Shield	0.025Ω/ι	m(0.0076Ω/Ft)	$0.025\Omega/m(0.0076\Omega/Ft)$
Capacitance at	t 1kHz,20°C	57pF/r	n(17.4pF/Ft)	Ref. Page 10.
	Inductance between conductors at 1kHz. 20°C		(0.12μH/Ft)	0.5μH/m(0.15μH/Ft)
Characteristic Im	pedance (10MHz)		75Ω	-
Attenuation(10M	Attenuation(10MHz) *(1)		608 dB/m	-
Phase Constar	nt(10MHz)	0.3 rad/m		-
Electrostatic No	Electrostatic Noise *(2)		n V Max.	50m V Max.
Microphonics at $50 \text{K}\Omega$	Load *(2)	40m V Max.		30m V Max.
Voltage Break	down	Must withstand at DC 500V/15sec.		
Insulation Resi	stance	10 ⁵ M Ω•m Min. at DC 125V,20°C		125V,20°C
Flex Life *(2)		16,000cycles	16,500cycles	26,000cycles
Tensile Strength		274N	539N	500N
Emigration		non-emigrant to ABS resin		BS resin
Applicable Temperature		-20°C~ +70°C(-4°F~ +158°F)		~ +158°F)
Standard		-	UL2552 AWM 30V 60°C VW-1	-

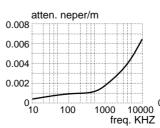
(1)Attenuation: 1 dB=0.1151 neper (1 neper=8.686 dB)

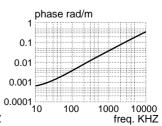
* (2)Using standard testing methods of Mogami Wire & Cable Corp.

Note: For digital audio cable Part No.3228 cable, see page48





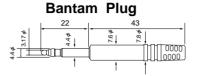


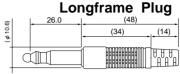


High frequency characteristics of Part No.2964 and #2965.

600 Ω AUDIO TERMINATION /600 Ω

 600Ω Bantam Plug Termination and 600Ω Longframe Plug Termination.



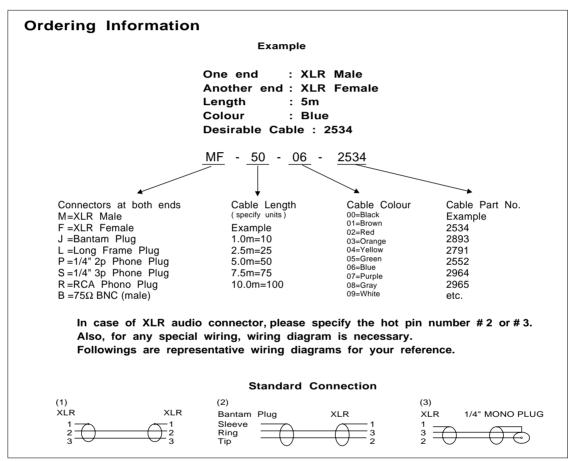


(Dimensions in mm)

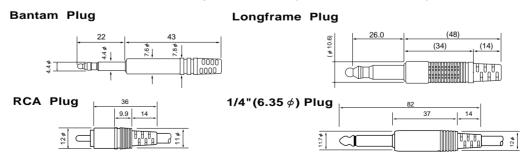
Part No.	Bantam	Longframe
	PJM-TNT	LF-TNT

Plug Mold	Material	PVC
	Colour	Ivory
Metal Film Resistor	Power Rating	1/4W
	Resistance	602Ω±1%

PART NUMBERING SYSTEM FOR CUSTOM ASSEMBLIES



Connector Specifications (Dimensions in mm)



Construction	RCA Phono Plug	1/4" Phone Plug	Bantam Plug	Longframe Plug
Contacts	Brass, Gold plate	Brass, Nickel plate	Brass, Nickel plate	Brass, Nickel plate
Shield	Phosphor Bronze, Gold plate	Brass, Nickel plate	Brass, Nickel plate	Brass, Nickel plate
Insulation	ABS Resin	Polystyrene	Polyacetal	Polyacetal
Molding	Flexible PVC	Flexible PVC (Double Mold)	Flexible PVC	Flexible PVC(Double Mold)

NOTE: For BNC connector, please refer to Page 40.

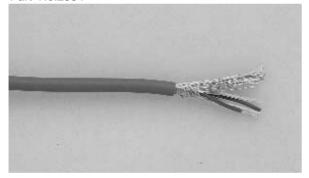
MICROPHONE CABLES

NEGLEX QUAD MIC. CABLES

NEGLEX type Quad Cables have been developed for the highest quality recording applications where maximum definition of recorded sound is of critical importance. Special proprietary materials & construction methods make those state-of-the-art mic. cables a must for direct to DISC and digital recording. Basic matters of flexibility, microphonics and shielding effect have been designed to meet international professional requirements. A Balanced quad structure is effective for high definition sound transmission as well as in canceling electromagnetic induction caused by nearby equipment such as floodlight projection, and therefore is well adapted to motion picture and TV studios.

- ☐ Conductor insulation is XLPE (Cross-Linked Polyethylene) which has excellent electrical characteristics and prevents shrink-back during soldering.
- ☐ Served (spiral) Bare Copper Shield is better for sound quality and simplifies termination.

Part No.2534

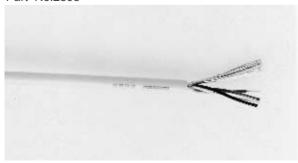


Part No.2534

Reference Standard NEGLEX Quad High Definition Mic. Cable

NEGLEX No.2534 has become popular around the world as the standard for high quality digital and analog recording. The cable has also become popular for use with unbalanced equipment, such as high quality pre-amp, amp inputs and tape decks.

Part No.2893



Part No.2893

Miniature Quad Superflexible Mic. Cable

Originally designed for BANTAM patch-cords, this cable has become popular where a small diameter Quad mic cable is required.

NEGLEX QUAD MIC. CABLES

SPECIFICATIONS

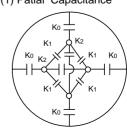
Configuration			(E)	
Part No.		2534	2893	
No. of Condu	uctor	4		
Conductor	Details	20/0.12 OFC	30/0.08 OFC	
	Size(mm²)	0.226mm²(#24AWG)	0.15mm²(#26AWG)	
	Ov. Dia.(mm)	1.6 \(\phi \) (0.063")	1.0 ¢ (0.039")	
Insulation	Material	XLPE(Cross-Linked Polyethylene)		
	Colours	Blue/Clear(Quad)	Black/Red/Blue/Clear	
Served Shiel	d	Approx. 64/0.18A	Approx. 73/0.12A	
	Ov. Dia.(mm)	6.0 \(\phi \) (0.236")	4.8 ¢ (0.189")	
Jacket	Material	Flexible PVC	Flexible PVC	
	Colours	10 colours available	5 colours available	
Roll Sizes		50 m (164Ft) 100m (328Ft) 200m (656Ft)	50 m (164Ft) 100m (328Ft) 200m (656Ft)	
Weight per 200m Roll		11 kg	7.5kg	

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.			2534	2893
DC Resistance at 20°C	inner Cond.		0.083Ω/m(0.025Ω/Ft)	0.13Ω/m(0.040Ω/Ft)
at 20 C	Shield		0.012Ω/m(0.0037Ω/Ft)	0.025Ω/m(0.0076Ω/Ft)
Capacitance a	at 1kHz, 20°C	K ₀	65pF/m(20 pF/Ft)	74pF/m(23 pF/Ft)
(Partial C.		K1	13pF/m(4 pF/Ft)	11pF/m(3.4 pF/Ft)
See below f	figure *(1)	K2	4pF/m(1.2 pF/Ft)	3pF/m(0.9 pF/Ft)
	Balanced Quad	CondCond.	97pF/m(29.6 pF/Ft)	131pF/m(40 pF/Ft)
	Connection	CondShield.	110pF/m(33.6 pF/Ft)	178pF/m(54 pF/Ft)
	Inductance betweenn conductors at 1kHz, 20°C		0.4μH/m (0.12μH/Ft)	0.5μH/m(0.15μH/Ft)
Electrostatic	Noise *(2)		50 mV Max.	50 mV Max.
Electromagn	etic Noise*(2)		0.15 mV Max.	0.15 mV Max.
Microphonics at 5	50 k Ω Load $^{*(2)}$		30 mV Max.	30 mV Max.
Voltage Bre	eakdown		Must withstand at DC 500V/15 sec.	
Insulation R	Insulation Resistance		10 ⁵ MΩ • m Min. at DC 125 V, 20°C	
Flex Life*(2)			11,000 cycles	26,000 cycles
Tensile Strength			686 N	500 N
Emigration			Non-Emigrant to ABS	Non-Emigrant to ABS
Applicable Temperature			-20°C~ + 70°C (-	4°F~ + 158°F)

^{*(2)} Using standard testing methods of Mogami Wire & Cable Corp.

*(1) Patial Capacitance

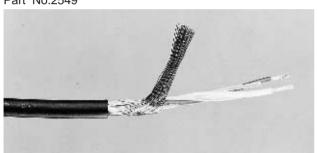


HIGH OUALITY BALANCED MIC. CABLES

NEGLEX TYPE #22AWG BALANCED MIC. CABLE

2549 has been designed using our famous Neglex OFC to provide the highest quality of audio reproduction in any recording application. It features #22AWG conductors and lower capacitance than our quad cables. The served shield and twisted pair construction is excellent at preventing noise caused by electromagnetic interference. This cable is recommended when high frequencies are important and where long cable runs are needed, and, it is cheaper and easier to terminate than quad cables.

Part No.2549



Part No.	2549
Conductor Size (mm²)	0.339mm² (#22 AWG)
O.D. (mm)	6.0 <i>ϕ</i> (0.236")
Flex Life	14,500cycles
Tensile Strength	657 N
Colours	Black/Red/Yellow/Green/Blue

105 STRAND BROADCAST MIC. CABLE

Excellent for rugged remote and on stage use in Sound Reinforcement, TV, Radio broadcasting etc. Its compact size together with a heavy duty binder and filler system and a braided shield make it ideal for all continuous handling applications. Exhibits very low microphonic pick-up and can operate at very cold temperatures down to -20°C (-4°F) without losing its flexibility. 105 strands of 0.05 mm O.D. annealed bare copper (#44AWG) features ultra flexibility with long flex life, maintaining excellent strength characteristics.

Part No.2791



Part No.	2791
Conductor Size (mm²)	0.206mm² (#24 AWG)
O.D. (mm)	5.5 ø (0.217")
Flex Life	164,000 cycles
Tensile Strength	578 N
Colours	Black/Red/Yellow/Green/Blue
Braid Shield	Coverage: over 95%

HIGH QUALITY BALANCED MIC. CABLES

SPECIFICATIONS

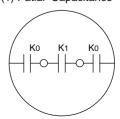
Configuration			
Part No.		2549	2791
No. of Con	ductor	2	2
Conductor	Details	30/0.12 OFC	105/0.05 A
	Size(mm ²)	0.339mm² (#22AWG)	0.206mm² (#24AWG)
	Ov. Dia. (mm)	1.9 ¢ (0.075")	1.5 ϕ (0.059")
Insulation	Material	XLPE(Cross-Linked Polyethylene)	
	Colours	Blue/Clear	Red/Clear
Shield		Served Approx. 64/0.18A	Braid 0.10A/9/16
	Ov. Dia. (mm)	6.0 \(\phi \) (0.236")	5.5 / (0.217")
Jacket	Material	Flexible PVC	Flexible PVC
	Colours	Black/Red/Yellow/Green/Blue	Black/Red/Yellow/Green/Blue
Roll Sizes		50 m (164Ft) 100m (328Ft) 200m(656Ft)	50 m (164Ft) 100m (328Ft) 200m(656Ft)
Weight per 200m Roll		11 kg	9kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.		2549	2791	
DC Resistance	Inner Cond.		0.058Ω/m(0.018Ω/Ft)	0.09Ω/m(0.027Ω/Ft)
at 20°C	Shield		0.013Ω/m(0.004Ω/Ft)	0.02Ω/m(0.006Ω/Ft)
Capacitance at 1kHz, 20°C(Partial C. Value)		K ₀	76pF/m(23 pF/Ft)	86pF/m(26 pF/Ft)
See below figure	*(1)	K 1	11pF/m(3.4 pF/Ft)	10pF/m(3.1 pF/Ft)
	Inductance between conductors at 1kHz, 20°C		0.8μH/m (0.24μH/Ft)	0.8μH/m (0.24μH/Ft)
Electrostatic	Electrostatic Noise *(2)		50 mV Max.	250 mV Max.
Electromagne	Electromagnetic Noise*(2)		0.15 mV Max.	0.15 mV Max.
Microphonics at 50kΩ Load *(2)		30 mV Max.	30 mV Max.	
Voltage Bre	akdown		Must withstand at DC 500V/15 sec.	
Insulation R	Insulation Resistance		10⁵ MΩ • m Min. at	DC 125 V, 20°C
Flex Life *(2)		14,500 cycles	164,000 cycles	
Tensile Strength		657 N	578 N	
Emigration		Non-Emigrant to ABS	Non-Emigrant to ABS	
Applicable Temperature		-20°C~ + 70°C (-	4°F ~ + 158°F)	

^{*(2)} Using standard testing methods of Mogami Wire & Cable Corp.

* (1) Patial Capacitance



LOW COST HIGH PERFORMANCE SUPERFLEXIBLE BALANCED MIC. CABLES

A specially developed high performance yet economical series of low impedance balanced microphone cables. These cables are small in size and special rubber - like PVC jacket is extremely flexible and exhibits good resistance to rough handling and abrasion.

High grade insulation material is designed to minimize heat shrinkage during soldering which allows easy termination to XLR type connectors. Available in both overall and individually sheilded types.

Part No.2552

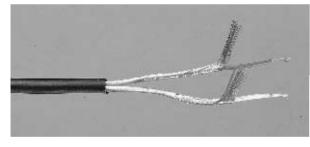


Part No. 2552 & 2582 Superflexible Light Weight Mic. Cables With Overall Shield

Here is an extremely limp and flexible cable for all types of audio/visual and industrial audio applications. XLPE insulation and a strong rubber-like outer jacket makes this cable ideal where a durable yet economical cable is needed.

Part No.	2552	2582
O.D. (mm)	5.0¢(0.197")	6.0¢(0.236")
Flex Life	11,000 cycles	13.800 cycles
Tensile Strength	421N	441N
Colours	Black	Black/Red/Yellow/ Green/Blue/Gray

Part No.2447

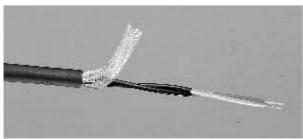


Part No. 2447 & 2435 Superflexible Light Weight Mic.Cables With Individual Shield

A durable and mechanically strong cable similar to 2552 but with two separately served shields. This produces capacitance level a little higher than that of 2552.

Part No.	2447	2435	
O.D. (mm)	5.0 ϕ (0.197")	6.0 ¢(0.236")	
Flex Life	14,000 cycles	24,000cycles	
Tensile Strength	451 N	451 N	
Colour	Black	Black	

Part No.2792



Part No. 2792 LOW MICROPHONICS MIC. CABLE WITH CONDUCTIVE PVC

Conductive material is coated on top of the XLPE insulation which reduces microphonic handling noise to negligible level even in high impedance applications. Before soldering the black coating shall be stripped back.

Part No.	2792
O.D. (mm)	6.0 <i>ϕ</i> (0.236")
Flex Life	22,000cycles
Tensile Strength	490 N
Colours	Black/Red/Yellow/Green/Blue/Gray

LOW COST HIGH PERFORMANCE SUPERFLEXIBLE BALANCED MIC. CABLES

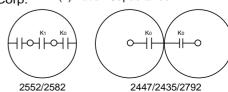
SPECIFICATIONS

<u> </u>	ICATIONS					
Configuration						
Part No.		2552	2582	2447	2435	2792
No. of C	onductor			2		
Conductor	Details		12/0	.12 A <t250d< td=""><td>*3></td><td></td></t250d<>	*3>	
	Size(mm²)		0.1	35mm² (#26AW	/G)	
	Ov. Dia. (mm)			1.5 \(\phi \) (0.059")		
Insulation	Material	L	NXLPE(Low No	oise Cross-Linke	ed Polyethylene	:)
	Colours			Red/Clear		
Conductive	PVC(mm)					1.75 ϕ (0.069")
Served S	hield	Approx.	67/0.12A	Approx.	Approx. 95/0.12A	
	Ov. Dia. (mm)	5.0 \(\phi \) (0.197")	6.0 \(\phi \)(0.236")	5.0 ¢ (0.197")	6.0¢(0.236")	6.0 \(\phi \) (0.236")
Jacket	Material			Flexible PVC		
	Colours	Black	Black/Red/Yellow/ Green/Blue/Gray	Black	Black	Black/Red/Yellow/ Green/Blue/Gray
Roll Sizes		50 m (164Ft) 100m (328Ft) 200m(656Ft)	50 m (164Ft) 100m (328Ft) 200m(656Ft)	100m (328Ft) 200m(656Ft)	100m (328Ft) 200m(656Ft)	50 m (164Ft) 100m (328Ft) 200m(656Ft)
Weight pe	er 200m Roll	7.5 kg	9 kg	7.7kg	9kg	8.8kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

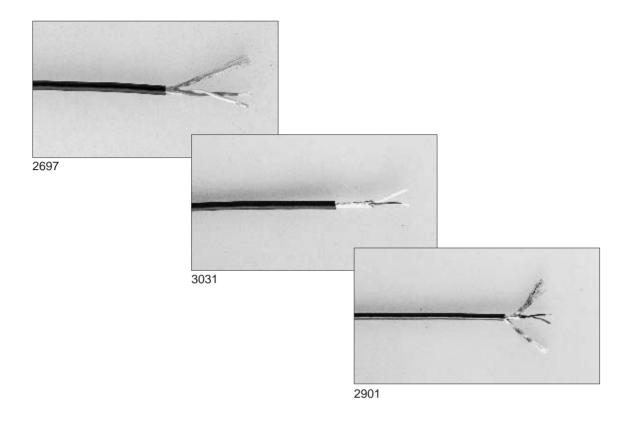
Part No.			2552	2582		2447	2435	2792
DC Resistance	Inner Cond.				0.	14Ω/m(0.043Ω/F	t)	
at 20°C	Shield		0.03Ω/m	(0.009Ω/Ft)		0	.02 Ω /m(0.006 Ω /F	Ft)
Capacitance at 1kl- See below figure	1 Z, 20 C(Partial C. Value) * (1)	K ₀	90pF/m(27 pF/Ft)		123pF/m(37.5 pF/Ft)		127pF/m(38.7 pF/Ft)	
		K 1	10pF/m(3pF/Ft)				_
Inductance be at 1kHz, 20°C	etweenn conduct	tors	0.8μH/m (0.24μH/Ft)					
Electrostatic N	loise *(2)		50 mV Max.			50 mV Max. 0.5		0.5 mV Max.
Electromagnetic	: Noise*(2)					0.15 mV Max.		
Microphonics at 50kg	2 Load ^{* (2)}		30 mV Max.	30 mV Ma	ax.	30 mV Max.	30 mV Max.	1 mV Max.
Voltage Break	kdown		Must withstand at DC 500V/15 sec.					
Insulation Res	sistance			10 ⁵ MΩ	2 • m	Min. at DC 12	25 V, 20°C	
Flex Life*(2)			11,000 cycles	13,800 cyc	cles	14,000 cycles	24,000 cycles	22,000 cycles
Tensile Stren	Tensile Strength			441 N		451 N	451 N	490 N
Emigration Non-Emigrant to ABS								
Applicable Te	mperature		-20°C~ + 70°C (-4°F~ + 158°F)					

*(2) Using standard testing methods of Mogami Wire & Cable Corp. *(1) Patial Capacitance



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MINIATURE BALANCED MIC. CABLES / LAVALIER MIC. CABLES



These miniature microphone cables feature necessary mechanical strength (tensile strength and long flex life) and flexibility for lavalier microphones and other applications. All balanced configuration. Part No. 3031 cable is exactly same construction as Part No. 2697 cable except for shield structure. Part No. 2697 cable is constructed with served (spiral) shield, while Part No. 3031 cable is constructed with braided shield. Part No. 2901 is specially designed with better tensile strength and longer flex life, sacrificing some sound quality, and creating a slightly more difficult soldering job because of used coppertin alloy conductor, this cable is mechanically very strong and durable. Of couse, its cost is higher.

Note: Any specific countermeasure against microphonics (noise) for high impedance microphones is not taken for these three lavalier microphone cables.

MINIATURE BALANCED MIC. CABLES / LAVALIER MIC. CABLES

SPECIFICATIONS

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Configuration					
Part No.		2697	3031	2901	
No. of Co	onductor		2	,	
Conductor	Details	16/0.08 A <	T1000D *1>	43/0.04 Cu-Sn	
	Size(mm²)	0.08mm²((#29AWG)	0.054mm ² (#30AWG)	
	Ov. Dia. (mm)	0.85¢	0.6 \(\phi \)(0.0236")		
Insulation	Material	P	Polyester		
	Colours	Red/	Black/Red		
Filler Thr	ead		Polypropylene		
Shield		Served Shield	Braided Shield	Double Served Shield	
		Approx.60/0.08A	16/6/0.08A	Approx.35/0.08A, Approx.40/0.08A	
	Ov. Dia. (mm)	2.5 \(\phi (0.098")	2.8 \(\phi (0.110")	2.16 \(\phi \) (0.085")	
Jacket	Material		Flexible PVC		
	Colours	Black	Black/White	Black	
Roll Sizes		50 m (164Ft) 100m (328Ft) 200m (656Ft)	200m (656Ft)(on spool)	305 m (1000Ft)	
Weight		1.8kg/200m	2.5kg/200m	2.7kg/305m	

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.			2697	3031	2901		
DC Resistance at 20°C	Inner Cond.		0.23Ω/m(0	0.070Ω/Ft)	0.41Ω/m(0.125Ω/Ft)		
at 20 C	Shield		$0.065\Omega/m(0.020\Omega/Ft)$	0.038Ω/m(0.0116Ω/Ft)	0.07Ω/m(0.0214Ω/Ft)		
Capacitance (Partial C. V	at 1kHz, 20°C ⁄alue)	Ko	300pF/m(92pF/Ft)	290pF/m(88 pF/Ft)	176pF/m(54 pF/Ft)		
See below fi	gure*(1)	K1	57pF/m(17pF/Ft)	70pF/m(21 pF/Ft)	32pF/m(9.8 pF/Ft)		
	Inductance between conductors at 1kHz, 20°C			0.8μH/m (0.24μH/Ft)			
Electrostatic	Noise*(2)		50 mV Max.	200mV Max.	1mV Max.		
Electromagnet	tic Noise*(2)		0.15 mV Max.				
Microphonics at 50k	κΩ Load *(2)		300mV Max.	150mV Max.	40mV Max.		
Voltage Brea	akdown		Must withstand at DC 500V/15 sec.				
Insulation Re	esistance		10⁵MΩ • m Min. at DC 125 V, 20°C				
Flex Life*(2)	Flex Life*(2)			26,000 cycles	177,000 cycles		
Tensile Stre	Tensile Strength			313 N	176 N		
Emigration	Emigration			Non-Emigrant to ABS resin			
Applicable T	emperature		-20°C~ + 70°C (-4°F~ + 158°F)				

^{*(2)} Using standard testing methods of Mogami Wire & Cable Corp.

^{*(1)} Patial Capacitance

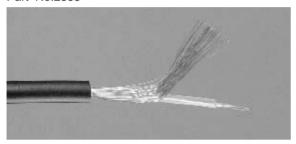


UNBALANCED MIC. CABLES

ECONOMICAL SUPERFLEXIBLE UNBALANCED MIC. CABLES

These cables show Mogami's manufacturing and cable design expertise in creating an economical unbalanced cables which maintain necessary mechanical strength (tensile strength and long flex life) and flexibility for a microphone cable. Two overall diameter sizes are available with exactly the same construction.

Part No.2333



Part No.	2330	2333
O.D. (mm)	3.0 ¢ (0.118")	4.0 ϕ (0.157")
Flex Life	15,500cycles	16,500 cycles
Tensile Strength	274 N	284 N
Colour	Black	Black

Note: For the very highest quality recording applications, Mogami original high-end Neglex audio cable Part No. 2803 or Part No. 2497 constructed with patented Double - Cylindrical structure should be used.

MINIATURE UNBALANCED MIC. CABLE



Part No. 2368 cable has the same structure as Part No. 2697 cable except for an unbalanced configuration. Therefore, although it naturally becomes weaker than Part No. 2697 cable because of its smaller overall diameter, its mechanical strength is much higher than any comparable overall diameter cable without any special contrivance, besides, it is low cost.

Note: Any specific countermeasure against microphonics (noise) for high impedance microphones is not taken for this cable.

UNBALANCED MIC. CABLES / LAVALIER MIC. CABLE

SPECIFICATIONS

Configuration					
Part No.		2330	2333	2368	
No. of Co	onductor		1		
Conductor	Details	10	6/0.08 A < T1000D *	* 1>	
	Size(mm²)	(0.08mm²(#29AWG)		
	Ov. Dia.(mm)	1.5 ¢ (0	1.0 \(\phi \)(0.039")		
Insulation	Material	LNXLPE(Low Noise C	PVC		
	Colour	Cle	White		
Served S	hield	Approx. 3	Approx. 38/0.08A		
	Ov. Dia.(mm)	3.0 ¢ (0.118")	4.0 \(\phi \) (0.157")	2.0 \(\phi (0.079")	
Jacket	Material	Flexible PVC			
	Colour				
Roll Sizes		100m (328Ft) 200m (656Ft)	200 m (656Ft) (standard)	100 m (328Ft) 200 m (656Ft)	
Weight pe	er 200m Roll	2.5 kg	4.2kg	1.5kg	

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.				2333	2368	
DC Resistance	illiel Colla.			$0.23\Omega/m(0.07\Omega/Ft)$		
at 20 C	Shield		0.05Ω/m(0.015Ω/Ft)	0.10Ω/m(0.031Ω/Ft)	
Capacitance at 1kHz, 20°C See below figure *(1) Ko		115pF/m(35 pF/Ft)		350pF/m(107 pF/Ft)		
Inductance between conductors at 1kHz, 20°C			0.3μH/m (0.092μH/Ft)			
Electrostatic	Noise*(2)		50 mV Max.			
Electromagnet	tic Noise*(2)		0.05 mV Max.		0.05 mV Max.	
Microphonics at 5	50kΩ Load *(2)		30 mV Max. 1V Ma			
Voltage Brea	akdown		Must withstand at DC 500V/15 sec.			
Insulation Re	esistance		10⁵MΩ • m Min. at DC 125 V, 20°C			
Flex Life*(2)			15,500 cycles	16,500 cycles	43,000 cycles	
Tensile Strength			274 N	284 N	206 N	
Emigration			Non-Emigrant to ABS resin			
Applicable Temperature			-20°C~ + 70°C (-4°F~ + 158°F)			

^{*(2)} Using standard testing methods of Mogami Wire & Cable Corp.

^{* (1)} Partial Capacitance



#24AWG STEREO MIC. CABLE





Stereo microphone cable comprised of larger and mechanically stronger cores for those who need stereo wiring at stage recording etc. to get rid of tangling problems. OD of each channel is 4.8mm (0.189") to relieve any anxiety about mechanical strength of separated cores connected to each XLR 3P audio connectors when compared with regular 2-core snake cable. This design of OFC conductor and low capacitance as regular size microphone cable assures the same reliable sound quality as MOGAMI #2549 mic cable level.

HIGH TENSION AERIAL MIC. CABLES

3177 (MONAURAL)



3178 (STEREO)



These cables are designed for suspension microphones reinforced by one stainless steel wire rope of 830 N (187 pounds) breakable weight for monaural type (Part No. 3177) and two same size ropes for stereo type (Part No. 3178). Although the sound quality is compromised a little (especially at high frequency range), they are all designed with quad (shielded four conductor) configuration for wider applications (to provide stronger electromagnetic noise cancellation).

STEREO MIC. CABLE / AERIAL MIC. CABLES

SPECIFICATIONS

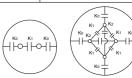
		I I			
Configuration					
Part No.		3106	3177	3178	
No. of Cores		2	1	2	
No. of Conduc	tor	2	4	4	
Conductor	Details	20/0.12 OFC	20/0.12 OFC	30/0.08OFC	
	Size(mm ²)	0.226mm ² (#24AWG)	0.226mm ² (#24AWG)	0.15mm ² (#26AWG)	
Insulation	Ov. Dia. (mm)	1.6¢ (0.063")	1.6 <i>ϕ</i> (0.063")	0.9 <i>ϕ</i> (0.0354")	
Ilisulation	Material	XLPE (Cross-Linked Polyethylene)	LNXLPE(Low Noize Cr	oss-Linked Polyethylene)	
	Colours	Blue/Clear	Blue/Wh	ite (Quad)	
	Material		Stainless Steel Wire Rope		
Reinforcement	Details		7/7/0.11		
	Numbers of Rope		1	2	
	Breakable Weight		830 N (187pound)	1,660 N (374pound)	
Monofilament	Ov. Dia. (mm)	1.1 ¢ (0.043")			
	Material	XLPE (Cross-Linked Polyethylene)			
Filler Thread			Cotton	Aramid	
Binder	Thickness		0.025mm (0.00098")		
	Material		Paper Tape		
Served Shield		Approx. 80/0.12A	Approx.115/0.12A	Approx.68/0.10A	
Core Jacket	Ov. Dia. (mm)			2.8mm (0.110")	
Core Jacket	Material			PVC	
	Colours			Red/White	
Filler Thread				Polypropylene	
Binder	Thickness			0.025mm (0.00098")	
	Material			Paper Tape	
Ov. Jacket	Ov. Dia. (mm)	2×4.8 \(\psi(2×0.189")	6.8 \(\phi (0.268")	7.4 \(\phi (0.291")	
Ov. Jacket	Material	PVC	PVC+Polyureth	ane Compound	
Colour		Black	Light Gray		
Roll Sizes		50 m (164Ft) 100m (328Ft) 200m(656Ft)	200m (656Ft)	200m (656Ft)	
Weight		5.7Kg/100m	12.2Kg/200m	13.3Kg/200m	

ELECTRICAL & MECHANICAL CHARACTERISTICS

LECTRICAL & MICCIANICAL CHARACTERISTICS							
Part No.				3106	3177	3178	
DC Resistance at 20°C Inner Co		ner Conductor.		0.083Ω/m(0.0253Ω/Ft)	0.090Ω/m(0.027Ω/Ft)	0.13Ω/m(0.0397Ω/Ft)	
at 20 C	Shi	ield		0.021Ω/m(0.0064Ω/Ft)	0.015Ω/m(0.0046Ω/Ft)	0.035Ω/m(0.011Ω/Ft)	
Capacitance at		K0 (Shield-Cond	uctor)	77pF/m(23.5 pF/Ft)	108pF/m(32.9 pF/Ft)	83pF/m(25.3pF/Ft)	
1kHz,20°C (Paritial Capacitance Val		K1 (between neigh	hbour conductors)	10pF/m(3.1 pF/Ft)	8pF/m(2.44 pF/Ft)	18pF/m(5.49 pF/Ft)	
See below figure * (1)		K2		_	3pF/m(0.92 pF/Ft)	3pF/m(0.92 pF/Ft)	
ŭ		Balanced Quad	Cond-Cond	_	107pF/m(32.6 pF/Ft)	160pF/m(48.8 pF/Ft)	
		Connection	Cond-Shield	_	190pF/m(58.0pF/Ft)	222pF/m(67.7pF/Ft)	
Inductance				0.9μH/m (0.27μH/Ft)	0.5μH/m (0.15μH/Ft)	0.2μH/m (0.061μH/Ft)	
Electrostatic Noise	* (2)			5 mV Max.	20mV Max.	5mV Max.	
Electromagnetic Nois	e a	t 10kHz		0.5 mV Max.	0.013 mV Max.	0.06 mV Max.	
Microphonics *(2)				10 mV Max.	5 mV Max.	10 mV Max.	
Voltage Breakdown	1			Must withstand at DC 500V/15sec.			
Insulation Resistan	се			10 ⁵ MΩ • m Min. at DC 500V, 20°C			
Flex Life *(2)				100,000 cycles	36,100 cycles	59,000 cycles	
Tensile Strength				382 N (per pair)	Over 9	980 N	
Emigration				Non-Emigrant to ABS resin			
Applicable Tempera	atur	e		-2	0°C~+70°C (-4°F~ +158°F)		
Standard				UL 20002 AWM 30V 60°C VW-1	_	_	

 $[\]ast\,\mbox{\scriptsize (2)}\,\mbox{Using standard testing methods of Mogami Wire & Cable Corp.}$

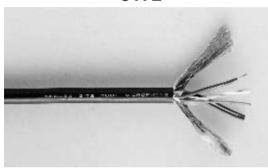
*(1) PARITIAL CAPACITANCE



HIGHEST DEFINITION TUBE MICROPHONE CABLE

Specifically designed highest sound quality tube microphone cable based on representative electrical circuits of today's tube microphone including its power supply. Applicable to most representative tube microphones.

3172



SPECIFICATIONS

Configuration				
Part No.		3172		
No. of Co	nductor	6	Signal Assignment	
Conductor	Details	2X(30/0.08OFC)		
	Size(mm²)	0.15mm ² (#26AWG)		
	Ov. Dia. (mm)	1.0 ¢ (0.039")	MIC. OUTPUT	
Insulation	Material	XLPE		
	Colours	Orange/White		
Conductor	Details	2X(75/0.04Cu-Sn)		
	Size(mm²)	0.094mm ² (#28AWG)		
	Ov. Dia. (mm)	1.0 ¢ (0.039")	BIAS	
Insulation	Material	XLPE	1	
	Colours	Red/Purple		
Conductor	Details	2X(80/0.08A)		
	Size(mm²)	0.40mm ² (#22AWG)	-	
	Ov. Dia. (mm)	1.6 ¢ (0.063")	HEATER CIRCUIT	
Insulation	Material	PVC		
	Colours	Green/Blue		
Shield		Double Served Shield Approx. 112/0.10A and Approx. 133/0.10A		
Binder	Thickness	0.025mm(0.00	098")	
	Material	Paper Tap	oe .	
	Ov. Dia. (mm)	6.5 ¢ (0.256	6")	
Ov. Jacket	Material	Flexible P\	/C	
	Colour	Black		
Roll Size		100 m (328Ft)		
Weight pe	r 100m Roll	6.3kg		

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.			31	72		
			MIC SIGNAL	0.13Ω/m (0.040Ω/Ft)		
DC Resistance at 20°C	Inn	er Conductor.	BIAS CIRCUIT	$0.23\Omega/m~(0.070\Omega/Ft)$		
at 20 C			HEATER CIRCUIT	0.046Ω/m (0.014Ω/Ft)		
	Shi	eld	0.011Ω/m(0.0034Ω/Ft)		
Capacitance 1kHz, 20°C	at	Shield-Conductor	230pF/m(70pF/Ft) 100pF/m	(30pF/Ft) 93pF/m(28pF/Ft)		
1KHZ, 20 C		between neighbour conductors	"TWISTED PAIR" 56pF/m(17pF/Ft)	46pF/m(14pF/Ft) 137pF/m(42pF/Ft)		
Inductance			"TWISTED PAIR" 0.4µH/m (0.12µH/Ft)			
Electrostatic	Nois	se *	"TWISTED PAIR" 1 mV Max.			
Electromagne	tic N	oise at 10kHz*	"TWISTED PAIR" 0.1mV Max.			
Microphonics	*		"TWISTED PAIR" 10 mV Max.			
Voltage Brea	akdov	wn	Must withstand at DC 500V/15sec.			
Insulation Re	esista	ance	10 ⁵ MΩ • m Min. at DC 500V, 20°C			
Flex Life *			13,000 cycles			
Tensile Strength			588 N			
Emigration			Non-Emigrant to ABS resin			
Applicable T	emp	erature	-20°C~+70°C (-4°F ~ +158°F)			

^{*}Using standard testing methods of Mogami Wire & Cable Corp.



INTERCOM HEADSET EXTENSION CABLE

Specifically designed for INTERCOM HEADSET EXTENSION CABLE. Not sticking to quality of sound, this cable is designed to be compact, flexible, light weight and durable handy structure for practical applications.

- ☐ Independent two coaxial core construction for better isolation between microphone signal and earphone signal.
- ☐ Many strands of copper-tin alloy conductor material makes it durable cable without losing flexibility.
- ☐ Compact round shape with smooth slippery surface makes it really handy for practical applications.
- ☐ Both bulk roll cable and standard length cable assemblies are available from stock.

Cable: Part No. 3242-00

Configuration



Part No.	IHE-03	IHE-05	IHE-10	
Length	3m 9.8 Ft	5m 16.4 Ft	10m 32.8 Ft	

Assembly



SPECIFICATIONS

Part No.		3242-00	
Conductor	Details	75/0.04 Cu-Sn	
	Size(mm²)	(0.094mm ²)(#28AWG)	
	Ov. Dia. (mm)	1.05 <i>\phi</i> (0.041")	
Insulation	Material	XLPE	
	Colours	Clear	
Served Shi	eld	Approx. 38/0.08A	
	Ov. Dia. (mm)	1.6 \(\phi (0.063")	
Jacket	Material	PVC	
	Colours	Yellow/Blue	
Nos. of C	ore	2	
	Ov. Dia. (mm)	1.07 \(\phi (0.042")	
Monofilament	Material	PVC	
	Colour	White	
	Nos.	2	
Filler Thread		PP	
Binder	Thickness	0.025mm(0.00098")	
	Material	Paper Tape	
	Ov. Dia. (mm)	5.0¢(0.197")	
Sheath	Material	PVC	
	Colour	Black	
Roll Size		50m(164Ft)/100m(328Ft)/200m(656Ft)	
Weight pe	er 100m Roll	3.9 Kg	

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance	Inner Conductor.	0.22Ω/m(0.067Ω/Ft)	
at 20°C	Shield	0.13Ω/m(0.040Ω/Ft)	
Capacitance at 1	kHz, 20°C	135pF/m(41.2pF/Ft)	
Inductance		0.3μH/m(0.09μH/Ft)	
Characteristic Impeda	ance at 10MHz	$46\Omega \pm 5\%$	
Attenuation at 10N	ИНz	0.25dB/m(0.076dB/Ft)	
Phase Constant at	10MH	0.43rad/m	
Electrostatic Nois	e*	50mV Max.	
Electromagnetic N	oise at 10kHz*	0.02mV Max.	
Microphonics *		40mV Max.	
Voltage Breakdov	vn	Must withstand at DC 500V/15Sec.	
Insulation Resista	ance	10 ⁴ MΩ • m Min. at DC 250V, 20°C	
Flex Life*		50,000 cycles	
Tensile Strength		294 N	
Emigration		Non-Emigrant to ABS resin	
Applicable Tempe	erature	-10°C~+60°C (10°F ~ +140°F)	

*Using standard testing methods of Mogami Wire & Cable Corp.

SNAKE CABLES (MULTICORE MIC.CABLES)



Mogami multicore cables are designed for the highest level of audio performance and feature superb electrical and mechanical characteristics while remaining compact, superflexible and easy to use.

☐ CL2 rated version available. Conductor size of CL2 rated version is thicker #25AWG so that it is also recommended for rugged application and firm and easier crimp terminal connector wiring as well as NEC fire regulation requirement.
☐ Individually twisted shielded pairs, available in 2 to 48 channels.
$\hfill\square$ Rugged and flexible construction that is easy to handle, even at temperatures down
to -20 °C(-4 °F).
☐ Easy cable identification system:
*Channel numbers are printed and underlined on each core jacket to ensure correct
identification, regardless of which end is stripped.
*Outer jackets of each pair are colour coded by standard resistor colour code,
allowing quick identification of conductor pairs.
*Inner conductors are also colour coded based on the international standard resistor
colour code. Eac hpair is colour coded by jacket and conductor colour combination.
\square Each channel has a drain wire and served (spiral) bare copper shield. The drain
wire simplify termination and can be crimped by the same size contact as the inner
conductor pair.
☐ XLPE (Cross Linked Polyethylene) insulation provides superb electrical characteristics
and will not melt or shrink back during soldering.

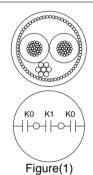
STANDARD VERSION

Part No.	No. Of Channels	Ov. Dia. (Approx. mm)	Jacket Thickness (Approx. mm)	Weight (kg/100m)(kg/328Ft)	Maximum Length available
2930	2-ch	7.5(0.295")	1.0(0.039")	7	
2931	4-ch	8.6(0.339")	1.0(0.039")	9	506m
2932	8-ch	11.5(0.453")	1.2(0.047")	18	(1.659Ft)
2933	12-ch	14.3(0.563")	1.5(0.059")	28	
2934	16-ch	15.8(0.622")	1.5(0.059")	32	
2935	19-ch	17.0(0.669")	1.7(0.067")	40	305m
2936	24-ch	20.0(0.787")	2.0(0.079")	46	(1.000Ft)
2937	27-ch	20.5(0.807")	2.0(0.079")	58	. ,
2938	32-ch	21.7(0.854")	2.0(0.079")	63	
2939	48-ch	26.0(1.02")	2.0(0.079")	97	200m (656Ft)

(Figures in parenthesis are in inches)

CABLE CORE SPECS

Conductor	30/0.08A (0.15mm²) #26AWG	(30×#40AWG)
Insulation	1.0	$(0.039"\phi)$
Drain Wire	7/0.18TA (0.18mm²) #25AWG	(7×#33AWG)
Shield	Approx. 58/0.10A Served (spiral) Shield	
Jacket(Covering)	2.8	(0.110"¢)
Identification	See core number identification table	



ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Pair Conductor		0.13Ω/m (0.040Ω/Ft)	
	Shield		0.031Ω/m (0.0095Ω/Ft)	
Capacitance at 1 kHz, 20°C(Partial Capacitance Value)	Ko	130pF/m (40pF/Ft)	
See Figure (1)		K1	12pF/m (3.7pF/Ft)	
Inductance			0.6μH/m (0.18μH/Ft)	
Electrostatic Noise (Hum Pic	ck-up)*		2.5mV Max.	
Electromagnetic Noise at 10 (Inductance of the tor		0.1mV Max.		
Microphonics * Method: Stepping on c	cable	50mV at 50kΩ Load		
Voltage Breakdown			Must withstand at DC 500V/15sec.	
Insulation Resistance at DC	C 125V, 20°C		10 ⁵ MΩ • m Minimum	
Tensile Strength of one pa	ir (26°C,65% RH)		274 N	
Emigration			Non-Emigrant to ABS resin	
Applicable Temperature		-20°C~+70°C (-4°F~+158°F)		
Standard			UL13 CL2X 60°C / UL 20002 AWM 30V 60°C VW-1	

 $\boldsymbol{\ast}$ Using standard testing methods of Mogami Wire & Cable Corp.

REMARKS: Standard EZID models with 19 channels or more are designed for studio applications only. For PA and/or non-statistical applications, use the CL2 rated version.

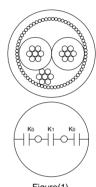
CL 2 RATED VERSION

Part No.	No. Of Channels	Ov. Dia. (Approx. mm)	Jacket Thickness (Approx. mm)	Weight (kg/100m) (kg/328Ft)	Maximum Lengths available
3040	2-ch	7.8(0.307")	1.0(0.039")	8	
3041	4-ch	9.0(0.354")	1.0(0.039")	10	
3042	8-ch	12.0(0.472")	1.2(0.047")	19	
3043	12-ch	14.6(0.575")	1.3(0.051")	29	305m
3044	16-ch	16.3(0.642")	1.4(0.055")	36	(1.000Ft)
3045	19-ch	17.5(0.689")	1.7(0.067")	44	,
3046	24-ch	20.5(0.807")	2.0(0.079")	57	
3047	27-ch	21.0(0.827")	2.0(0.079")	63	
3048	32-ch	22.4(0.882")	2.0(0.079")	73	
3049	48-ch	27.0(1.063")	2.0(0.079")	104	200m (656Ft)

(Figures in parenthesis are in inches)

CABLE CORE SPECS

Conductor	7/0.18A (0.178mm²) #25AWG	(7×#33AWG)
Insulation	1.05 ≠ XLPE (Cross Linked Polyethylene)	$(0.0413"\phi)$
Drain Wire	7/0.18A (Exactly same as conductor)	
Shield	Approx. 58/0.10A Served (spiral) Shield	
Jacket(Covering)	2.8	(0.110"¢)
Identification	See core number identification table	



Figure(1)

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Pair Conductor		$0.11\Omega/m$ ($0.0336\Omega/Ft$)	
	Shield		0.031Ω/m (0.0095Ω/Ft)	
Capacitance at 1 kHz, 20°C(F	Partial Capacitance Value)	Ko	140pF/m (42.7pF/Ft)	
See Figure (1)		K1	12pF/m (3.7pF/Ft)	
Inductance			0.6μH/m (0.18μH/Ft)	
Electrostatic Noise (Hum	Pick-up)*		2.5mV Max.	
Electromagnectic Noise at 10kHz* (Inductance of the toroidal core: 595μH)			0.1mV Max.	
Microphonics * Method: Stepping on cable			50mV at 50kΩ Load	
Voltage Breakdown			Must withstand at DC 500V/15sec.	
Insulation Resistance at I	DC 125V, 20°C		10⁵MΩ • m Minimum	
Tensile Strength of one	pair (26°C,65%RH)		274 N	
Emigration		Non-Emigrant to ABS resin		
Applicable Temperature		-20°C~+70°C (-4°F~+158°F)		
Standard		UL13 CL2 60°C		

*Using standard testing methods of Mogami Wire & Cable Corp.

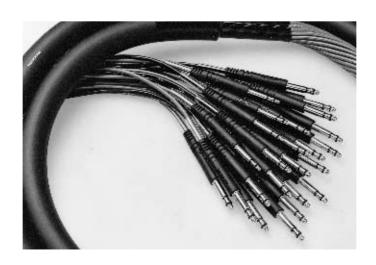
CORE NUMBER IDENTIFICATION TABLE

CORE NO.	COLOUR OF ONE OF THE PAIR	CORE JACKET COLOUR	CORE NO.	COLOUR OF ONE OF THE PAIR	CORE JACKET COLOUR	CORE NO.	COLOUR OF ONE OF THE PAIR	CORE JACKET COLOUR
1	BROWN		17	PURPLE		33	ORANGE	
2	RED		18	GRAY	BROWN	34	YELLOW	ORANGE
3	ORANGE		19	WHITE	(WHITE)	35	GREEN	
4	YELLOW	BLACK	20	BLACK		36	BLUE	(BLACK)
5	GREEN	(WHITE)	21	BROWN		37	PURPLE	
6	BLUE		22	RED	RED (WHITE)	38	GRAY	
7	PURPLE		23	ORANGE		39	WHITE	
8	GRAY		24	YELLOW		40	BLACK	
9	WHITE		25	GREEN		41	BROWN	
10	BLACK		26	BLUE		42	RED	
11	BROWN		27	PURPLE		43	ORANGE	YELLOW
12	RED	BROWN	28	GRAY		44	YELLOW	(BLACK)
13	ORANGE	(WHITE)	29	WHITE		45	GREEN	
14	YELLOW		30	BLACK	004105	46	BLUE	
15	GREEN		31	BROWN	ORANGE (BLACK)	47	PURPLE	
16	BLUE		32	RED	(22.1011)	48	GRAY	

	☐ Colour	iden	tifica	ation is	based	on	the res	istor	colou	ır c	ode.					
	☐ Colours	ind	icate	ed in pa	arenthe	sis i	ndicate	the i	numb	er	print	colour	on	the	core	jacket.
	☐ Insulati	on c	olou	ir of oth	er wire	e in	all pair	rs is	clear							
	☐ Colour	of o	uter	cable j	jacket	s bl	ack.									
	☐ How to	rea	d c	ore jack	et cha	nnel	numbe	ers								
										8						
Ì	EXAMPLE	1)	9	maana C	21V 2)	6	maana	NIINIE	2)	1	maan	, EICH	TEEN	l not	EICH	TV ONE
	EAAIVIPLE	1)	6	means 3	DIA 2)	9	means	INIINE	3)	1	mean	SEIGH	IEEIN	i, HOI	EIGH	I Y-ONE
										8						

ASSEMBLY OF SNAKE CABLE

☐ Customised connections and cable assemblies are available to special order.
$\hfill\Box$ Connection diagram and detailed specification sheet are necessary for all order.
☐ Delivery: 4 weeks excluding shipping time.
For details, consult your Mogami dealer

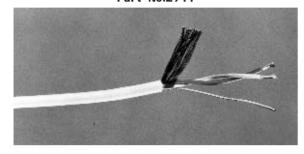


CONSOLE INTERNAL / EXTERNAL WIRING CABLES

The copper conductors of all these console cables are made of famous NEGLEX OFC, hence we can recommend any of these with confidence for the highest quality wiring of mixing consoles, rack panels, and studio equipment.

- ☐ All cables feature XLPE (Cross-Linked Polyethylene) which has excellent electrical characteristics and prevents shrink-back during soldering.
- ☐ Served (spiral) shield provides easier cable termination and better sound quality than braided shield.

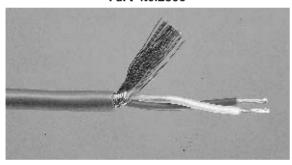
Part No.2944



STANDARD CONSOLE CABLE

- $\hfill\Box$ Small size for space saving.
- ☐ Very flexible and easy to use.
- ☐ Ten colours available for easy identification.
- ☐ Same configuration as the core of our standard multi mic. snake cable series (EZID models).
- ☐ Additional drain wire makes wiring efficient, as it can be crimped by the same size crimp terminal.

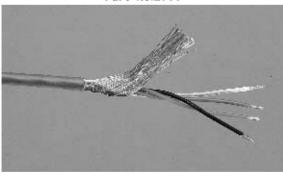
Part No.2806



LARGE CONDUCTOR SIZE CONSOLE CABLE

- #24AWG conductor version technically similar to #2549 NEGLEX balanced Mic. Cable except for smaller outer jacket.
- ☐ This item is designed for permanent installation and where larger conductor size is required such as long runs.
- ☐ Jacket Colour: Only Gray is available.

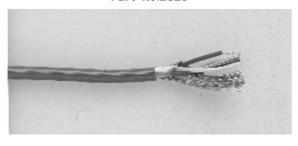
Part No.2799



MINI-QUAD CONSOLE CABLE

- ☐ Quad configuration reduces electromagnetic noise.
- Four different colours of insulation makes it possible to use as a four conductor overall shield cable.
- ☐ Conductor size: same as #2944
- ☐ Jacket Colour: Only Gray is available.

Part No.2820



LARGE SIZE QUAD CABLE

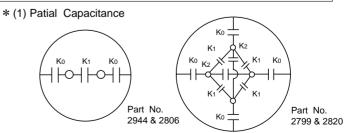
- #24AWG conductor version technically similar to #2534 NEGLEX quad Mic. Cable except for smaller and slippery outer jacket.
- ☐ This item is designed for permanent installation and where larger conductor size is required such as long runs.

SPECIFICATIONS AND CHARACTERISTICS

Configuration	G							
Part No.			2944		2806	2799	2820	
No. of Condu	ctor		2		2	4	4	
Conductor	Details		30/0.08 OFC	;	30/0.12 OFC	30/0.08 OFC	20/0.12 OFC	
	Size		0.15mm² (#26AWG)		0.34mm ² (#22AWG)	0.15mm ² (#26AWG)	0.226mm² (#24AWG)	
	Ov. Dia. (mn	n)	1.0¢(0.039")		1.9¢(0.075")	1.0¢(0.039")	1.6¢(0.063")	
Insulation	Material			·	XLPE(Cross-Link	ked Polyethylene)		
	Core Colour	rs	Red/Clear		Blue/Clear	Black/Red/Blue/Clear	Blue/Clear(Quad)	
Drain Wire	Details		7/0.18A					
	Size		0.18mm² (#25AWG)					
Served Shield			Approx. 58/0.10A	٨	Approx. 58/0.18A	Approx. 60/0.12A	Approx. 64/0.18A	
	Ov. Dia. (mn	n)	2.5\(\phi\)(0.098")		5.2¢(0.205")	3.2¢(0.126")	5.0¢(0.197")	
Jacket	Material				P\	/C		
	Core Colour	rs	Black/Brown/Red/ Orange/Yellow/Green/ Blue/Purple/Gray/White		Gray	Gray	Gray	
Roll Sizes			50 m (164Ft) 100m (328Ft) 200m(656Ft)		200 m (656Ft) (standard)	50 m (164Ft) 100m (328Ft) 200m(656Ft)	200 m (656Ft) (standard)	
Weight per 20	00m Roll		2.5 kg		8 kg	3.8 kg	8 kg	
DC Resistance	Inner Cond.		0.13Ω/m(0.040Ω/	′Ft)	$0.058\Omega/\text{m}(0.018\Omega/\text{Ft})$	0.13Ω/m(0.040Ω/Ft)	$0.083\Omega/m(0.025\Omega/Ft)$	
at 20°C	Shield		0.035Ω/m(0.011Ω/	′Ft)	$0.013\Omega/\text{m}(0.004\Omega/\text{Ft})$	$0.030\Omega/\text{m}(0.009\Omega/\text{Ft})$	$0.012\Omega/m(0.0037\Omega/Ft)$	
Capacitance at	1kHz 20°C	K o	130pF/m(40 pF/Ft))	87pF/m(27 pF/Ft)	69pF/m(21 pF/Ft)	65pF/m(20 pF/Ft)	
(Partial C. Val	ue)	K1	12pF/m(3.7 pF/Ft)		11pF/m(3.4 pF/Ft)	15pF/m(4.6 pF/Ft)	13pF/m(4 pF/Ft)	
See below figu	ure *(1)	K ₂				2pF/m(0.6 pF/Ft)	4pF/m(1.2 pF/Ft)	
			ad-Connection		Cond-Cond.	131pF/m(40 pF/Ft)	97pF/m(29.6 pF/Ft)	
			aa Oomicotion		Cond-Shield.	192pF/m(59 pF/Ft)	110pF/m(33.6 pF/Ft)	
Inductance between conductors at 1kHz, 20°C		0.6μH/m (0.18μH/Ft)		0.8μH/m (0.24μH/Ft)	0.5μH/m (0.15μH/Ft)	0.4μH/m (0.12μH/Ft)		
Electrostatic Noise *(2)		20 mV Max.		5 mV Max.	1.5 mV Max.	50 mV Max.		
Electromagnetic	Noise *(2)		0.1 mV Max.		0.2 mV Max.	0.02 mV Max.	0.15 mV Max.	

COMMON SPECS.

Voltage Breakdown	Must withstand at DC 500V/15 sec.
Insulation Resistance	10 ⁵ MΩ • m Minimum at DC 125 V, 20°C



* (2) Using standard testing methods of Mogami Wire & Cable Corp.

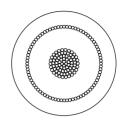


SPEAKER CABLES

SUPERFLEXIBLE STUDIO SPEAKER CABLES

2.0mm2 (APPROX.#14AWG) SPEAKER CABLE TO MEET XLR CONNECTOR CABLE CLAMP





This standard speaker cable is designed to meet XLR audio connector cable clamp. Coaxial Design is used to provide as large a conductor size as possible, which results in the following features:

Large	conductor	size	of 2	2.0mm	(close	to #	£14AWG)	despite	small	OD	of	6.5mm	(0.256)	')
(Same	conductor	size	for	both	internal	and	external	(shield) cond	ducto	ors.)		

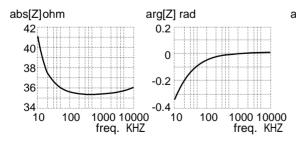
- ☐ Extremely low induction from outside and affection to outside.
- ☐ Suitable impedance as speaker cable.
- $\hfill \Box$ Better sound quality than quad nor regular parallel configuration.
 - Now, specify MOGAMI #3082 as world standard of economy and popular professional speaker cable.

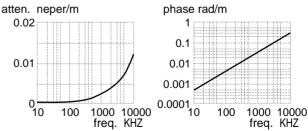
SPECIFICATIONS

OI LOII IOA	110140	
Part No.		3082
Conductor	Details	80/0.18 OFC (80X#33AWG)
	Size	2.03mm ² (Approx.#14 AWG)
Insulation	Ov. Dia.(mm)	4.6 <i>ϕ</i> (0.181")
insulation	Material	PVC
	Colour	White
Served Shield	Details	80/0.18 OFC (80×#33AWG)
	Size	2.03mm ² (Approx.#14 AWG)
	Ov. Dia.(mm)	$6.5^{+0.5}\phi$ (0.256 \pm 0.0197" ϕ)
Jacket	Material	Flexible PVC
	Colour	Black
Roll Sizes	3	100m(328Ft)/200m(656Ft)/ 153m(500Ft)
Weight per 1	100m (328Ft) roll	7.5kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.		3082				
DC Resistance at 20°C	Inner Conductor Shield Conductor	$0.009\Omega/m$ ($0.0027\Omega/Ft$) Same value for both internal and outernal/ shield conductor)				
Capacitance	at 1kHz, 20°C	253pF/m (77pF /Ft)				
Inductance		0.4μH/m (0.12μH/Ft)				
Electrostatic	Noise	0.2mV Max.				
Electromagnetic	Noise at 10kHz	0.2mV Max.				
Voltage Bre	akdown	Must withstand at DC 500V/15sec.				
Insulation R	esistance	10 ⁵ MΩ • m Min. at DC 500V, 20°C				
Flex Life		15,000 cycles				
Tensile Stre	ngth	More than 980 N				
Emigration		Non-Emigrant to ABS resin				
Applicable 7	Temperature	-20°C~+70°C (-4°F~+158°F)				
Standard		UL13 CL2X 75°C				



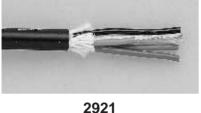


SUPERFLEXIBLE STUDIO SPEAKER CABLES HIGH DEFINITION MULTI SERIES PROFESSIONAL SPEAKER CABLES

These	unique	professional	speaker	cables	are	originally	designed	to	deliver	maximum
perforn	nance fr	om state-of-	the-art Tri	-Amp S	Syste	ms.				

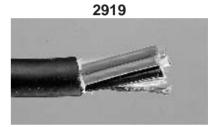
- ☐ They offer true audiophile performance for accurate sound transmission with clear transparent response yet possess a rugged superflexibility for the most demanding professional applications.
- ☐ Each conductor features many strands in rope-lay of famous MOGAMI 'NEGLEX' Oxygen-Free-Copper within colour-coded PVC insulation. A tough, low profile matte black superflexible PVC jacket protects the cables.
- ☐ Available in series of 2mm² (close to #14AWG), 2.5mm² (close to #13AWG) and 4mm² (close to #11AWG) conductor sizes.

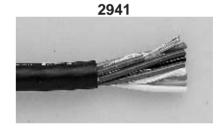












Part No.	3103	2972	2921	3104	2919	2941
No. of Conductor	2	2912	4	3104	6	8
Conductor Size	4mm² (#12AWG)	2mm² (#15AWG)	2.5mm² (#14AWG)	4mm² (#12AWG)	2.5n (#14A	
Overall Diameter(mm)	12 <i>¢</i>	10.5¢	11.3 <i>¢</i>	14.5 <i>ϕ</i>	12.8 <i>¢</i>	15.7 ¢
(inch)	(0.472")	(0.413")	(0.445")	(0.571")	(0.504")	(0.618")
Core Colours	Black/Red	Browr	n/Red/Orange/	Black/Brown/Red Orange/Yellow/Green	Black/Brown/Red Orange/Yellow/Green Blue/Purple	

4-conductor	type	is	also	applicable	for	standard	2-conductor	speaker	cable	by	quad-
connection.											

^{☐ 2972} is designed to be 2mm² which is ideal conductor size where it is necessary to combine two conductors (quad-connection) to fit a 3.5mm² crimp terminal.

SUPERFLEXIBLE STUDIO SPEAKER CABLES

SPECIFICATIONS AND CHARACTERISTICS

Configuration				(
Part No.		2972	2		3103		3	104	
No. of Conductor		4			2			4	
Conductor	Details	7/26/0.12 OF	C (bare)		7/50/0.	12 (OFC (bare	;)	
	Size	2.05mm² (#1	5AWG)		3.96m	nm² (#12AWG)		
Insulation Ov. Dia	a. (mm)	3.2 \(\phi(0.126")	φ) PVC		4.5ϕ (0	0.177	7" <i>φ</i>) PVC		
Jacket	Ov.Dia. (mm)	10.5 \(\phi \) (0.4	13" ¢)	12	2.0 φ(0.472" φ)	14.5 ø	(0.571" <i>ϕ</i>)	
	Material		Flex	kible	PVC, Matte	Bl	ack		
Weight per 153m	(500Ft) roll	26kg	ı		30kg		2	l8kg	
DC Resistance (2	0°C)	0.0088Ω/m (0.0	0027Ω/Ft)		0.005Ω	/m (0	.0015Ω/Ft)		
Inductance (20°C,1kHz	,	0.7μH/ (0.21μH/			0.6μH/m (0.18μH/Ft)			δμΗ/m 8μΗ/Ft)	
(Refer to the figures shown the capacitance data.)	1-3	0.7μH/ (0.21μH						6μH/m 8μH/Ft)	
Capacitance (20°C)	Frequency	100Hz	1kH	Z	10kHz	5	0kHz	100kHz	
2972 (1)	1-2	130pF/m (39.7pF/Ft)	100pF (30.5pF		81pF/m (24.7pF/Ft)		4pF/m 2.6pF/Ft)	71pF/m (21.7pF/Ft)	
32	1-3	110pF/m (33.6pF/Ft)	79pF/ (24.1pF		63pF/m (19.2pF/Ft)	57pF/m (17.4pF/Ft)		56pF/m (17.1pF/Ft)	
3103 (1) (2)	1-2	106pF/m (32.3pF/Ft)	93pF/ (28.4pF		83pF/m (25.3pF/Ft) (2		'6pF/m 3.2pF/Ft)	74pF/m (22.6pF/Ft)	
3104	1-2	110pF/m (33.6pF/Ft)	99pF/ (30.2pF		86pF/m (26.2pF/Ft)	78pF/m (23.8pF/Ft)		76pF/m (23.2pF/Ft)	
432	1-3	90pF/m (27.5pF/Ft)	78pF/ (23.8pF		67pF/m (20.4pF/Ft)	_	1pF/m 3.6pF/Ft)	59pF/m (18.0pF/Ft)	

COMMON SPECS.

Voltage Breakdown	Mus	Must withstand at DC 500V/15sec.					
Insulation Resistance	10⁴ MΩ • m Minimum at DC 125 V, 20°C						
Emigration of Jacket Material		Non-Emigrant to ABS resin					
Applicable Temperature	-20°C~+70°C(-4°F~ +158°F)						
Roll Sizes	2972 100m (328Ft)/153m (500 Ft)/300m (9						
Roll Sizes	3103/3104 100m (328Ft)/250m (820 Ft)						
Standard	UL13 CL2X 75°C						

Remarks: Connecting the conductors as diagonal pairs greatly reduces mutual inductance, even though cross-talk interferance is negligible.

[31]

SUPERFLEXIBLE STUDIO SPEAKER CABLES

SPECIFICATIONS AND CHARACTERISTICS

Configuration									
Part No.		2921			2919		2941		
No. of Conductor		4			6		8		
Conductor	Details	7/32/0.12 NEGLEX OFC (bare)							
	Size	2.53mm² (#14AWG)							
Insulation Ov. Dia. (mm)		3.4 φ (0.134" φ) PVC							
Jacket	Ov.Dia. (mm)	11.3 ¢(0.445" ¢)		12.8 ¢ (0.504" ¢)			15.7 ¢ (0.618" ¢)		
	Material	Flexible PVC, Matte			е В	Black			
Weight per 153m	n (500Ft) roll	28kg	ιg		39kg	39kg		58kg	
DC Resistance (20°C)		$0.008\Omega/m$ Typ. (0.0024 Ω/Ft)							
Inductance	1-2	0.7μH/ (0.21μH/	I		0.4μH/m (0.12μH/Ft)	0.4μH/m (0.12μH/Ft)		0.8μH/m (0.24μH/Ft)	
(20°C, 1kHz (Refer to the figure	1 1 1 1	0.3μH/m (0.09μH/Ft)			0.45μH/m (0.14μH/Ft)		1.0μH/m (0.31μH/Ft)		
shown in the capa tance data.)					0.65μH/m (0.20μH/Ft)		1.2μH/m (0.37μH/Ft)		
tarioc data.)	1-8							βμΗ/m 4μΗ/Ft)	
Capacitance (20°C)	Frequency	100Hz	1kHz		10kHz	50kHz		100kHz	
2921	1-2	127pF/m (38.7pF/Ft)	110pF/m (33.6pF/Ft)		101pF/m (30.8pF/Ft)		92pF/m 8.1pF/Ft)	90pF/m (27.5pF/Ft)	
4 2	1-3	102pF/m (31.1pF/Ft)	89pF/ (27.1pF		89pF/m (27.1pF/Ft)	l	74pF/m 2.6pF/Ft)	71pF/m (21.7pF/Ft)	
2919	1-2	126pF/m (38.4pF/Ft)	102pF/m (31.1pF/Ft)		87pF/m (26.5pF/Ft)	l	30pF/m 4.4pF/Ft)	78pF/m (23.8pF/Ft)	
(6)	1-3	94pF/m (28.7pF/Ft)	72pF/m (22.0pF/Ft)		61pF/m (18.6pF/Ft)		56pF/m 7.1pF/Ft)	55pF/m (16.8pF/Ft)	
543	1-4	82pF/m (25.0pF/Ft)	62pF/m (18.9pF/Ft)		52pF/m (15.9pF/Ft)	48pF/m (14.6pF/Ft)		46pF/m (14.0pF/Ft)	
2941	1-2	113pF/m (34.5pF/Ft)	100pF/m (30.5pF/Ft)		90pF/m (27.5pF/Ft)	84pF/m (25.6pF/Ft)		80pF/m (24.4pF/Ft)	
(7 ¹ 2)	1-3	77pF/m (23.5pF/Ft)	67pF/m (20.4pF/Ft)		61pF/m (18.6pF/Ft)	l	56pF/m 7.1pF/Ft)	55pF/m (16.8pF/Ft)	
(683)	1-4	68pF/m (20.7pF/Ft)	60pF/m (18.3pF/Ft)		54pF/m (16.5pF/Ft)	l	50pF/m 5.3pF/Ft)	49pF/m (14.9pF/Ft)	
(5)(4)	1-8	93pF/m (28.4pF/Ft)	81pF/ (24.7pF		74pF/m (22.6pF/Ft)		69pF/m 1.0pF/Ft)	67pF/m (20.4pF/Ft)	

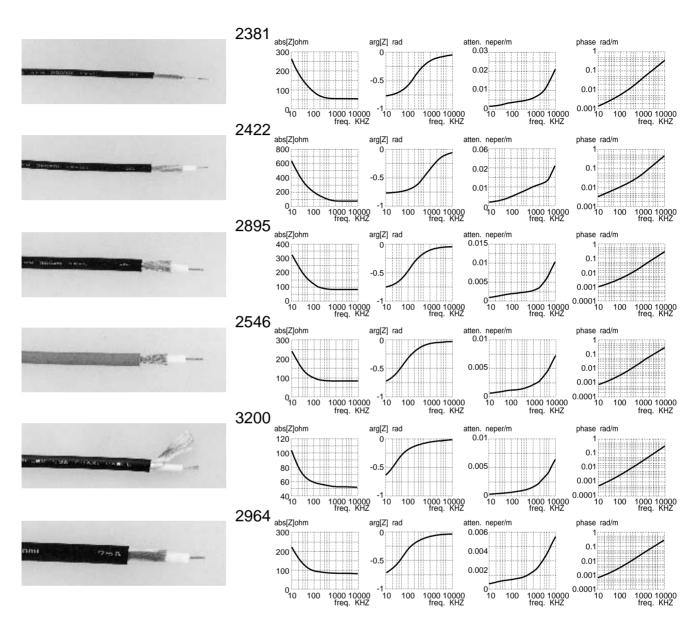
COMMON SPECS.

Voltage Breakdown	Must withstand at DC 500V/15sec.				
Insulation Resistance	10⁴ MΩ • m Minimum at DC 125 V, 20°C				
Emigration of Jacket Material	Non-Emigrant to ABS resin				
Applicable Temperature	-20°C~+70°C(-4°F~ + 158°F)				
Roll Sizes	100m (328Ft)/153m (500 Ft)/300m (984Ft)				
Standard	UL13 CL2X 75°C				

Remarks: Connecting the conductors as diagonal pairs greatly reduces mutual inductance, even though cross-talk interferance is negligible. For 8-cond. version P/N 2941, connect it as close as to diagonal combination.

VIDEO CABLES & HIGH FREQUENCY COAXIAL CABLES

SUBMINIATURE & MINIATURE COAXIAL CABLES



Superflexible subminiature coaxial cables which cannot be found out in MIL, JIS and other worldwide popular standards. Standardized coaxial cables are available from any cable manufacturer so that your choice is determined by competitive price, which means there is no chance for a Japanese cable manufacturer in the world market. However, there are lots of cases where those standard cables will not do the job. MOGAMI superflexible subminiature coaxial cables may have a chance in such case. All these coaxial cables were also originally made for custom applications and remained long thereafter finding unfixed multiple users all over the world.

SUBMINIATURE & MINIATURE COAXIAL CABLES













CABLE SPECIFICATIONS

Part No.		2381	2422	2895	2546	3200	2964	
Characteristic Impedance		50Ω	75Ω	75Ω	75Ω	50Ω	75Ω	
Conductor	Conductor Details		1/0.20 Copper-Coverd Piano Wire	17/0.08A	7/0.14A	50/0.12 OFC	16/0.08 OFC <t1000d *1=""> 22/0.08 OFC Double Served</t1000d>	
	Size	0.047mm ² (#31AWG)	0.03mm ² (#33AWG)	0.085mm ² (#28AWG)	0.107mm ² (#27AWG)	0.565mm ² (#20AWG)	0.19mm ² (#25AWG)	
Insulation	Ov. Dia . (mm)	0.9¢(0.035")	1.3 ϕ (0.051")	1.7¢(0.067")	1.95¢(0.077")	2.6 \(\phi(0.102")	2.6¢(0.102")	
	Material	XLPE	XLFRPE	XLCPE	CPE	XLCPE	XLCPE	
Overall Shield	Туре	SER'	VED	BRA	IDED	SERVED		
	Details	Approx. 30/0.10A	Approx. 38/0.10TA	16/5/0.10A	16/4/0.12A	Approx. 70/0.12OFC	Approx. 70/0.12OFC	
Jacket	Ov. Dia . (mm)	1.6 \(\phi \) (0.063")	2.0 \(\phi (0.079")	3.3 \(\phi (0.130")	4.8 φ (0.189")			
Jacket	Material		PVC					
	Colour	Black/Red/Yellow/Blue	Black	Black	Gray	Black	Black/Red/Yellow/Green/Blue	
Roll Sizes		305m (1,000Ft)				50m (164Ft)/100m(328Ft)/200m(656Ft)		
Weight Per 305m (1,000Ft) Roll		1.5kg	2.1kg	4.2kg	5.0kg	3.0kg/100m(328Ft)	5.9kg/200m(656Ft)	

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.		2381	2422	2895	2546	3200	2964		
DC Resistance	Inner Cond.	0.4Ω/m (0.12Ω/Ft)	2.4Ω/m (0.73Ω/Ft)	0.22Ω/m (0.067Ω/Ft)	0.18Ω/m (0.055Ω/Ft)	0.035Ω/m (0.011Ω/Ft)	0.090Ω/m (0.027Ω/Ft)		
at 20°C	Shield	0.06Ω/m (0.018Ω/Ft)	0.062Ω/m (0.019Ω/Ft)	0.035Ω/m (0.011Ω/Ft)	$0.03\Omega\text{/m}(0.009\Omega\text{/Ft})$	0.025Ω/m (0.0076Ω/Ft)	0.025Ω/m (0.0076Ω/Ft)		
Capacitance	at 1kHz, 20°C	110pF/m (33.6pF/ Ft)	96pF/m (29.3pF/ Ft)	58pF/m (17.7pF/ Ft)	62pF/m (18.9pF/ Ft)	95pF/m (29.0pF/ Ft)	65pF/m (19.8pF/ Ft)		
Characteristic I	mperdance at 10MHz	50Ω±10%	75Ω±10%	75Ω±10%	75Ω±10%	50Ω±10%	75Ω±10%		
Attenuation (10MHz)		0.15 dB /m (0.046 dB /Ft)	0.25dB /m (0.076 dB /Ft)	0.069 dB /m (0.021 dB /Ft)	0.061 dB /m (0.019 dB /Ft)	0.061 dB /m (0.019 dB /Ft)	0.061 dB /m (0.019 dB /Ft)		
Phase Cons	Phase Constant (10MHz)		0.39rad / m	0.28rad / m	0.30rad / m	0.31rad / m	0.3 rad / m		
Electromagne	etic Noise*	0.1mV Max.							
Voltage Brea	akdown	Must withstand at DC 500V/15sec.							
Insulation Re	esistance	10⁴ MΩ • m Min . at DC 250V , 20°C							
Flex Life*		21,000 cycles	8,100 cycles	8,400 cycles	8,600 cycles	12,000 cycles	16,000 cycles		
Tensile Strength		68 N	117 N	196 N	205 N	343 N	274 N		
Emigration		Non-Emigrant	to PSR resin		Non-Emigrant	to ABS resin			
Applicable T	emperature	-20°C~+60°C (-4°F~+140°F)							
Standard		UL 1354 AWM VW-1	UL 1354 AWM VW-ISC	UL 1354 AWM	VW-1 30V 60°C	-	_		

Attenuation : 1 dB = 0.1151 neper (1 neper = 8.686 dB)

^{*}Using standard testing method of Mogami Wire & Cable Corp.

Y/C SEPARATE CABLE

2947 CABLE



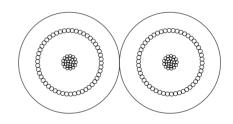




Part No . 2947 parallel 75Ω coaxial cable was developed with accumulated the technical ability of MOGAMI to satisfy a contradicted requirement , that is to make a compact dual coax to fit in a MINI DIN connector without losing electrical characteristics of 75Ω low attenuation for Y/C separate interconnection.

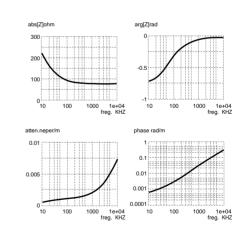
CABLE SPECIFICATIONS

2947 2×75Ω Coax.		
OVZEO Coov		
2 × 7 512 Coax.		
26mm² (#27AWG)		
None		
Flexible PVC		
2×3.0 \(\phi (0.118")		
Black		
153m/305m (500Ft /1,000Ft)		
4kg		



ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Cond.		0.15Ω/ m (0.046Ω/ Ft)			
	Shie	ld	0.04Ω/ m (0.012Ω/ Ft)			
Capacitance at 1kHz, 20	°C		59pF/ m (18.0 pF/ Ft)			
Characteristic Impedance	at 10	MHz	75Ω±5%			
Attenuation (10MHz)			0.061dB / m (0.019 dB / Ft)			
Phase Constant (10MHz)		0.28 rad / m			
Electromagnetic Noise*			0.1mV Max.			
Voltage Breakdown		Must withstand at DC 500V/15sec.				
Insulation Resistance		10⁴MΩ • m Min . at DC 500V , 20°C				
Flex Life*		24 ,000 cycles				
Tensile Strength		392 N				
Emigration			Non-Emigrant to ABS resin			
Applicable Temperature		-:	20°C~ +70°C (-4°F~+158°F)			
Standard		UL Subje	ct 758 AWM 2552 VW-1 60°C 30V, -F-			



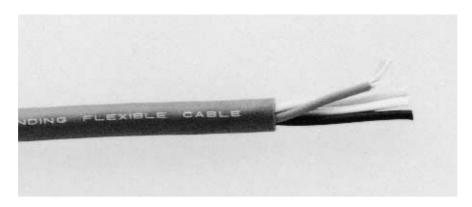
MOLDED Y/C CABLE ASSEMBLY WITH 4-PIN MINI DIN CONNECTORS

Part No.	5139-03	5139-06	5139-12	5139-20	5139-30	5139-50	5139-75	5139-100
Length (m)	0.9m	1.8m	3.6m	6.1m	9.1m	15.2m	22.8m	30.5m
3, ()	(3 Ft)	(6 Ft)	(12 Ft)	(20 Ft)	(30 Ft)	(50 Ft)	(75 Ft)	(100 Ft)

Attenuation : 1 dB =0.1151 neper (1 neper =8.686 dB) *Using standard testing method of Mogami Wire & Cable Corp .

MONITOR CABLE

2326



Specifically designed as a miniature video monitor cable, it can be easily connected to a rectangular 8 - pin connector.

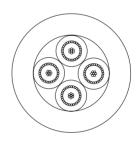
CABLE SPECIFICATIONS

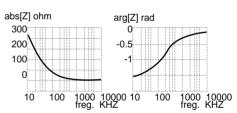
Part No.		2326		
Core Config	guration	4×50Ω Coax.		
Conductor	Size	0.047mm ² (#31AWG)		
Overall Shi	eld	None		
Ov. Jacket	Material	Flexible PVC		
	Ov. Dia . (mm)	6.0 \(\phi(0.236")		
	Colour	Dark Gray		
Roll Size		200m (656Ft)		
Weight per	200m (656Ft) Roll	8.3kg		

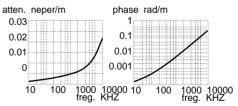
ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	ance at 20°C Inner		0.4Ω/m (0.122Ω/Ft)	
	Shiel	d	0.078Ω/m (0.024Ω/Ft)	
Capacitance at 1kHz, 20°	С		102pF/m (31.1pF/ Ft)	
Characteristic Impedance at	10MHz		50Ω±5%	
Attenuation at 10MHz			0.2dB/m (0.061 dB /Ft)	
Velocity Ratio		0.63		
Electromagnetic Noise*		0.1mV Max.		
Voltage Breakdown		Must withstand at DC 500V/15sec.		
Insulation Resistance		104 MΩ • m Min . at DC 500V , 20°C		
Flex Life*		6,500 cycles		
Tensile Strength		294 N		
Emigration		Non-Emigrant to ABS resin		
Applicable Temperature -20			°C~ +70°C (-4°F~+158°F)	

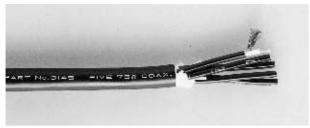
 $[\]ast\,\mbox{Using}$ standard testing method of Mogami Wire & Cable Corp .

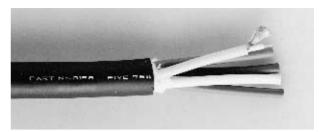






MULTICORE 75Ω COAXIAL CABLES





3145 3158

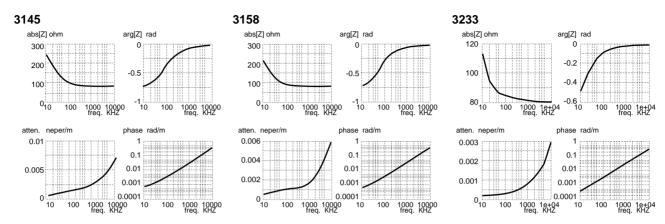
Multicore 75 Ω coaxial cables used for HD TV RGB signal, VGA and CRT drive etc. are available in three versions. One small overall diameter version to meet shrink Dsub 15P connector and two large overall diameter version with less attenuation for longer runs offer the following outstanding features.

- ☐ Because of used XLCPE (Cross-Linked Cellular polyethylene) insulation, despite its compact overall diameter, lower attenuation value is realized. To reach the same attenuation level by regular solid PE insulated coax. cable, its overall diameter has to become more than 50% larger. Also, cross-linking makes this insulation more durable against soldering heat.
- ☐ All versions have featured MOGAMI flexibility so that they are convenient for handling, and its unique served (spiral) shielding construction and stranded center conductor helps easier wiring and installation.
- \square Medium overall diameter version is comprised of MOGAMI standard #2964 (75 Ω audio video cable), and one touch Push-Pull BNC male connector specifically designed for #2964 cable is available so that your own original cable assembly and instant procurement from standard cable assemblies are both available. One touch Push-Pull BNC for large size version is also available.

NOTE: Two items in Miniature type (Part No.3146 ~ 3147) is available only on order made production because of small demand.

MINIATURE MULTI 75 Ω COAX. CABLE			MEDIUM SIZE MULTI 75 Ω COAX. CABLE					LARGE SIZE MULTI 75 Ω COAX. CABLE						
Part No.	Nos. of Cores		Weight (Kg/153m) (Kg/500Ft)	Roll Sizes	Part No.	Nos. of Cores		Weight (Kg/100m) (Kg/328Ft)	Roll Sizes	Part No.	Nos. of Cores	Ov.Dia. (Approx. mm)	Weight (Kg/100m) (Kg/328Ft)	Roll Sizes
3147	3	8.0 (0.315")	?	77m/153m	3156	3	14.0 (0.551")	18	10m/20m/30m/	3231	3	18.5 (0.728")	32	
3146	4	8.9 (0.350")	?	(250Ft/500Ft)	3157	4	15.5 (0.610")	25	40m/50m/	3232	4	20.5 (0.807")	40	100m/300m
3145	5	9.8 (0.386")	14.8		3158	5	17.5 (0.689")	33	100m/300m	3233	5	22.5 (0.886")	50	

MULTICORE 75 Ω COAXIAL CABLES



CABLE CORE SPECS (COMMON SPECS)

	`	<u> </u>					
Туре		MINIATURE MULTI 75Ω COAX. CABLE	MEDIUM SIZE MULTI 75Ω COAX. CABLE	LARGE SIZE MULTI 75 Ω COAX. CABLE			
Conductor	Details	7/0.18A(7×#33AWG)	16/0.08 OFC <t1000d *1=""> 22/0.08OFC Double Served</t1000d>	12/0.26A			
	Size	0.178mm ² (#25AWG)	0.19mm ² (#25AWG)	0.636mm ² (#20AWG)			
Insulation	Ov. Dia. (mm)	2.1 ¢ (0.083")	2.6¢ (0.102")	4.9 \(\phi (0.193")			
	Material	XLCPE (Cross-Linked Cellular Polyethylene)					
Overall Shield	Туре		SERVED				
	Details	Approx.69/0.10A	Approx.70/0.12OFC	Approx.82/0.18A			
Jacket	Ov. Dia. (mm)	2.9¢(0.114")	4.8 \(\phi (0.189 \)")	6.6¢ (0.260")			
	Material	PVC					

ELECTRICAL & MECHANICAL CHARACTERISTICS

Туре		MINIATURE MULTI 75Ω COAX. CABLE	MEDIUM SIZE MULTI 75 Ω COAX. CABLE	LARGE SIZE MULTI 75 Ω COAX. CABLE			
DC Resistance at 20°C Inner Cond. Shield		0.104Ω/m(0.032Ω/Ft)	$0.090\Omega/m(0.027\Omega/Ft)$	$0.028\Omega/m(0.0085\Omega/Ft)$			
		0.035Ω/m(0.011Ω/Ft)	0.025Ω/m(0.0076Ω/Ft)	0.011Ω/m(0.0034Ω/Ft)			
Capacitance at 1kH	z, 20°C	60pF/m(18.3 pF/Ft)	60pF/m(18.3 pF/Ft)	54pF/m(16.5pF/Ft)			
Characteristic Impedance at 10MHz		75Ω±10%					
Attenuation (10MHz)		0.058dB/m (0.018dB/Ft)	0.050dB/m (0.015dB/Ft)	0.032dB/m (0.0098dB/Ft)			
Phase Constant (10MHz)	0.30rad/m	0.29rad/m	0.31rad/m			
Electromagnetic No	pize *	0.1mV Max					
Voltage Breakdown	1	Must withstand at DC 500V/15sec.					
Insulation Resistan	ce	10 ⁴ MΩ • m Min. at DC 250V, 20°C					
Flex Life of Inside Cor	e*	4,100 cycles	16,000 cycles	40,000 cycles			
Tensile Strength pe	er Core	186 N	274 N	over 980 N			
Emigration		Non-Emigrant to ABS resin					
Applicable Temperature		-20°C~+70°C (-4°F~+158°F)					
Standard		80°C	60°C	60°C			
		UL 20002 AWM 30V VW-1					
Applicable Temperature			Non-Emigrant to ABS resin -20°C~+70°C (-4°F~+158°F) 60°C				

Attenuation: 1dB = 0.1151 neper (1 neper=8.686 dB)

* Using standard testing method of Mogami Wire & Cable Corp.



LIGHT WEIGHT CABLE! FLEXIBLE! ONE TOUCH!





PUSH-PULL BNC CABLE ASSEMBLIES

Only available combination of Mogami & Tajimi. Both have supplied high quality products, and for the first time ever, have now introduced cable assemblies that are perfect for field engineers. This cable is a dream come true for those with professional analog and digital video applications. Available in both 50Ω & 75Ω .

One Touch "Push-Pull" locking mechanism is markedly effective in high density patch panels, considerably reduces installation time, and perfect for applications requiring frequent connection and disconnection.

50Ω / 75Ω BNC CONNECTOR SPECIFICALLY DESIGNED FOR P/N 3200/2964 COAXIAL CABLE

It is our pleasure to be able to provide our customers with REAL "ONE TOUCH PUSH-PULL BNC Connector" by TAJIMI specifically designed for MOGAMI P/N 3200&2964 cables. This very innovative and handy BNC's can be combined with varied cables from single 50Ω & 75Ω coaxial cables in five colours up to complexed five core RGB cables. Not only available in raw cables and connectors



independently as well as standard length cable assemblies, but also custom length with various connector combinations are made to order.

Quick and reliable ONE TOUCH LOCK "PUSH-PULL" connection suitable for dense
panel, fast installation and frequent connection and removal.
Equivalent connection strength to conventional BNC, realized by innovative rotary
mechanism.
Durable 75Ω BNC against gouge strength, reinforced by newly developed open part of
the shield contact structure and the fixed structure of the center pin terminal.
Reliable high frequency characteristics with MOGAMI standard superflexible light weight
cable assured for 1.2 V.S.W.R. up to 1GHz and acceptable to be bent up to 10mm
(0.4") as the minimum radius of curvature.
Both solder type and crimp type are available. However, we basically recommend solder type
for field use because strength of cable clamp becomes too weak in case of crimp type
resulted by the very feature of flexiblity of MOGAMI cable. We can assure the cable retention
strength only up to 98 N in case of crimp type, while up to 147 N can be assured in case of
solder type. Therefore, all of our standard cable assemblies are made of solder type.
Available in colours:
50Ω BNC CONNECTOR: BLACK ONLY
75Ω BNC CONNECTOR: 6 colours (BLACK • RED • YELLOW • GREEN • BLUE • WHITE)

Characteristic Impedance	50	Ω	75Ω			
Туре	SOLDER TYPE	CRIMP TYPE	SOLDER TYPE	CRIMP TYPE		
Part No.	BNC-3200	BNC-3200C	BNC-2964-□	BNC-2964C-□		

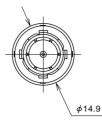
Add register colour code in ☐ Example : P/N BNC-2964-6 means BLUE

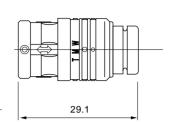
Colour	BLACK	RED	YELLOW	GREEN	BLUE	WHITE
Code No.	0	2	4	5	6	9

TERMINATIONS





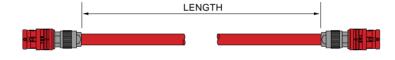




Part No.	Impedance	Colour	Frequency Range V.S.W.R. under 1.2	Option	Rating
BNC-TNT-50	50Ω	White		W/Out String	
BNC-TNT-50S	0022	VVIIICO	DC ~ 2GHz	With String	1/4W
BNC-TNT-75	75Ω	V-II	DC ~ 2GH2	W/Out String] ,
BNC-TNT-75S	7 322	Yellow		With String	

STANDARD CABLE ASSEMBLIES AVAILABLE FROM STOCK





Part No.	BB-01	BB-02	BB-03	BB-06	BB-10	BB-16	BB-25	BB-33	BB-50	BB-66	BB-100
Length	1Ft	2Ft	3Ft	6Ft	10Ft	16Ft	25Ft	33Ft	50Ft	66Ft	100Ft
	0.3m	0.6m	0.9m	1.8m	3.0m	4.8m	7.6m	10.0m	15.2m	20.1m	30.5m

☐ BNC to RCA

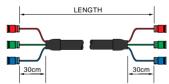


Part No.	BR-03	BR-06	BR-10	BR-16
Length	3Ft 0.9m	6Ft 1.8m	10Ft 3.0m	16Ft 4.8m

Cable: Part No. 2964 Standard Colour: Black • Red • Yellow • Green • Blue

Cable: Part No. 2964 Standard Colour: Black

☐ 3×BNC to 3×BNC



LENGTH

(Remarks: 3 and 4 core types are available on only order made, not standard stock item.)

Part No.	3B3B-02	3B3B-03	3B3B-05	3B3B-08	3B3B-10	3B3B-15	3B3B-20	3B3B-30
Length	6.55Ft	9.83Ft	16.3Ft	26.2Ft	32.7Ft	49.1Ft	65.5Ft	98.3Ft
	2m	3m	5m	8m	10m	15m	20m	30m

Cable: Part No. 3156

Part No.	4B4B-02	4B4B-03	4B4B-05	4B4B-08	4B4B-10	4B4B-15	4B4B-20	4B4B-30
Length	6.55Ft	9.83Ft	16.3Ft	26.2Ft	32.7Ft	49.1Ft	65.5Ft	98.3Ft
	2m	3m	5m	8m	10m	15m	20m	30m

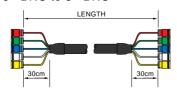
Cable: Part No. 3157

Part No.	5B5B-02	5B5B-03	5B5B-05	5B5B-08	5B5B-10	5B5B-15	5B5B-20	5B5B-30
Length	6.55Ft	9.83Ft	16.3Ft	26.2Ft	32.7Ft	49.1Ft	65.5Ft	98.3Ft
	2m	3m	5m	8m	10m	15m	20m	30m

Cable: Part No. 3158

☐ 5×BNC to 5×BNC

☐ 4×BNC to 4×BNC

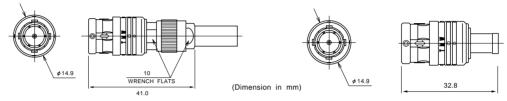


NOTE: Customised cable Assembly is available to special order. Please refer to Page 8 and Page 26 in our general catalogue and or consult your MOGAMI distributor.

CONNECTOR SPECIFICATIONS







CONSTRUCTION

CONSTRUCTION						
Part No.	BNC-3200	BNC-3200C	BNC-2964-□	BNC-2964C-□		
Туре	SOLDER TYPE	CRIMP TYPE	SOLDER TYPE	CRIMP TYPE		
Coupling Ring	Nylon W/0	Glass Fiber	Nylon W/C	Nylon W/Glass Fiber		
Rotary Shell	Nickel Plated P	hosphor Bronze	Nickel Plated Phosphor Bronze			
Shell	Nickel Pla	ated Brass	Nickel Plated Brass			
Clamp Shell	Silver Plated Brass		Silver Plated Brass ———			
Center Terminal	Gold Pla	ted Brass	Gold Plated Brass			
Insulation	PT	FE	PTFE			
Ferule		Tin Plated Copper		Tin Plated Copper		
Spacer			Silver Plated Brass ————			
Nut	Nickel Plated Brass		Nickel Plated Brass			
Sleeve	_	<u> </u>	Chloroprene			

CHARACTERISTICS

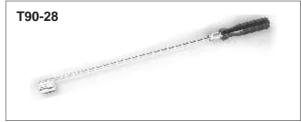
Part No.	BNC-3200	BNC-3200C	BNC-2964-□	BNC-2964C-□	
Туре	SOLDER TYPE	CRIMP TYPE	SOLDER TYPE	CRIMP TYPE	
Voltage Rating	AC 50	00Vrms	AC 50	00Vrms	
Dielectric Withstanding Voltage	AC 1,500Vrm	s at sea level	AC 1,500Vrms	s at sea level	
Insulation Resistance	1,000 MΩ Mir	n. at DC 500V	1,000 MΩ Mir	n. at DC 500V	
Contact Resistance	5mΩ Max.	at DC 1A	5mΩ Max. at DC 1A		
Characteristic Impedance	50	ΩΩ	75Ω		
V.S.W.R.	1.2 Max. DC ~1GHz		1.2 Max. DC ~1GHz		
Minimum Acceptable Radius of Curvature of Used Cable	10mm	n (0.4")	10mm (0.4")		
Cable Retention	196 N (44 lbf) Min.	117 N (26 lbf) Min.	147 N (33 lbf) Min.	98 N (22 lbf) Min.	
Withstanding Vibration	98m/S ² (10G),10 ~ 50	0Hz (JIS C5402 6.1)	98m/S² (10G) , 10 ~ 50	00Hz (JIS C5402 6.1)	
Connector Durability	1,000 times Min.		1,000 times Min.		
Applicable Temperature	-40°C ~ + 85°C	(85%RH Max.)	-40°C ~ + 85°C (85%RH Max.)		
Standard	IEC 169-8/	MIL-C-39012	IEC 169-8/MIL-C-39012		

TOOLS

Crimp Tool



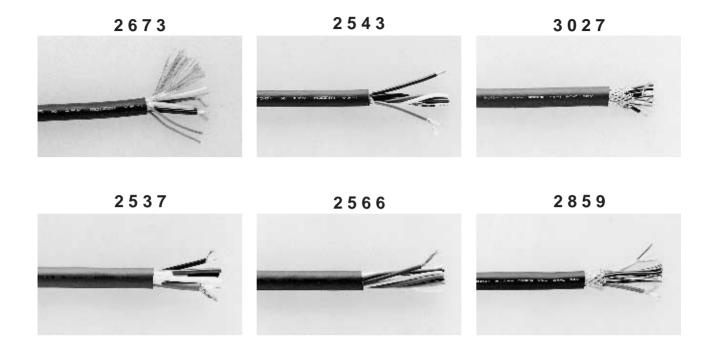
Attach and Detach Connecting Tool





VIDEO CABLES

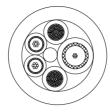
COMPLEXED COAX. (VIDEO CAMERA) CABLES

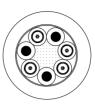


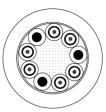
Many variations of video camera cables which were originally developed for respective customers' requirements (as each camera needed a different specification) when the camera and the recorder were separated, these cables remained as a kind of standard stock item with some demand for maintenance and new and different applications in the international world wide market. Some video camera cables are of course applicable to professional cameras, and feature the same flexibility and compact size as other MOGAMI cables. Most of these cables are often comprised of 50Ω coaxial cable cores to make them as miniature as possible (of course it naturally becomes flexible), because the wave length of video signal is rather long (20m / 66Ft) the reflection (impedance mismatch) problem does not become critical as long as it is used within this length (within one whole wave length) so that compactness and flexibility can be a benefit without any anxiety. However, for interconnection longer than 20m (66Ft) or when attenuation is of importance, strictly adjusted 75 Ω coaxial cable with larger conductor size must be used. Finally, video camera cables are destined to be discontinued as their demand decreases, therefore, please ask our distributor for its availability before you make a decision on its application.

COMPLEXED COAX. (VIDEO CAMERA) CABLES



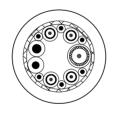






CABLE SPECIFICATIONS

Part No.		2673	2537	2543	2566		
Core Config	uration	1×50Ω COAX. (#28AWG)	1×75Ω COAX. (#28AWG)	4×50Ω COAX. (#31AWG)	6×50Ω COAX. (#31AWG)		
		2×40Ω COAX. (#28AWG)	2×Unbalanced (#24AWG) 3× Power(#22AWG)		3×Power(#22AWG)		
		1× Power (#22AWG)	2×Power (#16AWG)				
		1× Signal (#26AWG)					
		2× Signal (#28AWG)					
Overall Shie	eld	Served ※(#18AWG)	Unshielded				
Ov. Jacket	Material		Flexible PVC				
OV. Gaonor	Ov. Dia.(mm)	5.9 \(\phi \) (0.232")	9.0 ¢ (0.354")	7.4 ϕ (0.291")	8.8 \(\phi \) (0.346")		
	Colour	Black		Dark Gray			
Standard		UL 20125 AWM VW-1	UL 20002 AWM	VW-1 30V 60°C	UL 2725 AWM VW-1		
Emigration			Non-Emigrant	to ABS resin			
Applicable Te	emperature		-20°C~+70°C(-4°F~+158°F)			
Roll Size			153m (500Ft)				
Weight Per 1	53m(500Ft) roll	7.8kg	16kg	9.7kg	14kg		





*Served shield (#18AWG) of #2673 is originally designed for one of power conductor and to meet with applied crimp terminal in order to design this cable within limited overall diameter, so there is no guarantee as a perfect shielding.

Please ascertain its screening effect before your application if you use it as a shield conductor.

CABLE SPECIFICATIONS

CABLE SELGIFICATIONS							
Part No.		3027	2859				
Core Config	uration	1×75Ω COAX. (#26AWG)	2×75Ω COAX. (#28AWG)				
		4×40Ω COAX. (#26AWG)	$1 \times 50\Omega$ COAX. (#28AWG)				
		1× Power (#18AWG)	1× Balanced (#28AWG)				
		,	2× Power (#18AWG)				
		1× Power (#20AWG)	2× Signal (#24AWG)				
		6× Signal (#26AWG)	3× Signal (#26AWG)				
Overall Shie	ld	Braided					
Ov. Jacket	Material	Flexible PVC					
0 11 Guerrer	Ov. Dia.(mm)	11.6 ϕ (0.457")	11.0 ¢ (0.433")				
	Colour	Dark Gray	Black				
Standard		UL 20124 AWM	VW-1 30V 60°C				
Emigration		Non-Emigrant	to ABS resin				
Applicable Te	mperature	-20°C~+70°C(-4°F~+158°F)				
Roll Size		153m (500Ft)					
Weight Per 1	53m(500Ft) roll	33 kg	27 kg				
Weight Per 1	53m(500Ft) roll	33 kg	27 kg				

*More detailed specification or characteristics of the used inside cores are not included in this catalogue as it is not economical compared with the size of the market for these items. In case of necessity, please ask our distributor for extended detailed core specifications.

DIGITAL INTERFACE CABLES

MIDI SYNCHRO CABLE ASSEMBLIES

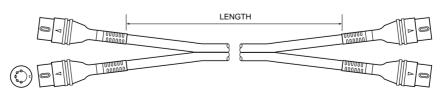


MOGAMI MIDI SYNCHRO CABLE ASSEMBLIES are specially designed for use with the Musical Instrument Digital Interface (MIDI) communication system.

Applications include the latest MIDI patchbays, and interconnection between MIDI equipment and MIDI served musical instruments. These outstanding professional cables offer the following features:

□ SINGLE and DUAL MIDI CABLES are both available from standard stock. NEW DUAL MIDI CABLES are designed for compact wiring and prevent connection errors when using both Midi-Out and Midi-In ports simultaneously.
 □ One piece molded 5pin Din connectors.
 □ Elegant desigh two stage molding for easy handling, reliability and long life.
 □ 0.76μ gold plated pin version available to order.
 □ Specially designed, superflexible cable with four #25AWG copper conductors and served (spiral) shield.
 □ Attractive, durable, satin black rubber like PVC jacket.
 □ Fast, accurate transmission of MIDI signal via a twisted pair for better electromagnetic noise rejection.
 □ Additional two pins wired for tape synchro signal.
 □ Interchangeable colour rings for easy patch cord identification.
 □ Bulk cable also available in 50m (164Ft), 100m (328Ft) rolls and 200m (656Ft) spools.

Single Cable	Part No. 2948
Dual Cable	Part No. 3033

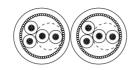


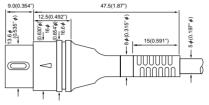
Dort No.	Single	MIDI-015	MIDI-03	MIDI-05	MIDI-10	MIDI-15	MIDI-20	MIDI-30
Part No.	Dual	MIDI-015D	MIDI-03D	MIDI-05D	MIDI-10D	MIDI-15D	MIDI-20D	MIDI-30D
Length		18"(1.5')	3Ft	5Ft	10Ft	15Ft	20Ft	30Ft
		45cm	90cm	1.5m	3m	4.5m	6.1m	9.1m

MIDI SYNCHRO CABLE ASSEMBLIES

SPECIFICATIONS







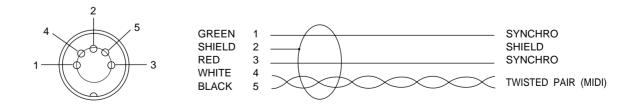
Cable Part No.	2948	3033	PLUG		
Conductor	30/0.08A (30×#40)	0.15mm² (#26AWG)	Pins	0.76μ gold or silver plated brass	
Insulation	1.2φ(0.047"φ)PVC(BLA	CK/WHITE/RED/GREEN)	Shield	Nickel Plated Brass	
Shield	98/0.12A(98 × #37)Serv	red Shield	Insulation	Polyacetal Resin	
Jacket	5.0 φ (0.197" φ) Flex	(ible PVC (BLACK)	Molding	Flexible PVC (Two Stage Molding) (BLACK)	
Weight	8.6kg/200m	15kg/200m			

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance (20°C)	Inner Conductor	,				
Capacitance (1kHz, 20°C)	F/m (30 pF/Ft) Twisted Pair: 182 pF/m (56 pF/Ft) Conductor: 180 pF/m (55 pF/Ft) Conductor: 91 pF/m (28 pF/Ft)					
Pitch of Twisted Pair		Approx. 30mm (1.18")				
Electromagnetic Noise*(10kHz)		0.02~0.06mV				
Voltage Breakdown		Must withstand at DC 500V/15sec.				
Insulation Resistance (DC 125V, 20	0°C)	10 ⁴ MΩ•m Min.				
Tensile Strength (At Cable-Connector J	oint)	480 N Min.				
Flex Life*: At the connector strain Cable itself (200gr, Bend radius of the cable	45,000 Cycles 6,700 Cycles					
Emigration	Non-Emigrant to ABS resin					

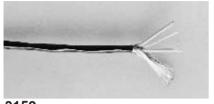
^{*} Using standard testing methods of Mogami Wire & Cable Corp.

WIRING DIAGRAM: The MIDI signal is transmitted via a twisted pair (black and white) and wired to pins 4 & 5.



NOTE: Transmission lag in MIDI systems is mainly caused by the speed of the photocoupler and the rise time of the driver rather than the transmission characteristics of the cable.

110 Ω AES/EBU DIGITAL AUDIO CABLES







3159 3173



3080-FC



3080-TBFITTING TUBING FOR ITT
CANNON XLR CONNECTOR

All of MOGAMI 110 Ω AES/EBU digital audio cables are designed with flexibility and handy configuration. Many variations are available from regular application type up to long distance application types, from single core up to 12-core types, internal wiring type, and interconnect application types. Strict tolerance control of impedance within + 5% up to + -10% at the maximum.

Part No.	3159	3228	3080	3135	3173	3160 ~ 3163
Suggested Maximum applicable length			0m 2Ft		300m 1,000Ft	150m 492Ft

Part No.3159 is for internal wiring material, Part No.3160~3163 are multicore cables and other cables are for regular interconnect application. Part No.3228 is compact size, flexible and durable cofiguration to meet tiny telephone plug cable clamp, therefore it is recommended for use with rough applications. And, Part No.3173 is specially designed for long distance application assured over 300 m.

However, above suggested maximum applicable length is based on use with any device that meets AES standard requirement without equalizer. In the case of use with an equalizer, the maximum applicable length can be expanded up to 1.5 times longer than assured length above. We have also prepared CAD program to see the changes of eyediagram and transmitted wave form at the receiving end for various working conditions, so you can check it yourself at http://www.mogami-wire.co.jp/ before purchasing cables. Since AES/EBU digital audio cable is low capacitance characteristics, it can result in high quality analog audio transmission in general especially for high frequency range.

Bantam Patch Cord			LEN	LENGTH			
	Œ				0000	100	
Part No.	PJD-12	PJD-18	PJD-24	PJD-36	PJD-48	PJD-60	PJD-72
Length	12" 30cm	18" 45cm	24" 60cm	36" 90cm	48" 120cm	60" 150cm	72" 180cm

Cable: Part No .3228 standard Colour: Black only

110 Ω AES/EBU DIGITAL AUDIO CABLES

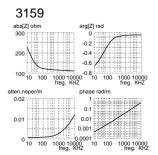
SPECIFICATIONS

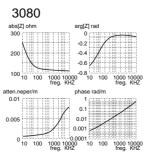
	A CONTROL OF THE PARTY OF THE P				
	3159	3228	3080	3135	3173
ctor	2	2	2	2	2
Details	7/0.20A(7×#32AWG)	36/0.08OFC(36×#40AWG)	7/0.18A(7 ×#33AWG)	7/0.18A(7×#33AWG)	19/0.25A(19×#31AWG)
Size(mm²)	0.22mm ² (#24AWG)	0.18mm ² (#25AWG)	0.178mm ² (#25AWG)	0.178mm ² (#25AWG)	0.932mm ² (#18AWG)
Ov. Dia.(mm)	1.35 ¢ (0.053")	1.35\(\phi(0.053")	1.36¢(0.054")	1.36\(\phi(0.054\)	2.8¢(0.110")
Material	CPP	XLPE	XLPE	XLPE	CPP
Colours	Red/Light green	Red/Clear	Red/Clear	Red/Clear	Red/White
Ov. Dia.(mm)					1.87¢(0.0736")
Material		Cotton	<u> </u>		LDPE(Clear)
Details	7/0.20A(7×#32AWG)		7/0.18TA(7×#33AWG)	7/0.18TA(7 ×#33AWG)	20/0.18TA(20×#33AWG)
Size(mm ²)	0.22mm ² (#24 AWG)		0.178mm ² (#25AWG)	0.178mm ² (#25AWG)	0.509mm ² (#21AWG)
	Approx. 79/0.10A (Approx.79/#39AWG)	Approx. 98/0.10A (Approx.98/#39AWG)	Approx. 60/0.12A (Approx.60/#37AWG)	Approx. 60/0.12A (Approx.60/#37AWG)	Approx. 100/0.18A (Approx.100/#33AWG)
Ov. Dia.(mm)	3.2 ϕ (0.126 ϕ)	4.8\(\phi(0.189\(\phi\))	$5.0\pm0.3\phi(0.197\pm0.0118"\phi)$	5.0±0.3¢(0.197±0.0118"φ)	7.8±0.5¢(0.307±0.0197"¢)
Material	PVC	PVC	Flexible PVC	Flexible PVC	PVC
Colour	Black/Gray	Black	Black/Blue	Black	Black
	50 r	n (164Ft) 100m (328Ft) 200m(6	56Ft)	77m(250Ft) 305m(1,000Ft)	300m(983Ft)
	2Kg/100m Roll	3.0Kg/100m Roll	3.3Kg/100m Roll	2.6Kg/250 Ft Roll	27Kg/300m
	Size(mm²) Ov. Dia.(mm) Material Colours Ov. Dia.(mm) Material Details Size(mm²) Ov. Dia.(mm) Material	3159 3159 3159 3159 3159 3159 3159	3159 3228	3159 3228 3080	3159 3228 3080 3135

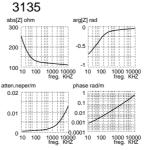
ELECTRICAL & MECHANICAL CHARACTERISTICS

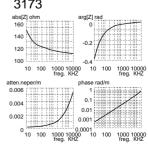
Part No.		3159	3228 3080		3135	3173		
DC Resistance	Inner Conductor	0.081Ω/m(0.0247Ω/Ft)	$0.1\Omega/m(0.031\Omega/Ft)$	$0.11\Omega/m(0.034\Omega/Ft)$	$0.11\Omega/m(0.034\Omega/Ft)$	0.02Ω/m(0.006Ω/Ft)		
at 20°C	Shield Conductor	0.024Ω/m(0.0073Ω/Ft)	0.025Ω/m(0.0076Ω/Ft)	0.028Ω/m(0.0085Ω/Ft)	0.028Ω/m(0.0085Ω/Ft)	0.007Ω/m(0.0021Ω/Ft)		
Capacitance at 1kHz, 20°C (effective capacitance value between inner twin)		46pF/m(14 pF/Ft)	53pF/m(16 pF/Ft)	46pF/m(14 pF/Ft)	46pF/m(14 pF/Ft)	50pF/m(15.3pF/Ft)		
Inductance		0.8μH/m(0.24μH/Ft)	0.8μH/m(0.24μH/Ft)	1.0μH/m(0.31μH/Ft)	1.0μH/m(0.31μH/Ft)	0.7μH/m(0.21μH/Ft)		
Characteristic In	mpedance	110Ω±10%	110Ω±5%	110Ω±5%	110Ω±5%	110Ω±10%		
Attenuation (6MI	J-\	0.065dB/m	0.069dB/m	0.069dB/m	0.069dB/m	0.0347dB/m		
Attenuation (bivir	12)	(0.020dB/Ft)	(0.021dB/Ft)	(0.021dB/Ft)	(0.021dB/Ft)	(0.0106dB/Ft)		
Phase Constant	(6MHz)	0.17rad/m	0.20rad/m	0.20rad/m	0.20rad/m	0.17rad/m		
Electrostatic Noi	ise *	50mV Max.						
Electromagnetic	Noise At 10kHz*	2.0mV Max.						
Microphonics*		60mV 40mV Max. 40mV Max.						
Voltage Breakdo	own		Must w	ithstand at DC 500V/	15sec, 20°C			
Insulation Resis	tance		10⁴ľ	MΩ • m Min. at DC 250	0V, 20°C			
Flex Life		2,900 cycles	33,000 cycles	10,000 cycles	10,000 cycles	16,000 cycles		
Tensile Strength	1	303 N	441 N	343 N	362 N	Over 980 N		
Emigration Non-Emigrant to ABS resin			sin					
Applicable Temperature -20°C~+60°C (-4°F~+140°F)								
Standard		AES3-100X (ANSI S. 4. 40-199-X) EBU Rech, 3250-E CEI / IEC 958 / CCIR Rec. 647	AES3-100X (ANSI S. 4. 40-199-X) EBU Rech, 3250-E CEI / IEC 958 / CCIR Rec. 647 UL AWM 2623, 30V, 80°C, VW-1	AES3-100X (ANSI S. 4. 40-199-X) EBU Rech, 3250-E CEI / IEC 958 / CCIR Rec. 647	AES3-100X (ANSI S. 4. 40-199-X) EBU Rech, 3250-E CEI / IEC 958 / CCIR Rec. 647 UL444, CM, 300V, 60°C, #25AWG	AES3-100X (ANSI S. 4. 40-199-X) EBU Rech, 3250-E CEI / IEC 958 / CCIR Rec. 647 UL AWM 2552, 30V, 60°C, VW-1, #18AWG		

* Using standard testing methods of Mogami Wire & Cable Corp.









Option : FERRITE CORE is available for Part No.3080 and No.3135 to eliminate EMI noise. FITTING TUBING for ITT CANNON XLR connector is available for Part No.3080 and No.3135 cable.

MULTICORE 110 Ω AES/EBU DIGITAL AUDIO SNAKE CABLES

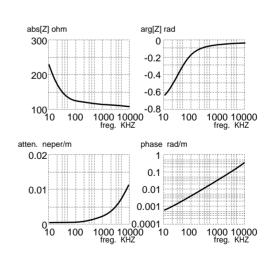


Like the world standard MOGAMI multicore microphone "Snake" cable, very flexible and compact design makes these multicore 110 Ω AES/EBU DIGITAL AUDIO cables easy for wiring, installation and handling.

- ☐ Because of employed cellular PP (polypropylene) insulation material, regardless of its compact overall diameter, larger conductor size is used, which naturally results in lower attenuation.
- ☐ Besides, there are the following outstanding features similar to the standard analog multipair cables:
 - •Easy cable core identification system, such as numbered cable core
 - •Easy wiring assisted by the same conductor size drain wire
 - •Flexible and good low temperature characteristic

3160.

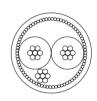
freq kHz	abs(z)ohm	arg(z)rad	atten npr/m	phase rad/m
10	253.053778	-0.666284	0.000485	0.000617
20	186.122587	-0.559186	0.000611	0.000978
50	140.097832	-0.348423	0.00074	0.002038
100	127.900865	-0.206205	0.000811	0.003876
200	123.592395	-0.124331	0.000951	0.007596
500	120.029543	-0.080112	0.001498	0.018508
1000	117.020927	-0.0671	0.002361	0.036164
2000	114.290764	-0.0558	0.003866	0.070617
5000	111.573232	-0.04365	0.007263	0.173456
10000	110.521001	-0.0358	0.012238	0.351575



Part No.	Nos. of Cores.	O.D. (Approx. mm)	Jacket Thickness (Approx. mm)	Weight (Kg/100m)(Kg/328Ft)	Maximum Length available
3160	2-CR	9.0(0.354")	1.0 (0.039")	8	
3161	4-CR	10.5(0.413")	1.2 (0.047")	14	305m
3162	8-CR	13.8(0.543")	1.4 (0.055")	23	(1,000Ft)
3163	12-CR	17.0(0.669")	1.6 (0.063")	30	

CABLE CORE SPECS

Conductor	7/0.20A (0.22mm²)#24 AWG	(7×#32AWG)
Insuration	1.35¢CPP (Cellular polypropylene)	(0.053")
Drain Wire	7/0.20A (Exactly same as conductor)	
Shield	Approx. 79/0.10A Served (Spiral) Shield	
Jacket(covering)	3.2 ∮ Flexible PVC	(0.126")
Identification	Similar to analog snake cable (Ref. Page #26)	



ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance	Inner Pair Conductor	0.081Ω/m(0.0247Ω/Ft)		
	Shield	0.024Ω/m (0.0073Ω/Ft)		
Capacitance at	1kHz 20°C itance value between inner twin)	46pF/m (14pF/Ft)		
Inductance		0.8μH/m (0.24μH/Ft)		
Characteristic In	mpedance	110Ω±10%		
Attenuation (6M	H ₂)	0.065dB/m		
Atteridation (own	112)	(0.020dB/Ft)		
Phase Constan	t (6MHz)	0.17rad/m		
Electrostatic No	ise *	5.0mV MAX.		
Electromagnetic	Noise at 10kHz *	2.0mV MAX.		
Microphonics *		60mV MAX.		
Voltage Breakd	own	Must Withstand at DC 500V/15sec.		
Insulation Resist	tance at DC 125V. 20°C	10⁴MΩ • m MIN.		
Tensile Strengtl	h of one Core	303 N		
Emigration		Non-Emigrant to ABS resin		
Applicable Tem	perature	-20°C~+70°C (-4°F~+158°F)		
Standard		AES3-100X(ANSI S.4.40-199X)		
		EBU Rech. 3250-E		
		CEI/IEC 958/CCIR Rec. 647		
		UL13 CL2X 60°C / UL20002 AWM 30V 60°C VW-1		

 $[\]boldsymbol{\ast}$ Using standard testing methods of Mogami Wire & Cable Corp.

VESA VGA CABLE [FOR PLUG & PLAY]



MOGAMI Part No. 3206-08 is a specially designed cable to meet VESA standard for plug and play. Applicable up to 30 m (100 Ft) long, and possible to solder to a very small and troublesome Shrink Dsub 15P connector.

Shrink Dsub 15P Pin Assignment

Pin No.	Standard VGA	DDC1 Host	DDC2B Host	DDC2B+or DDC2AB Host	DDC1/2 Display
1			Red video		
2			Green video		
3			Blue video		
4			Monitor ID bit 2		Optional
5	Test(ground)		Re	eturn	
6			Red video return		
7			Green video return	ı	
8			Blue video return		
9	No connection		+5volt supply		+5volt load
9	(mechanical key)		(mandatory supply)		(optional use)
10			Sync. return		
11		Monitor ID	bit 0		Optional
12	Monitor ID bit 1 Data from display Bi-directional data (SDA)				
13	Horizontal sync.				
14	Vertical sync.				
15	Monitor ID bit 3 Open Data clock (SCL)				

Wiring Instruction When all 15 Pins're Wired

Assigned Core
Centre Conductor of Red Coax.
Centre Conductor of Green Coax.
Centre Conductor of Blue Coax.
Brown Lead Wire, #28 AWG, PVC
Orange + Green Lead Wire, #28 AWG, XLCPE
Shield Conductor of Red Coax.
Shield Conductor of Green Coax.
Shield Conductor of Blue Coax.
Black Lead Wire, #26AWG, PVC
Shield Conductor of White + Yellow Coax.
Red Lead Wire, #28 AWG, PVC
Yellow Lead Wire, #28 AWG, XLCPE
Centre Conductor of White Coax.
Centre Conductor of Yellow Coax.
Blue Lead Wire, #28 AWG, XLCPE

VESA VGA CABLE

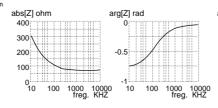
SPECIFICATIONS

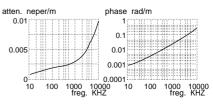
Configuratio	n				
Part No.					3206
Core Config	guration				5×75Ω Coax. (#28AWG) 3×Twisted-Pair (#28AWG) 1×Power (#26AWG)
Coax.	Cond	uctor	Detail	s	17/0.08A
			Size(ı	mm²)	0.0854mm² (#28AWG)
	Insula	ation	Ov. [Dia. (mm)	1.7¢ (0.0669")
			Mater	ial	XLCPE
			Colou	ır	Natural
	Serve	ed Shield			Approx. 54/0.10A
	Jacke	nt .	Ov. [Dia. (mm)	2.4¢ (0.0945")
	Jacke	ŧ.	Mater	ial	PVC
			Colou	irs	Red/Green/Blue/White/Yellow
Lead Wire		Conductor		Details	4× (17/0.08A)
				Size (mm²)	0.0854mm² (#28AWG)
Insulation		Insulation		Ov. Dia. (mm)	0.95 ¢ (0.0374")
				Material	XLCPE
				Colours	Orange/Yellow/Green/Blue
Lead Wire		Conductor		Details	2× (17/0.08A)
				Size (mm²)	0.0854mm ² (#28AWG)
		Insulation		Ov. Dia. (mm)	0.85 ¢ (0.0335")
				Material	PVC
				Colours	Brown/Red
Power Lead Wire Condu		Conductor		Details	1 × (30/0.08A)
Insulation				Size (mm²)	0.15mm ² (#26AWG)
		Insulation		Ov. Dia. (mm)	1.0¢ (0.0394")
				Material	PVC
			Colour	Black	
Filler			Polypropylene		
Binder Thickness Material				0.025mm (0.001")	
				Paper Tape	
Ov. Shield				Braid Shield	
Ov. Shield				10/24/0.12TA	
Ov. Jacket Ov. Dia. (mm)				9.8 \(\phi \) (0.386")	
		Material			PVC
		Colour			Dark Gray
Roll Sizes	s				77/153m (250Ft/500Ft)

ELECTRICAL & MECHANICAL CHARACTERISTICS

			·	
DC Resistance	Inner Conductor	Coax.	0.22Ω/m (0.0671Ω/Ft)	
at 20°C		lead Wire	0.22Ω/m (0.0671Ω/Ft)	
		Power lead	0.12Ω/m (0.0366Ω/Ft)	
	Shield Conductor	Coax.	0.044Ω/m (0.0134Ω/Ft)	
		Ov.Shield	0.0076Ω/m (0.0023Ω/Ft)	
Capacitance (1kHz,20°C)	58	3pF/m (17.7pF/Ft)	
Characteristic Impedance	e(10MHz)	75Ω±10%		
Attenuation (10MHz)		0.085dB/m		
		(0.0259dB/Ft)		
Phase Constant (10MHz	<u>z</u>)		0.30rad/m	
Electromagnetic Nois	se at 10kHz		0.2mV max.	
Voltage Breakdown		Must Withstand at DC 500V/15sec.		
Insulation Resistance	е	10 ⁴ MΩ • m Min. at DC 250V,20°C		
Tensile Strength (22	2°C,60%RH)	Over 980 N		
Emigration		Non-Emigrant to ABS resin		
Applicable Temperat	ture	-20°C~+60°C (-4°F~+140°F)		
Stanndard		VESA, UL20124 AWM 60°C 30V VW-1		

freq khz	abs (z) ohm	arg (z) rad	atten npr/m	phase rad/n
10	303.478132	-0.750064	0.000824	0.000885
20	215.268557	-0.714327	0.001123	0.001293
50	139.510971	-0.615286	0.001603	0.002265
100	106.083113	-0.479051	0.001945	0.00374
200	89.114101	-0.314782	0.002197	0.006734
500	81.545187	-0.154867	0.002515	0.016007
1000	79.55112	-0.09565	0.003033	0.031444
2000	78.029826	-0.0649	0.004074	0.061829
5000	76.504807	-0.04325	0.006485	0.152336
10000	76 266668	-0.0204	0.000814	0.307570

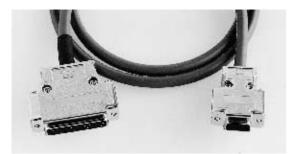






DIGITAL INTERFACE CABLES

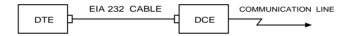
ANSI/EIA 232 CABLE



EIA 232 was originally developed as an interface between DTE (data terminal equipment) such as computers and DCE (data circuit-terminating equipment) such as MODEM to transmit 20 kbit/sec. serial data within 15m (50 Ft). Today it is widely used as a standard interface for a computer system as well as GP-IB interface. However, different from GP-IB, it has directional rule for data path, and further the definition of the control signals and the pin assignment differs between each device, therefore, special care for necessary numbers of conductors and wiring diagram is needed in choosing a cable.

EIA 232 CABLE

EIA 232 CABLE is an interface cable to connect DTE (data terminal equipment) and DCE (data circuit-terminating equipment) to transmit 20kbit / sec. serial data within 15m (50 Ft) distance based on EIA 232 standard.

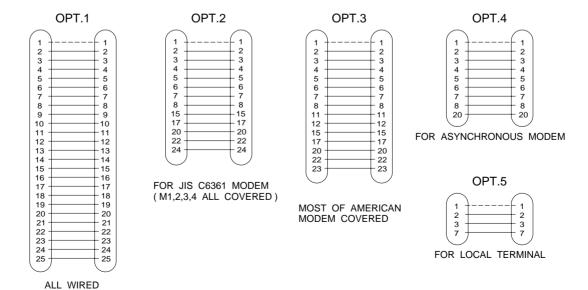


For ordering, specify the following informations:

PART NO: EIA 232 CABLE

CABLE LENGTH:

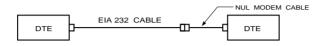
COMBINATION OF CONNECTORS AT BOTH ENDS: Generally male to male **WIRING DIAGRAM:** Select correct wiring from the following five options.



Remarks: ANSI/EIA 232 standard is almost same contents as CCITT V.24 and JIS C6361.

SERVICE INFORMATION NUL MODEM CABLE

NUL MODEM CABLE is a tool to solve a contradiction or collision generated when the same type of equipment, DTE and DTE or DCE and DCE, are connected. Because it looks like modem from DTE side without substance, it is called so "NUL MODEM"

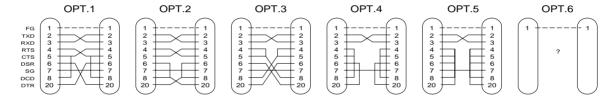


For ordering, specify the following informations:

PART NO: NUL MODEM CABLE

WIRING DIAGRAM: Select correct wiring from the following six options. Also, in case of special requirement, specify necessary cable length (generally 1 m/3.28Ft)

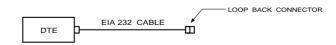
and combination of connectors at both ends (generally male to female).



OPT.6 All the wiring except for Pin No.1 can be designated at your free choice.

LOOP BACK CONNECTOR

In case the system wired by EIA 232 interface does not work or there is any anxiety in operation of DTE (data terminal equipment), the easiest and important test is the loop back test. It works as a mirror against DTE when it is connected in place of DTE or DCE. In other words, it looks like corresponding from a reproduction of the DTE itself by returning the output data or control signals from itself, so it can test its own transmitter-receiver and control function.



For ordering, specify the following informations:

PART NO: LOOP BACK CONNECTOR

WIRING DIAGRAM: Select correct wiring from the following three options.

Also, in case of special requirement, specify sex distinction of the connector (generally female).



ANSI/EIA32 CABLE

There are some variations in EIA 232 interface as explained in the beginning, therefore, the following four types of raw cables are prepared to match respective cost and those raw cables are also available from stock. All those cables are approved as UL SUBJECT 758 AWM 2626 VW-1SC.

CABLE SPECIFICATIONS

Configuration	1						
Part No.		2691	2690	2689	2579		
No. of Cond	luctor	3	8	14	24		
Conductor	Details	17/	7/0.16TA (7×#34AWG)				
	Size		0.14mm² (#26AWG)				
Insulation	Ov. Dia. (mm)		1.0 \(\phi(0.0394")				
	Material	PVC					
Drain Wire	Details	17	20/0.18TA (20×#33AWG)				
Size		0.34mm² (#22AWG)			0.51mm ² (#21AWG)		
Braided Shield		16/ 6/ 0.12TA	24/ 6/ 0.12TA	24/ 8/ 0.12TA	24/ 7/ 0.12TA		
Jacket	Ov. Dia. (mm)	6.0 \(\phi \) (0.236" \(\phi)	8.0 \(\phi \) (0.315" \(\phi \)	9.2 ¢ (0.362" ¢)	9.3 ¢ (0.366" ¢)		
	Material	Flexible PVC					
	Colour	Gray					
Roll Size		153 m (500Ft)					
Weight per 153	Bm (500Ft) Roll	8.0Kg	13.5Kg	20Kg	21Kg		

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	2691 2690 2689 2579					
DC Resistance at 20°C	0.06Ω/m(0.018Ω/Ft) 0.14Ω/m(0.043Ω/Ft)					
Voltage Breakdown	Must withstand at DC 500V/15sec.					
Insulation Resistance	10 ⁴ MΩ • m Min. at DC 500V, 20°C					
Emigration	Non-Emigrant to ABS resin					
Applicable Temperature	-20°C~+70°C (-4°F~ +158°F)					
Standard	UL Subject 758 AWM 2626 VW-1SC 30V 80°C					

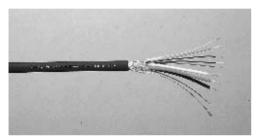
Option : FERRITE CORE is available as a countermeasure against EMI noise.

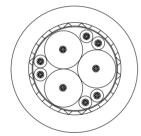
PART NO. 3227 HIGH SPEED SERIAL TRANSMISSION CABLE

High speed serial transmission cable is a specifically designed cable for higher speed and or longer cable transmission is required such as for 115.2 kbps ISDN-TA. This cable enables for use at five times higher rate transmission or five times longer cabling, comparing with regular cable. Feature of this cable can be described as shown below. For detailed information such as transmitted wave form etc., please ask for technical data.

		Higher s	speed	transmission	and or	longer	cabling	becomes	possibl
--	--	----------	-------	--------------	--------	--------	---------	---------	---------

- ☐ Compact overall diameter to meet Dsub 9P connector used for IBM-PC.
- ☐ This very flexible cable is available in both raw cable and cable assembly.





OVERALL SPCIFICATION

Ov. Dia.(mm)	$7.3\phi~(0.287"\phi)$
Conductor Size	17/0.08A (#28AWG)
Shield	Overall Braided Shield
Capacitance	37pF/m (Signal Line-All other conductors) 87pF/m (Control Line-All other conductors)
Mutual Capacitance	3pF/m (Between Signal Lines) 6pF/m (Signal Line-Control Line) 32pF/m (Between Control Lines)
Standard	UL758 STYLE 20124 60°C 30V VW-1 28AWG

Remarks : Capacitance value determines distortion of transmitted wave.

Mutual capacitance value is the largest factor to determine cross-talk level.

Typical Pin Assignment

Dsub 25P	Dsub 9P	Circuit	Function Name	
1	-	FG	Protective Ground	
2	3	TXD	Transmitted Data	
3	2	RXD	Receive Data	
4	7	RTS	Request to Send	
5	8	CTS	Clear to Send	
6	6	DSR	Data Set Ready	
7	5	SG	Signal Ground	
8	1	DCD	Received Line Signal Detector	
20	4	DTR	Data Terminal Ready	
22	9	RI	Ring Indicator	

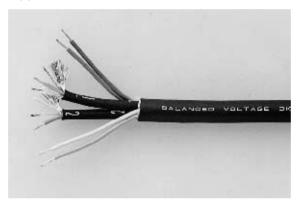
- □ Please assign inside core conductor Red, White and Black to TxD, RxD and SG respectively for your own original cable assembly, otherwise expected characteristics cannot be realized. Other inside core conductors can be wired to any signal line.
- ☐ Cable assembly is available to order in 10cm(0.394")interval. Specify required length at XX part of the cable assembly part number of 5016-XX.

Example: In case of 6m, it is 5016-60, while in case of 8.5m, it is 5016-85. In addition, we need to know used connector and wiring diagram variations as well as type of screw of the connector case you actually need.

RS-422 BALANCED VOLTAGE DIGITAL INTERFACE CABLE

MOGAMI #2997 is designed to meet EIA Standard RS-422 general applications, with 2 balanced cores and 4 signal conductors. Overall diameter of 7mm (0.276") enables it to fit into most of the D-sub 9-pin connectors available. All the conductors are designed same the size (#25AWG) including the drain wire which can be crimped by the same size contact. Numbering print system on the balanced cores is the same as Mogami snake cables and serves as an efficient identification system together with colour coded remaining four signal conductors.

2997



2997-FC FERRITE CORE



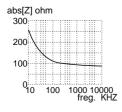
SPECIFICATIONS

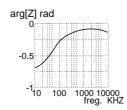
Configuration						
Part No.		299	97			
No. of Conduc	etor	2×BALANCED 4×SIGNAL CON				
Conductor	Details	7/0.18A(7×	(#33AWG)			
	Size(mm ²)	0.178mm² (i (The same size i				
Insulation	Ov. Dia. (mm)	1.05 \(\phi(0.0413")	1.2 φ(0.0472")			
	Material	XLPE	PVC			
	Colours	Brown/Clear Red/Clear	Brown/Red Orange/Yellow			
Drain Wire Details		7/0.18TA(7×#33AWG)				
Size (mm ²)		0.178mm ² (#25AWG)				
Served Shield	Shield Approx.58/0.10A (Approx.58 × #38AWG)					
Core Jacket	Ov. Dia. (mm)	2.7 <i>ϕ</i> (0.106")				
Core Jacket	Material	PVC				
	Colours	Black (with number print)				
Binder	Thickness	0.025mm ((0.001")			
	Material	Paper 1	Гаре			
Ov. Jacket	Ov. Dia. (mm)	7.0 ¢ Max. (0	· · · · · · · · · · · · · · · · · · ·			
OV. Jacket	Material	Flexible	-			
	Colour	Blad	ck			
Roll Sizes		153 m (500Ft) 3	05m (1.000Ft)			
Weight		9.6Kg/153m	9.6Kg/153m (500Ft) Roll			

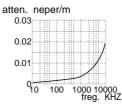
ELECTRICAL & MECHANICAL CHARACTERISTICS

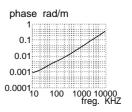
	a mediamore diffracter			
Part No.		2997		
DC Resistance	Inner Conductor	0.105Ω/m(0.032Ω/Ft)		
at 20°C	Shield Conductor	0.31Ω/m(0.095Ω/Ft)		
Capacitance at 1kHz, 20°C(effective capacitance value between inner twin)		65pF/m(19.8 pF/Ft)		
Characteristi	ic Impedance	95Ω±10%		
Attenuation(1MHz)	0.031dB/m		
		(0.0095dB/Ft)		
Phase Constant(1MHz)		0.043rad/m		
Electromagnetic Noise At 10kHz		0.5mV Max.		
Voltage Breakdown		Must withstand at DC 500V/15sec.		
Insulation Resistance		10 ⁴ MΩ • m Min. at DC 500V, 20°C		
Tensile Strength (26°C,65%RH)		705 N		
Emigration		Non-Emigrant to ABS resin		
Applicable 7	Temperature	-20°C~+70°C (-4°F~ +158°F)		
Standard		EIA RS-422 UL758 STYLE 2725 60°C, 30V, VW-1		

Option : FERRITE CORE is available to eliminate EMI noise.









GP-IB CABLE



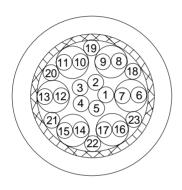
So-called "GP-IB"originally developed by HP and standardized as IEEE 488 is an excellent interface. GP-IB cable is equipped with a special piggy-back connector (both female and male connector are put together back to back) at both ends, which enables the easy change or installation of more peripherals. IEEE 488 standard specifies that the number of connected peripherals must be within 15, and the total length of applicable cables is limited to whichever is smaller 20 m(66Ft) or double numbers in meter of the connected equipment. So, 0.5m, 1m, 2m, 4m (1.6Ft, 3.2Ft, 6.5Ft, 13Ft) are available as standard lengths. However, if the applied interface speed is slow, as any problem is not generated practically and longer cable is needed in practical application, 8m,16m (26Ft, 52Ft) and longer or odd length cables are also available to order.

Part No.	GPIB-05	GPIB-10	GPIB-20	GPIB-40	GPIB-XX
Length	0.5m	1.0m	2.0m	4.0m	CDECIEV LENGTH
Lengin	(1.6Ft)	(3.2Ft)	(6.5Ft)	(13Ft)	SPECIFY LENGTH

Available applicable connectors are MICRO RIBBON (Amphenol or Cinch 57 series) or CHAMP (AMP). Option: FERRITE CORE is available as a countermeasure against EMI noise.

GP-IB CABLE

The raw cable, Part No. 2571 is well designed bus cable based on IEEE 488-1975 (IEEE Standard Digital Interface for Programmable Instrumentation), especially low cross-talk and easiness of assembly are considered. Six signal wires for DAV, NRFD, NDAC, IFC, SRQ and ATN are all comprised of twisted pairs preventing from generation of noise to DIO 1~8 because hand-shake is taken place in these signal wires while data are effective in DIO 1~8 lines. This cable is approved as UL AWM 2626 VW-1SC.



Part No.		2571	
No. of Con	ductor	23	
Braided Shi	24/8/0.12TA		
Ov. Jacket	Ov.Dia. (mm)	10.0 ¢(0.394")	
	Material	Flexible PVC	
	Colour	Gray	
Roll Size		153m (500Ft)	
Weight per 15	53m(500Ft) Roll	16.6kg	

IEEE 488 CABLE (GP-IB CABLE)

	· · · · · · · · · · · · · · · · · · ·	·						_
CONTACT	Γ No. SIGNAL NAME	CABLE POSITION	COLOUR	CONTACT No.	SIGNAL NAME	CABLE POSITION	COLOUR	
1	DIO 1	18	BROWN	 13	DIO 5	23	ORANGE	_
2	DIO 2	19	RED	14	DIO 6	22	RED	_
3	DIO 3	1	ORANGE	15	DIO 7	4	GREEN	-
4	DIO 4	2	YELLOW	16	DIO 8	3	BLUE	-
5	EOI	20	GREEN	17	REN	21	PURPLE	_
6	DAV	6	BLUE	18	Gnd (6)	7	BROWN	-
7	NRFD	16	PURPLE	19	Gnd (7)	17	RED	-
8	NDAC	8	GRAY	20	Gnd (8)	9	ORANGE	-
9	IFC	10	WHITE	21	Gnd (9)	11	GREEN	-
10	SRQ	14	BLACK	22	Gnd (10)	15	BLUE	
11	ATN	12	BROWN	 23	Gnd (11)	13	PURPLE	
12	SHIELD	DRAIN WIRE O	F SHIELD	24	Gnd, LOGIC	5	GRAY	-

SCSI-2 SINGLE-ENDED A CABLE & SCSI-3 (WIDE SCSI) CABLE



MOGAMI SCSI cables are specially designed to satisfy all the requirements of "SCSI-2 Single-Ended A Cable" based on ANSI X3T9/89-042 Standard. And, SCSI-3 cable is also specially designed to meet ANSI SCSI-3 Single-Ended Bus Cable Standard. These cables offer the following features.

Satisfy characteristic impedance requirement for "fast synchronous data transfer" .
Satisfy "minimum conductor size #28AWG requirement" and realize low attenuation.
Suitable for high speed transmission because of large velocity constant.
SCSI-2 cable is adaptable to "50-Contact Shielded High Density SCSI Device
Connector". And, SCSI-3 cable is adaptable to "68-Contact Shielded High Density SCSI
Device Connector".
SCSI-2 cable is exclusive use for single-end only, while SCSI-3 cable can be used
both single-end and differential as it is full-wired.
Ferrite Core is optionally available to strengthen countermeasure against EMI noise.
Malfunction caused by noise is not avoidable by strengthening shielding conductor.
Flexibility as regular MOGAMI standard cable.

Cable Type	SCSI-2 Cable	SCSI-3 Cable		
Ov. Dia.	9.6mm (0.378")	14mm (0.551")		
Conductor Size	0.088mm² (#28AWG)			
DC Resistance at 20°C	0.21Ω/m (0.064Ω/Ft)			

DIGITAL INTERFACE CABLES

MOGAMI SCSI cable is a completely assembled cable with a real noise rejection countermeasure. When ordering, put the length after each part number. For example, 514215 means: SCSI-2 half pitch connector to Dsub 50P connector with 1.5m (4.9Ft) long cable. Standardized stock lengths are 0.5m, 1.0m, 1.5m and 2.0m. However, please note that in the Single-Ended SCSI system, total length of all the connected cable must be set within 6 m (20Ft).

SCSI-2 Half Pitch Connector is a newly standardized 50P half pitch pin type connector by SCSI-2 Standard and used by "Sparc Station". 50P means 50 poles. Dsub 50P connector is not listed in SCSI Standard, but used for "SUN3". It is an increased numbers of pins of RS-232 Standard connector, often seen around peripherals for SUN. 50P Ribbon Connector is a SCSI Standard formal connector and a version of increased numbers of pins of a printer interface connector. Besides these, Dsub 25p connector is used for MAC. by Apple and bellows type half pitch 50p connector is used for NEC 98 series.

PART NO.	COMBINATION OF CONNECTORS AT BOTH ENDS	STANDARD/TYPE
5141XX	SCSI-2 Half Pitch Connector <=> SCSI-2 Half Pitch Connector	SCSI-2 Standard
5142XX	SCSI-2 Half Pitch Connector <=> Dsub 50P Connector	Sparc Station
5143XX	SCSI-2 Half Pitch Connector <=> SCSI 50P Ribbon Connector	Sparc Station
5144XX	Dsub 50P Connector <=> Dsub 50P Connector	Sun 3/Sun 4
5145XX	SCSI 50P Ribbon Connector <=> SCSI 50P Ribbon Connector	SCSI -1/SCSI-2
5146XX	Dsub 50P Connector <=> SCSI 50P Ribbon Connector	Sun3 /Sun 4
5147XX	Dsub 25P Connector <=> SCSI 50P Ribbon Connector	MAC.
5123XX	Dsub 25P Connector <=> Bellows Half Pitch Connector	MACNEC 98
5124XX	Dsub 25P Connector <=> SCSI -2 Half Pitch Connector	MACSCSI-2
5125XX	Dsub 25P Connector <=> Dsub 50P Connector	MACSUN
5112XX	Bellows Half Pitch Connector <=> Bellows Half Pitch Connector	NEC 98
5113XX	Bellows Half Pitch Connector <=> SCSI -2 Half Pitch Connector	NEC 98-SCSI-2
5114XX	Bellows Half Pitch Connector <=> Dsub 50P Connector	NEC 98-SUN
5115XX	Bellows Half Pitch Connector <=> SCSI 50P Ribbon Connector	NEC 98
5095XX	SCSI-3 Half Pitch Connector <=> SCSI-3 Half Pitch Connector	SCSI -3 Standard
5039XX	SCSI-3 Half Pitch Connector <=> Dsub 25P Connector	MAC.
5040XX	SCSI-3 Half Pitch Connector <=> SCSI -2 Half Pitch Connector	
5043XX	SCSI-3 Half Pitch Connector <=> SCSI 50P Ribbon Connector	
5045XX	SCSI-3 Half Pitch Connector <=> Bellows Half Pitch Connector	

DIGITAL INTERFACE CABLES

The most important factor in a cable for the application of high speed transmission is CHARACTERISTIC IMPEDANCE. Electromagnetic wave reflects at the point where impedance is different and the larger the difference the more the reflection. Although it is specified $100\Omega + -10\%$ in the SCSI-1 standard, available cable on the market is usually only about $50~\Omega$. This means it generates nearly 50% reflection and indicates how difficult to design the cable to meet SCSI Standard (requirement). These ordinary cables are applicable for low speed transmission device at short distance. However, it becomes inapplicable for high speed synchronized transmission or for long run transmission.

MOGAMI SCSI CABLE is the first and only one "SCSI-1/SCSI-2/SCSI-3 CABLE" in the world that can satisfy SCSI Standard perfectly. Please use our cables under following cares to prevent from troublesome problem caused by cable.

- 1) Never mixed with different impedance other cable in the same system.
- 2) Set terminations (terminating resistors) only at both ends of the system.

If there is any low impedance cable out of Standards in the system of SCSI devices, reflection is generated at the connected part with it. Also, if any additional cable is connected to the termination, unexpected reflection is generated even with several centimeters (several inches). Please make sure if two terminations are located at the both ends of all the connected cables correctly.

PRESENT STATE OF SCSI CABLE DIFFICULTY OF SCSI CABLE

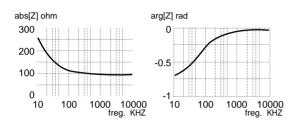
SCSI is the most successful digital interface for computer system after IEEE488 (GP-IB). However, generally used cables on the market are far from the requirement by SCSI Standard and inapplicable for high speed transmission at a distance. Even though each twisted pair inside the cable is designed to be close to the SCSI commended value of 110 Ω , the characteristic impedance of the practical transmission circuit in Single-Ended system is greatly lowered by the following two reasons:

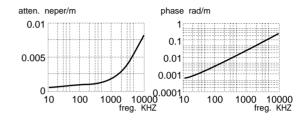
- 1) Common ground parallel circuit lowers the working impedance.
- 2) Existence of shield and multiple neighbour conductors lowers impedance of each pair. This difficulty is known to ANSI X3.131-1986, and despite of the SCSI commended impedance value of $110\Omega + -10\%$, difficulty in getting such cable is indicated as well. In fact, it is really hard to realize it in practical application. For example, characteristic impedance of one of available cable on the market is very low impedance of 50Ω . It means 45% reflection would be generated so that the voltage at receiving end of a cable in transient state becomes only 55% of desired value. In case of satisfactory cable within tolerance of the Standard, it stays within 19% of reflection. Further, it can stay within 10% of reflection in case the satisfactory cable within tolerance of the Standard is used with active terminator standardized by ANSI X3T9/89-042 SCSI-2. In high speed transmission of SCSI-2, it became necessary condition to satisfy this requirement.

REFRENCIAL DATA

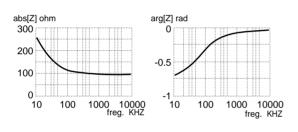
Because impedance of each twisted pair inside of the shield becomes lower at the outernal stratum, pairs in the internal stratum shall be assigned to hand-shake and unsynchronized control lines. Representative impedance characteristics of a pair in respective stratum at the most critical condition where all GNDs of each pair and overall shield are shorted are as shown below:

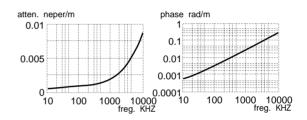
1.1 INNER STRATUM



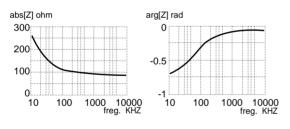


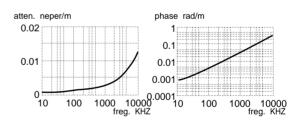
1.2 MEDIUM STRATUM





1.3 OUTER STRATUM



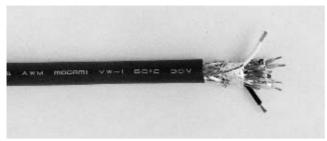


CHARACTERISTIC IMPEDANCE AND REFLECTION

Unless characteristic impedance of a cable matches with the load impedance, wave-form is distorted by reflected electro-magnetic wave and the largeness of reflection is as shown below. Reflection factor 1.0 means total reflection and 0.5 does 50% reflection. In case active termination is employed, as the load impedance can be lowered at the same voltage level, it can realize more suitable value for the existing state of a cable.

CHARACTERISTIC IMPEDANCE (Ω)	40	50	60	70	80	90	100	110	120	130
PASSIVE TERMINATION	0.54	0.45	0.38	0.31	0.25	0.19	0.14	0.09	0.05	0.01
ACTIVE TERMINATION	0.46	0.38	0.29	0.22	0.16	0.10	0.05	0.00	0.04	0.08

IEEE1394 FIRE WIRE





IEEE 1394 is a Serial BUS standard designed for use in real-time applications such as sound, video, and animation. This technology was designed by INMOS for their TRANSPUTER and then further developed by APPLE, at which point it was given the name "FIRE WIRE". The IEEE 1394 signal has an intermediate characteristic between serial and parallel transmission. It transmits serial data and clock signal in parallel, and countermeasures cable skew (propagation velocity difference between two pairs) by not changing the clock signal when the data signal changes. This interface requires a new type of cable and connector. It uses high speed real-time transmission with a cable that can be connected and disconnected without turning off any device. It makes it possible to connect freely between multiple terminals without having to consider termination. MOGAMI Part No. 3208-08 is specifically designed for the IEEE 1394 standard, and offers the following features.

- 1) Low attenuation
- 2) High propagation velocity
- 3) Low cable skew

Therefore, it carries data transmission with enough margin to be used for longer runs than the recommended maximum length of $4.5 \, \text{m}$ ($14.75 \, \text{Ft}$) per cable in the IEEE 1394 standard. Incidentally, the maximum applicable length of all the connected cables in one Fire Wire system, excluding a bus bridge on any one bus, is limited to $4.5 \, \text{m}$ X 15 pcs for a total of $67.5 \, \text{m}$ ($14.75 \, \text{Ft}$ X 15 pcs = $221.25 \, \text{Ft}$).

6p	connector	cable	assembly	is	available	to	order	in	10cm (0.394") interval. Specify	required
lenç	th at XX	part of	the cable	as	sembly pa	art ı	number	of	5086-XX.	

Example: In case of 1.2m, it is 5086-12, while in case of 4.5m, it is 5086-45.

6P CONNECTOR PIN ASSIGNMENT

Pin No.	Signal	Comment
1	ΥP	Cable Power
2	V G	Cable Ground
3	TPB	Strobe on receive, Data on transmit
4	TPB	(differential pair)
5	TPA	Data on receive, Strobe on transmit
6	TPA	(differential pair)

 $[\]hfill\Box$ Bulk cable is available in 77m (250 Ft) and 153m (500 Ft) roll.

SPECIFICATIONS

Configuration			
Part No.			3208
Core Configuration	n		2×Balanced Signal Pair
			2×Power Conductor
Balanced	Conductor Size (mm²)	0.0886mm² (#28AWG)
Signal Pair	Insulation	Ov. Dia. (mm)	1.0 ¢ (0.0394")
		Material	CPP
		Colours	Red/Green, Blue/Orange
	Shield	1st Shield	Aluminum Tape Shield
		2nd Shield	Copper Braid Shield
Power Conductor	Conductor Size (mm²)	0.341mm² (#22AWG)
	Insulation	Ov. Dia. (mm)	1.2 <i>ϕ</i> (0.0472")
		Material	PVC
		Colours	Black/White
	between two indi all aluminum tape	1/2 Wrap Polyester Tape	
Ov. Shield	1st Shield		Aluminum Tape Shield
	2nd Shield		Copper Braid Shield
Ov. Jacket	Ov. Dia. (mm)		6.1 \(\phi \) (0.240")
	Material		Flexible PVC
	Colour	Dark Gray	
Roll Sizes			77/153m (250Ft/500Ft)
Weight per 77m	(250Ft) Roll		4.5kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Signal Pair	Impedance	Differential	110Ω±6Ω		
		Common Mode	$33\Omega\pm 6\Omega$		
	Attenuation (at 4.5	5m)	100MHz: 1.3dB		
			200MHz: 1.9dB		
			400MHz: 3.1dB		
	Propagation Veloc	ity	4.35nS/m		
	Relative Propagati	on Skew (at 4.5m)	76ps		
Power Pair	Characteristic Impedance		520		
	(Differential)		53Ω		
	DC Resistance at	20°C (at 4.5m)	0.235Ω		
Crosstalk (a	t 1MHz~500MHz)		-52dB		
Tensile Stre	ngth	882 N			
Emigration			Non-Emigrant to ABS resin		
Applicable 1	emperature	-10°C~+60°C(-14°F~+140°F)			
Standard		IEEE 1394, UL 2560 AWM 60°C 30V VW-1			

PARALLEL DIGITAL VIDEO CABLE

3037

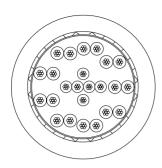


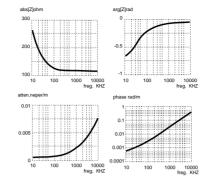
PARALLEL DIGITAL VIDEO INTERFACE STANDARD CCIR 656 satisfied cable MOGAMI Part No. 3037. MOGAMI Parallel Digital Video Interface Cable is available from stock as well as the only one existing cable in the world now that meets the computer interface SCSI - II. It resembles others in execution of very high speed transmittance through twisted pair conductors in parallel, though there is a slight difference in applicable frequency and difference between balanced (differential) for digital video and unbalanced (single ended) for SCSI.

	CORE IDENTIFICATION TABLE							
Core No.	Insulation Colour	Surface Print Colour	Surface Print Mark	Remarks				
1.	SKY BLUE	RED	_	DATA A				
2.	SKY BLUE	BLACK	_	DATA A				
3.	LIGHT GREEN	RED	_	SYSTEM GROUND				
4.	SKY BLUE	RED		DATA B				
5.	SKY BLUE	BLACK		DATA B				
6.	LIGHT GREEN	BLACK	_	SYSTEM GROUND				
7.	YELLOW	RED	_	CLOCK SIGNAL				
8.	YELLOW	BLACK	_	CLOCK SIGNAL				
9.	GRAY	RED		DATA 0~7				
10.	GRAY	BLACK		DATA 0~7				
11.	GRAY	RED		DATA 0~7				
12.	GRAY	BLACK		DATA 0~7				
13.	GRAY	RED	_	DATA 0~7				
14.	GRAY	BLACK	_	DATA 0~7				
15.	WHITE	RED	DOTTED LINE	DATA 0~7				
16.	WHITE	BLACK	DOTTED LINE	DATA 0~7				
17.	WHITE	RED		DATA 0~7				
18.	WHITE	BLACK		DATA 0~7				
19.	WHITE	RED		DATA 0~7				
20.	WHITE	BLACK		DATA 0~7				
21.	WHITE	RED		DATA 0~7				
22.	WHITE	BLACK		DATA 0~7				
23.	WHITE	RED	_	DATA 0~7				
24.	WHITE	BLACK	_	DATA 0~7				

WIRING INSTRUCTION: Use YELLOW COLOURED INSULATION TWISTED PAIR only for CLOCK SIGNAL, as the pitch of this twisted pair is made shorter than other twisted pairs.

DIGITAL INTERFACE CABLES





freq kHz	abs(z)ohm	arg(z)rad	atten npr/m	phase rad/m
10	248.988868	-0.662248	0.000442	0.000569
20	183.979031	-0.552778	0.000558	0.000907
50	139.415383	-0.343838	0.000677	0.001896
100	127.545956	-0.205028	0.000747	0.003607
200	123.046573	-0.126159	0.00089	0.00706
500	119.076685	-0.083306	0.001408	0.017149
1000	115.898775	-0.06685	0.002194	0.033423
2000	113.148393	-0.0528	0.003323	0.065361
5000	110.930495	-0.03825	0.005245	0.161097
10000	110.325506	-0.0308	0.0076	0.327579

SPECIFICATIONS

Part No.		3037
No. of Twisted Pair		11
No. of System Ground		2
Conductor Size (mm)		0.219mm² (#24AWG)
Insulation	Ov. Dia. (mm)	1.00~1.2 \(\phi \) (0.0393~0.0472")
	Material	XLPE
Binder	Thickness	0.05mm (0.002")
	Material	Paper Tape
Overall Braided Shield	Detaiis	24/10/0.12TA
	Coverage	Min. 85%
Jacket	Ov. Dia. (mm)	10.5±1.0 φ (0.413±0.0394")
	Material	Flexible PVC
	Colour	BLACK
Roll Sizes		77 m (250Ft) 153 m (500Ft)
Weight		22Kg / 153m (500Ft)

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Conductor	$0.082\Omega/m(0.025\Omega/Ft)$
	Shield	$0.009\Omega/m(0.0027\Omega/Ft)$
Capacitance at 1kHz, 20°C		43.9pF/m
(Effective capacitance value between inner twin)		(13.4pF/Ft)
Characteristic Impedance at 14MHz		110Ω±10%
Attenuation at 10MHz		0.0712dB/m
		(0.0217dB/Ft)
Phase Constant at 10MHz		0.34rad/m
Delay time of Electromagnetic Wave		5.1~5.6nS/m
		(1.55~1.71nS/Ft)
Suggested Applicable Maximum Length		50~80m at the maximum
		(164~262Ft at the maximum)
Voltage Breakdown		Must withstand at DC 500V/15sec.
Insulation Resistance at DC 500V, 20°C		10⁵ MΩ • m Min.
Emigration		Non-Emigrant to ABS resin
Applicable Temperature		-20°C~+70°C (-4°F~+158°F)
Applicable Connector		Dsub 25P
Standard		CCIR 656
		UL 758 AWM STYLE 20125 VW-1 80°C, 30V

How much the difference of delay time between each pair can be made smaller is the key to how long the cable can be used, as the transmitted parallel signals must be received at the same time in the parallel digital video interface (fast parallel transmittance) system. Therefore, specification of #3037 parallel digital video cable is subject to change without notice, as it may be improved for longer distance application.

GUITAR CABLES

GUITAR CABLES/HIGH IMPEDANCE TRANSMISSION CABLES



2319



2524

Most musical instrument sound pick-ups such as those in electric guitars are comprised of high impedance circuits driven by voltage, in other words by very small electrical current flow. Therefore, so-called MICROPHONICS (noise) becomes a critical problem. (Microphonics means noise that is generated when the cable is moved and or tapped when the cabling circuit is a high impedance link.) Guitar cables must be counter-measured against this, so, a

conductive PVC layer is placed under the shield conductor in most cases even though it may have a bad affect on audio sound quality. Therefore, the conductive PVC (black carbon PVC) layer must be removed together with the shielding conductor when wiring, otherwise we receive a strange claim that the cable is shorting.

SPECIFICATIONS

Configuration			
Part No.		2319	2524
Conductor	Details	12/0.18TA	50/0.12A
	Size(mm ²)	0.305mm ² (#23AWG)	0.565mm ² (#20AWG)
Insulation	Ov. Dia. (mm)	1.6 \(\phi \)(0.063")	2.7 ϕ (0.106")
	Material	PE	
	Colour	Clear	
Sub-Shield	Ov. Dia. (mm)	1.8 ϕ (0.071")	3.3 \(\phi(0.130") \)
	Material	Conductive PVC (Carbon PVC)	
	Colour	Black	
Main-Shield	Served-Shield	Approx.38/0.16TA	Approx.55/0.18A
Jacket	Ov. Dia. (mm)	5.0 \(\phi (0.197")	6.0 \(\phi(0.236 \) ")
	Material	Р	VC
Colour		Black	
Roll Sizes		100 m (328Ft)	100 m (328Ft) / 200m (656Ft)
Weight per 100 (328 Ft) m roll		3.5Kg	5.1Kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.		2319	2524	
DC Resistance	Inner Conductor	0.064Ω/m(0.020Ω/Ft)	0.033Ω/m(0.010Ω/Ft)	
at 20°C	Shield Conductor	$0.026\Omega/\text{m}(0.0079\Omega/\text{Ft})$	0.014Ω/m(0.0043Ω/Ft)	
Capacitance at 1	kHz, 20°C	155pF/m(47.3 pF/Ft)	130pF/m(39.7 pF/Ft)	
Inductance		0.3μH/m(0.092μH/Ft)	0.2μH/m(0.061μH/Ft)	
Electrostatic No	ize*	0.13mV Max.	0.15mV Max.	
Electromagnetic	Noise At 10kHz*	0.07mV Max.	0.07mV Max.	
Microphonics*		0.3mV Max	0.3mV Max	
Voltage Breakdo	own	Must withstand at DC 500V/15sec.		
Insulation Resis	tance	10 ⁵ MΩ • m Min. at DC 500V, 20°C		
Flex Life*		11,000 cycles	15,000 cycles	
Tensile Strength (26°C,65%RH)		303 N 578 N		
Emigration		Non-Emigrant to ABS resin		
Applicable Temperature		-20°C~ +60°C (-4°F~+140°F)		

 $[\]ast$ Using standard testing methods of Mogami Wire & Cable Corp.

MULTICORE CABLES

MECHATRO OVERALL SHIELD CABLES





Multi purpose #28AWG superflexble overall shielded cable available in twisted pair configuration for electromagnetic noise rejection as well as in economy and easy wiring general round configuration in compact gray jacket. All these cables are approved as UL SUBJECT 758 AWM 20002 VW-1SC.

CABLE SPECIFICATIONS

Conductor	Details	7/0.127 TA (7×#37AWG)
	Size	0.088mm² (#28AWG)
Insulation	Ov. Dia. (mm)	0.95 ¢(0.0374")
	Material	PVC
Overall Shield	Туре	Braided shield
	Coverage	Minimum 85%
Ov. Jacket	Material	Flexible PVC
	Colour	Dark Gray

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	0.21Ω/m(0.064Ω/Ft)
Voltage Breakdown	Must withstand at DC 500V/15sec.
Insulation Resistance	10 ⁴ MΩ • m M in. at DC 500V, 20°C
Chracteristic Impedance*	90~115Ω (at 10MHz)
Cable Skew*	0.517nS/m
Delay Time*	5.5~6.1 n S/m
Velocity Ratio*	0.55~0.60
Emigration	Non-Emigrant to ABS resin
Applicable Temperature	-20°C~ +70°C (-4°F~+158°F)
Standard	UL 758 AWM 20002 VW-1SC 30V 80°C

^{*} Data for Twisted Pair Type Only.

	ROUND TYPE					
Part No.	No. of Conductor	Ov. Dia. (mm)	Roll size and weight per roll	Basical structure		
2861	7	5.2¢ (0.205")	6kg/153m (500Ft)	(B)(B)(B)		
2862	12	6.4ϕ (0.252")	8.5kg/153m (500Ft)			
2863	24	8.4¢ (0.331")	15kg/153m (500Ft)			
2835	30	9.0¢ (0.354")	18kg/153m (500Ft)			
2864	40	10.0 <i>¢</i> (0.394")	20kg/153m (500Ft)			
2865	50	11.0 <i>¢</i> (0.433")	25kg/153m (500Ft)	(B)(B)(B)		
2866	64	12.3 (0.484")	30kg/153m (500Ft)			

	TWISTED PAIR TYPE					
Part No.	No. of Pair	Ov. Dia. (mm)	Roll size and weight per roll	Basical structure		
2840	5-PR	7.4¢(0.291")	10.8kg/153m (500Ft)			
2841	7-PR	$7.8 \phi (0.307")$	12kg/153m (500Ft)	() () () () () () () () () ()		
2842	8-PR	8.4 \(\phi (0.331")	13.6kg/153m (500Ft)			
2843	10-PR	9.5 <i>ϕ</i> (0.374")	17kg/153m (500Ft)	(*************************************		
2845	13-PR	10.0 <i>ϕ</i> (0.394")	19kg/153m (500Ft)	(
2847	18-PR	11.5 \(\phi \) (0.453")	25kg/153m (500Ft)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
2848	20-PR	11.8 \(\phi \) (0.465")	26kg/153m (500Ft)			
2849	25-PR	13.0 ¢ (0.512")	15kg/77m (250Ft)			
2851	32-PR	14.5 ¢ (0.571")	19kg/77m (250Ft)			

Option : FERRITE CORE is available as a countermeasure against EMI noise.

0.15mm²(#26AWG) CONDUCTOR OVERALL SHIELD CABLE SERIES







0.15mm² (#26AWG) conductor overall shield cable series is comprised of about two times larger conductor size as mechatro overall shield cable series. There is no community in design policy, as they were originally custom-made cables and remained as standard items one by one, however, they are suitable where larger conductor size, flexibility and compactness are all required. Available from five up to nine conductor, not in twisted pair configuration.

SPECIFICATIONS

Conductor	Details	30/0.08A (30×#40AWG)
	Size	0.150 mm² (#26AWG)
Insulation	Ov. Dia. (mm)	1.0 \(\phi(0.0394 ")
	Material	PVC
Overall Shield	Туре	See Each Spec.
	Coverage	85% (Braid)~ 100%(Served)
Ov. Jacket	Material	Flexible PVC
	Colour	Dark Gray or Black

ELECTRICAL & MECHANICAL CHARACTERISTICS

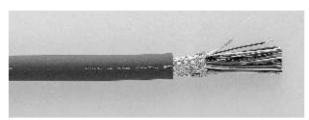
DC Resistance at 20°C	$0.13\Omega/m(0.040\Omega/Ft)$	
Electromagnetic Noise	0.1mV Max.	
Voltage Breakdown	Must withstand at DC 500V/15sec.	
Insulation Resistance	10 ⁴ MΩ • m Min. at DC 500V, 20°C	
Emigration	Non-Emigrant to ABS resin	
Applicable Temperature	-20°C~+70°C (-4°F~+158°F)	
Standard	UL 758 AWM 20002 VW-1SC 30V 80°C Except for Part No. 2642-08 / No. 2789-00	

Part No.	No. of Conductor	Ov. Dia. (mm)	Type of Shield	Colour	Roll size and weight per roll
2757-00	5	5.0¢(0.197")	Braid	Black	5.5kg/153m (500Ft)
2814-00	6	5.4 <i>ϕ</i> (0.213")	Braid	Black	6.2kg/153m (500Ft)
2642-08	7	5.3 <i>ϕ</i> (0.209")	Served	Gray	8.8kg/200m (656Ft)
2789-00	8	$5.6\phi(0.220")$	Served	Black	9.0kg/200m (656Ft)
2871-00	9	5.8¢(0.228")	Served	Black	8.0kg/153m (500Ft)

 $\label{thm:correction} \mbox{Option: FERRITE CORE is available as a countermeasure against EMI noise.}$

0.14mm² (#26AWG) SIZE 50-CONDUCTOR OVERALL SHIELD CABLE

2580-08



Part No.2580-08 was a custom-made cable and then remained as standard stock item because of 50-conductor numbers in each size of 0.14mm² (#26AWG) with overall braided shield. This cable is suitable where larger conductor size than mechatro series is needed. UL rated as AWM 2626 VW-1SC, not in twisted pair configuration.

SPECIFICATIONS

Conductor	Details	7/0.16TA (7 × #34AWG)
	Size	0.14mm² (#26AWG)
Insulation	Ov. Dia. (mm)	1.0 ¢(0.0394")
	Material	PVC
Drain Wire	Details	20/0.18TA (20 × #33AWG)
	Size	0.51mm ² (#21AWG)
Overall Shield	Braid	32/9/0.12TA
Overall Siller	Coverage	Minimum 85%
	Ov. Dia. (mm)	11.5 \(\phi(0.453")
Ov. Jacket	Material	Flexible PVC
	Colour	Dark Gray

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	0.14Ω/m(0.043Ω/Ft)
Electromagnetic Noise	0.1mv Max.
Voltage Breakdown	Must withstand at DC 500V/15sec.
Insulation Resistance	10 ⁴ MΩ • m Min. at DC 500V, 20°C
Emigration	Non-Emigrant to ABS resin
Applicable Temperature	-20°C~+70°C (-4°F~ +158°F)
Standard	UL 758 AWM 2626 VW-1SC 80°C, 30V
Roll Size	153m (500Ft)
Weight Per 153m (500Ft) roll	30kg
	•

MINIATURE UNSHIELDED MULTICONDUCTOR CONTROL CABLE



	Part No.	No. of Conductor	Ov. Dia. (mm)	Roll size and weight per roll
ľ	2329-08	7	5.8 \(\phi (0.228")	5kg/153m (500Ft)
	2245-08	12	6.0 \(\phi \)(0.236")	6kg/153m (500Ft)
	2249-08	24	8.0 ¢ (0.315")	11kg/153m (500Ft)

Miniature unshielded multiconductor control cable series were originally designed for a remote control use when a wireless remote control equipment was not developed. Therefore, it is designed to be mechanically very strong with reignforce polyester fiber inside of each conductor which is MOGAMI original development, so that it is still suitable where compactness, flexibility and mechanical strength is required without shield. Conductor size is 0.08 mm² (very close to #28AWG) and rated as UL Subject 758 AWM 20002 VW-1SC, not in twisted pair configuration.

SPECIFICATIONS

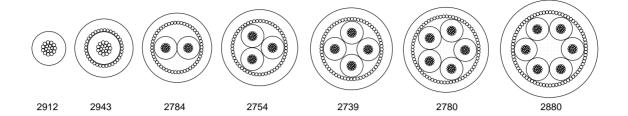
Conductor	Details	16/0.08A (16×#40AWG)		
	Size	0.08mm ² (#29AWG)		
Insulation	Ov. Dia. (mm)	1.0 \(\phi(0.0394")		
	Material	PVC		
Ov. Jacket	Material	Flexible PVC		
Ov. backet	Colour	Dark Gray		

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	0.23Ω/m(0.070Ω/Ft)
Voltage Breakdown	Must withstand at DC 500V/15sec.
Insulation Resistance	10 ⁴ MΩ • m Min. at DC 500V, 20°C
Emigration	Non-Emigrant to ABS resin
Applicable Temperature	-20°C~+70°C (-4°F~ +158°F)
Standard	UL 758 AWM 20002 VW-1SC 80°C,30V

ULTRAFLEXIBLE MINIATURE CABLES

ULTRAFLEXIBLE MINIATURE CABLES



Most of these miniature cables were originally developed one by one as custom cable for a magnetic head lead which must be swiftly moved to speficified position precisely by small energy such as a floppy disk drive. And then, some of them remained as continued items close to standard stock products, finding out unfixed varied demand in long period of time. For such application, these cables are indispensable, even thanked.

☐ LEAD WIRE

Part No.	Conductor Size	Ov. Dia.	Available Colour
2680-0X	#33 AWG (0.0314mm²)	0.6mm (0.0236")	01
2912-0X	#28AWG (0.0854mm²)	0.85mm (0.0335")	Standard 10 Colours

☐ SHIELDED CABLES

Nos. of	#33 AWG SERIES		#32 AWG SERIES		#28 AWG SERIES	
Conductor	Part No.	Ov. Dia.	Part No.	Ov. Dia.	Part No.	Ov. Dia.
				1.0mm		1.5mm
1			0.444.00/	(0.0394")		(0.0591")
I			2444-0X	1.7mm	2943-00	2.3mm
2		1.8mm	0.400.00	(0.0669")		(0.0906")
2	2784-0X	(0.0709")	2490-08	1.8mm	2794-00	2.45mm
•		1.95mm		(0.0709")		(0.0965")
3	2754-08	(0.0768")	2879-08	2.0mm	2790-00	2.7mm
		2.1mm	2769-0X	(0.0787")	2929-00	(0.106")
4	2739-0X	(0.0827")				
_		2.2mm				
5	2780-00	(0.0866")			_	
•		2.5mm				
6	2880-00	(0.0984")				
Flexibility / Flex Life						
	1		3		2	
Easiness of cable end						
treatment	3		2		1	
Low cost		2		4		2
			1		3	

ESTIMATION: 1:TOP 2:MEDIUM 3:LOW

REMARKS: Part No. 2880-00 is basically custom order.

CAUTION: Extremely weak against Tensile Strength.

ULTRAFLEXIBLE MINIATURE CABLES

SPECIFICATIONS

☐ LEAD WIRE

SPECIFICATIONS

Part No.	Conductor		Insulation		Weight
rait No.	Details Size (mm²)		Ov. Dia.(mm)	Material	
2680	25 / 0.04A	0.0314mm ² (#33AWG)	0.60¢(0.0236")	Flexible PVC	0.52kg
2912	17 / 0.08A	0.0854mm ² (#28AWG)	0.85 \(\phi \) (0.0335")	Flexible PVC	1.03kg

Common Specification	Roll Size	Colour	Details of Colours
	2,000 Ft spool	10 colours	Black/Brown/Red/Orange/Yellow/ Green/Blue/Violet/Gray/White

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 20°C	Tensile Strength	Flex Life
			(cycles)
2680	0.6Ω / m $(0.183\Omega$ / Ft)	8.3 N	21,000
2912	0.22Ω / m (0.0672Ω / Ft)	21 N	32,000

COMMON CHARACTERISTICS

Voltage breakdown	Must Withstand at DC 500V/15sec.
Insulation resistance	10 ³ MΩ • m Min. at DC 250V, 20°C
Emigration	Non-Emigrant to ABS resin
Applicable temperature	-20°C~+80°C (-4°F~+176°F)
Standard	UL758 STYLE 1571 80°C 30V VW-1SC

☐ SHIELDED WIRE #32AWG SERIES

SPECIFICATIONS	Common Construction	Conductor		Insulation	
		Details	Size (mm ²)	Ov. Dia.(mm)	Material
		7/0.08TA	0.0351mm ² (#32AWG)	$0.53 \phi (0.0209")$	Flexible PVC

Part No	Nos. of Conductor	Shield Served Shield	Jacket		Colour	Roll Size	Weight
			Ov. Dia.(mm)	Material			
2444	1	Approx. 23/0.08A	1.0 \(\phi \) (0.0394")		Black/Gray		0.75 kg
2490	2	Approx. 30/0.10A	1.7 \(\phi \) (0.0669")	Flexible PVC	Gray	305m (1,000Ft)	1.55 kg
2879	3	Approx. 30/0.10A	1.8 \(\phi \) (0.0709")		Gray		1.83 kg
2769	4	Approx. 40/0.10A	2.0 \(\phi \) (0.0787")		Black/Gray		2.28 kg

Exception Ov. Dia. of conductor insulation of Part No.2444 is 0.55¢ (0.0217"). Also, stranded conductor of 0.08mm dia. bare copper, not tin plated.

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Re Inner Conductor	Flex Life (cycles)	
2444	$0.53\Omega/m(0.162\Omega/Ft)$	0.16Ω/m (0.0488Ω/Ft)	13,000
2490	0.55Ω/m	$0.08\Omega/m$ (0.0244Ω/Ft)	9,100
2879	(0.168Ω/Ft)	$0.08\Omega/m$ (0.0244Ω/Ft)	22,000
2769		$0.06\Omega/m$ ($0.0183\Omega/Ft$)	20,000

COMMON CHARACTERISTICS

Voltage breakdown	Must Withstand at DC 250V/15sec.
Insulation resistance	10 ³ MΩ • m Min. at DC 250V, 20°C
Tensile strength (26°C, 65%RH)	9.8 N (Per One Core Conducto)
Emigration	Non-Emigrant to ABS resin
Applicable temperature	-20°C~+80°C (-4°F~+176°F)
Standard	UL758 STYLE 2844 80°C 30V VW-1SC 32AWG

Exception: UL approval of Part No.2444 is STYLE 1682 60°C 30V VW-1SC 32AWG.

ULTRAFLEXIBLE MINIATURE CABLES

☐ #28AWG SERIES

SPECIFICATIONS

Common Construction	Conductor		Insulation		
	Details	Size (mm²)	Ov. Dia.(mm)	Material	
	17/0.08TA	0.0854mm ² (#28AWG)	0.83¢(0.0327")	Flexible PVC	

Part No	Nos. of Conductor	Filler	Shield Served Shield	Jacket		Colour	Roll Size	Weight
				Ov. Dia.(mm)	Material			
2943	1	-	Approx. 35/0.08A	1.5 \(\phi \) (0.0591")		Black		1.37kg
2794	2	-	Approx. 52/0.08A	2.3 \(\phi (0.0906")	Flexible PVC	Black	305m (1,000Ft)	2.55kg
2790	3	-	Approx. 70/0.08A	2.45 \(\phi \) (0.0965")		Black		3.25kg
2929	4	Polypropylene	Approx. 83/0.08A	2.7 \(\phi (0.1063")		Black		4.0kg

Exception: Ov. Dia. of conductor insulation of Part No.2943 is $0.85\,\phi$ (0.0355").

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 2	Flex Life	
	Inner Conductor	Shield Conductor	(cycles)
2943		0.11Ω/m (0.0336Ω/Ft)	36,000
2794	0.22 Ω/m	0.07 Ω/m (0.0214Ω/Ft)	16,000
2790	(0.0671Ω/Ft)	0.053Ω/m (0.0162Ω/Ft)	28,000
2929		0.045 Ω/m (0.0137Ω/Ft)	21,000

COMMON CHARACTERISTICS

Voltage breakdown	Must Withstand at DC 250V/15sec.
Insulation resistance	10 ³ MΩ • m Min. at DC 250V, 20°C
Tensile strength (26°C, 65%RH)	21 N (per one core conductor)
Emigration	Non-Emigrant to ABS resin
Applicable temperature	-20°C~+80°C (-4°F~+176°F)
Standard	UL758 STYLE 2844 80°C 30V VW-1SC 28AWG

☐ #33AWG SERIES SPECIFICATIONS

Common	Construction	Conductor		Insulation		
		Details	Size (mm ²)	Ov. Dia.(mm)	Material	
		25/0.04A	0.0314mm ² (#33AWG)	0.60 \(\phi \) (0.0236")	Flexible PVC	

Part No.	Nos. of Conductor	Filler	Shield Served Shield	Jac	ket	Colour	Roll Size	Weight
				Ov. Dia.(mm)	Material			
2784	2	-	Approx. 35/0.08A	1.8 \(\phi \) (0.0709")		Black/Gray		1.56kg
2754	3	-	Approx. 54/0.08A	1.95 ϕ (0.0768")	Flexible PVC	Gray	305m (1,000Ft)	2.05kg
2739	4	Polypropylene	Approx. 60/0.08A	2.1 ϕ (0.0827")		Black/Gray		2.44kg
2780	5	Polypropylene	Approx. 65/0.08A	2.2 \(\phi (0.0866")		Black		2.85kg
2880	6	Polypropylene	Approx. 68/0.08A	2.5 \(\phi \) (0.0984")		Black		3.24kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 2	Flex Life	
	Inner Conductor	Shield Conductor	(cycles)
2784		0.1 Ω/m (0.0305 Ω/Ft)	20,000
2754		0.07 Ω/m (0.021 Ω/Ft)	
2739	0.6 Ω/m (0.183 Ω/Ft)	0.06 Ω/m (0.0184 Ω/Ft)	57,000
2780		0.057 Ω/m (0.0174 Ω/Ft)	35,000
2880		0.05 Ω/m (0.0153 Ω/Ft)	

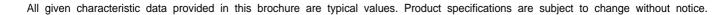
COMMON CHARACTERISTICS

Voltage breakdown	Must Withstand at DC 250V/15sec.
Insulation resistance	10 ³ MΩ • m Min. at DC 250V, 20°C
Tensile strength(26°C, 65%RH)	8.3 N (per one core conductor)
Emigration	Non-Emigrant to ABS resin
Applicable temperature	-20°C~+80°C (-4°F~+176 °F)
Standard	UL758 STYLE 2844 80°C 30V VW-1SC 33AWG

☐ STANDARD COLOUR COMBINATION OF SHIELDED CORES

	Nos. of Cores		1	2	3	4	5	6
	Core Colour		White	White/Red	White/Red/	White/Red/	White/Red/Black/	White/Red/Black/
					Black	Black/Yellow	Yellow/Blue	Yellow/Blue/Green
Ì	Exception	Part No.	2769	White/Yello	w/Blue/Green			

Cables are long term products, and cable failure often results in problems in which the original cause is extremely difficult to detect. Choosing a reliable, long life, and multiple application cable from the start, is the key to safety, efficiency, and getting the best value. Always select a quality product, and use it at great length to better coexist with our precious earth.





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2339-08 73 2864-08 71 3156-00 37,38 5141XX 62 MIDH-10 45 2333-00 17,18 2865-08 71 3157-00 37,38 5142XX 62 MIDH-15 45 2336-00 17,18 2865-08 71 3158-00 37,38 5142XX 62 MIDH-15 45 2336-00 17,18 2867-00 72 3159 47,48 50 5145XX 62 MIDH-15 45 2331 33,34 2879-08 74,78,76 3161-00 47,48,50 5145XX 62 MIDH-20 45 2435-00 13,14 2893 2,56,78,9,10 3162-00 47,48,50 5145XX 62 MIDH-20 45 2435-00 13,14 2893 2,56,78,9,10 3162-00 47,48,50 5145XX 62 MIDH-20 45 2435-00 13,14 2893 2,56,78,9,10 3162-00 47,48,50 5145XX 62 MIDH-20 45 2435-00 13,14 2893 2,56,78,9,10 3162-00 47,48,50 5145XX 62 MIDH-20 45 2444 74,75,76 2950-00 33,34 3163-00 47,48,50 5145XX 62 MIDH-20 45 2444 74,75,76 2912 74,75 3173-00 47,8 50 5145XX 62 MIDH-30 45 2444 74,75,76 2912 74,75 3173-00 47,8 50 5145XX 62 MIDH-30 45 2444 70 13,14 2893-00 30,32 3177-18 19,20 5858-03 41 PLD-12 5,47 2534-00 89,70 2819-00 30,32 3177-18 19,20 5858-03 41 PLD-18 5,47 2534-00 89,10 27 2910-00 30,32 3177-18 19,20 5858-03 41 PLD-18 5,47 2534-08 34,34 2939-00 22,426 3200-00 33,34 40 5858-15 41 PLD-36 5,47 2543-08 43,44 2939-00 22,426 3209-00 85,52 558-00 41 PLD-36 5,47 2543-08 43,44 2939-00 22,426 3209-00 85,52 558-00 41 PLD-36 5,47 2549 41 2,27 2,28 20 32,42 63 3209-00 33,34 0 5858-15 41 PLD-60 5,47 2549 41										
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2388-00 17.18 2871-00 72 3159 47.48 5144XX 62 MIDI-SD 45 52812 33.34 2870-08 74.76 3161-00 47.49.50 5145XX 62 MIDI-20 45 2422-00 33.34 2880-00 74.76 3161-00 47.49.50 5145XX 62 MIDI-20 45 2424-00 13.14 2803-0 15.67 8.91 3161-00 47.49.50 5145XX 62 MIDI-20 45 2444-00 13.14 2801-00 15.16 37.2-00 47.49.50 5145XX 62 MIDI-30 45 2444-00 13.14 2801-00 15.16 37.2-00 47.49.50 5858-03 41 MIDI-30 45 2444-00 13.14 2801-00 15.16 37.2-00 47.49.50 5858-03 41 PJID-18 5.47 2524-00 69.70 2919-00 30.32 3177-18 19.20 5858-03 41 PJID-18 5.47 2534 89.10.27 2821-00 30.32 3177-18 19.20 5858-03 41 PJID-18 5.47 2534 89.10.27 2821-00 30.32 3177-18 19.20 5858-03 41 PJID-36 5.47 2534 89.10.27 2823-00 23.42.65 3206-08 51.52 5858-03 41 PJID-80 5.47 2549 11.12.27 2837-08 43.44 2929-00 74.76 3200-00 33.3440 5558-03 41 PJID-80 5.47 2549 11.12.27 2837-00 84.344 2933-00 23.24.26 3228-00 52.454-8 38.858-03 41 PJID-80 5.47 2559-00 81.13.14 2833-00 23.24.26 3228-00 52.547-8 880-02 41 PJID-80 5.47 2559-00 81.13.14 2833-00 23.24.26 3228-00 52.547-8 880-02 4.1 PJID-80 5.47 2559-00 81.13.14 2833-00 23.24.26 3228-00 33.34 880-02 6.41 PJID-12 5.47 2559-00 81.13.14 2833-00 23.24.26 3228-00 37.38 880-02 6.41 PJID-12 5.47 2559-00 81.13.14 2833-00 23.24.26 3228-00 37.38 880-02 6.41 PJID-12 5.47 2559-00 87 3 2339-00 23.24.26 3228-00 37.38 880-02 6.41 PJID-12 5.571-08 60 2335-00 23.24.26 3228-00 37.38 880-06 6.41 PJID-12 5.579-08 55 2939-00 23.24.26 3328-00 37.38 880-06 6.41 PJID-12 5.579-08 55 2939-00 23.24.26 33838-02 41 88-25 6.41 PJID-12 5.580-08 73 2839-00 23.24.26 33838-02 41 88-02 6.41 PJID-14 5.580-08 55 2944-00 30.32 3838-05 41 88-03 6.41 PJID-14 5.580-08 55 2948-00 45.46 3838-02 41 88-03 6.41 PJID-14 6.6 6.41 PJID-15 5.45 680-08 55 2948-00 45.46 3838-03 41 88-00 6.41 PJID-17 5.6 6.2 680-08 55 2948-00 45.46 3838-03 41 88-00 6.41 PJID-17 6.6 6.2 680-08 55 2948-00 45.46 3838-03 41 88-00 6.41 PJID-17 6.6 6.2 680-08 55 2948-00 45.46 8838-03 41 88-00 6.41 PJID-17 6.6 6.2 680-08 55 2948-00 45.46 8838-03 41 88-00 6.41 PJID-17 6.6 6.2 680-08 55 2948-00 45.46 883										
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2435-00 13,14 2893	2381		2879-08	74,75,76	3160-00		5145XX	62	MIDI-20	45
2444 74,75,76 2895.00 33,34 3163.00 47,49,50 5BSB-02 41 MIDI-300 45 2447-00 13,14 2912 74,75 3173-00 21 5BSB-05 41 PJD-12 5,47 2524 89,10,27 2919-00 30,32 3177-18 19,20 5BSB-05 41 PJD-18 5,47 2534 89,10,27 2921-00 30,32 3178-18 19,20 5BSB-10 41 PJD-46 5,47 2537-08 43,44 2929-00 74,76 3200-00 33,44 910-48 5,47 2543-08 43,44 2930-00 23,24,26 3206-06 65,66 5BSB-15 41 PJD-60 5,47 2549 111,12,27 2932-00 23,24,26 3220-00 33,34 19,114-18 5 2552-00 8,13,14 2933-00 23,24,26 3222-00 37,38 8B-03 6,41 PJM-18 5 2569-08 8,23,14 2935-00	2422-00	33,34	2880-00	74,76	3161-00	47,49,50	5146XX	62	MIDI-20D	45
2447-00 13,14 2901-00 15,16 3172-00 21 5858-03 41 P,ID-12 5,47 2490-08 74,75,76 2912 74,75 1373-00 47,48 5858-05 41 P,ID-12 5,47 2524-00 69,70 2919-00 30,32 3177-18 19,20 5858-08 41 P,ID-36 5,47 2537-08 43,44 2939-00 74,76 300-00 33,34 05868-10 41 P,ID-36 5,47 2546-08 33,34 2931-00 23,24,26 3206-08 51,52 5858-30 41 P,ID-60 5,47 2546-08 31,314 2934-00 23,24,26 3220-00 35,34 058-00 41 P,ID-60 5,47 2566-00 11,12,27 2932-00 23,24,26 3220-00 25,474.8 88-02 6.11 P,IM-12 5 2579-08 55 2936-00 23,24,26 3232-00 37,38 88-06 6.41 P,IM-46 5 <td>2435-00</td> <td>13,14</td> <td>2893</td> <td>2,5,6,7,8,9,10</td> <td>3162-00</td> <td>47,49,50</td> <td>5147XX</td> <td>62</td> <td>MIDI-30</td> <td>45</td>	2435-00	13,14	2893	2,5,6,7,8,9,10	3162-00	47,49,50	5147XX	62	MIDI-30	45
2490.08 7.4,75,76 2912 7.4,75 3173-00 47,48 5858-05 41 PJD-24 5,47 2524-00 69,70 2919-00 30,32 3177-18 19,20 5858-08 41 PJD-24 5,47 2537-08 43,44 2929-00 74,76 3200-00 33,34 5858-15 41 PJD-46 5,47 2546-08 33,34 2931-00 23,24,26 3206-08 65,66 5858-10 41 PJD-46 5,47 2549 11,12,27 2932-00 23,24,26 3208-08 65,66 5858-30 41 PJD-60 5,47 2556-00 8,13,14 2933-00 23,24,26 3229-00 37,38 88-01 6,41 PJM-18 6 2577-08 55 2930-00 23,24,26 3232-00 37,38 88-06 6,41 PJM-36 5 2580-08 73 2937-00 23,24,26 3338-02 41 88-25 6,41 PJM-46 5	2444	74,75,76	2895-00	33,34	3163-00	47,49,50	5B5B-02	41	MIDI-30D	45
2524-00 69.70 2919-00 30.32 3177-18 19.20 5858-08 41 PJD-24 5.47 2534 8.9,10,27 2921-00 30.32 3178-18 19.20 5858-10 41 PJD-36 5.47 2537-08 43.44 2829-00 74.76 3200-00 33.34.40 5858-15 41 PJD-46 5.47 2543-08 43.44 2829-00 23.24.26 3206-08 51.52 5858-20 41 PJD-67 5.47 2546-08 33.34 2930-00 23.24.26 3220-08 65.66 5858-30 41 PJD-77 5.47 2549 11,12,27 2932-00 23.24.26 3227-08 56 680-01 6.41 PJD-77 5.47 2558-00 43.44 2939-00 23.24.26 3227-08 56 88-01 6.41 PJD-77 5.47 2558-00 43.44 2939-00 23.24.26 3231-00 37.38 88-03 6.41 PJD-74 5.5 2556-08 43.44 2934-00 23.24.26 3233-00 37.38 88-06 6.41 PJD-74 5.5 2557-08 55 2936-00 23.24.26 3233-00 37.38 88-10 6.41 PJD-74 5.5 2559-08 73 2937-00 23.24.26 3233-00 37.38 88-10 6.41 PJD-74 5.5 2562-08 73 2939-00 23.24.26 3233-00 22 88-16 6.41 PJD-74 5.5 2642-08 72 2939-00 23.24.26 3388-03 41 88-25 6.41 PJD-77 6.5 2642-08 72 2939-00 33.24 3838-03 41 88-33 6.41 PJD-77 6.5 2689-08 55 2944 27.28 3388-03 41 88-50 6.41 PJD-77 6.6 2689-08 55 2947-00 36.3 3838-03 41 88-50 6.41 PJD-77 6.6 2699-08 55 2947-00 35 3838-03 41 88-50 6.41 PP-01 6.6 2699-09 55 2947-00 35 3838-03 41 88-60 6.41 PP-06 6.0 2699-00 55 2947-00 35 3838-03 41 88-60 6.41 PP-06 6.0 2699-00 55 2947-00 35 3838-03 41 88-60 6.41 PP-06 6.0 2699-00 55 2947-00 35 3838-03 41 88-60 6.41 PP-06 6.0 2699-00 74.76 3031 15.16 4848-03 41 88-60 6.41 PP-06 6.0 2759-00 74.76 3031 15.16 4848-03 41 88-00 6.41 PP-06 6.0 2769-00 74.76 3033-00 6.48 4848-03 41 88-00 6.41 PP-06 6.0 2769-00 74.76 3033-00 6.48 4848-03 41 88-00 6.41 PP-06 6.0 2769-00 74.76 3033	2447-00	13,14	2901-00	15,16	3172-00	21	5B5B-03	41	PJD-12	5,47
2534 8,910.27 2921-00 30.32 3178-18 19,20 585B-10 41 PJD-36 5,47 2537-08 43,44 2920-00 74,76 3200-00 33,44,00 585B-16 41 PJD-46 5,47 2546-08 33,34 2931-00 23,24,26 3206-08 65,66 585B-30 41 PJD-72 5,47 2549 11,12,27 2932-00 23,24,26 3228-00 2,54,748 88-01 6,41 PJM-12 5 5,47 8 88-02 6,41 PJM-18 6 2557-00 8,13,14 2933-00 23,24,26 3228-00 37,38 88-06 6,41 PJM-18 6 2577-08 55 2936-00 23,24,26 3232-00 37,38 88-06 6,41 PJM-36 5 2590-00 23,24,26 3232-00 37,38 88-10 6,41 PJM-46 5 2562 13,14 2938-00 23,2426 338-02 41 88-25 6,41 PJM-72 5 28642	2490-08	74,75,76	2912	74,75	3173-00	47,48	5B5B-05	41	PJD-18	5,47
2537-08 43,44 2929-00 74,76 3200-00 33,34,40 \$5858-15 41 PJD-60 5,47 2543-08 43,24 2939-00 23,24,26 3208-08 65,66 \$5858-30 41 PJD-72 5,47 2549 11,12,27 2932-00 23,24,26 3227-08 66 BB-01 6,41 PJM-12 5 2566-00 43,44 2934-00 23,24,26 3227-00 37,38 BB-03 6,41 PJM-18 5 2571-08 60 2935-00 23,24,26 3231-00 37,38 BB-03 6,41 PJM-14 5 2579-08 55 2936-00 23,24,26 3232-00 37,38 BB-10 6,41 PJM-18 5 2580-08 73 2937-00 23,24,26 3323-00 37,38 BB-10 6,41 PJM-18 5 2580-08 73 2937-00 23,24,26 3838-03 41 BB-25 6,41 PJM-172 5	2524-00	69,70	2919-00	30,32	3177-18	19,20	5B5B-08	41	PJD-24	5,47
2543-08	2534	8,9,10,27	2921-00	30,32	3178-18	19,20	5B5B-10	41	PJD-36	5,47
2546-08 33,34 2931-00 23,24,26 3208-08 65,66 585B-30 41 PJD-72 5,47 2549 11,12,27 2932-00 23,24,26 3228-08 56 BB-01 6,41 PJM-12 5 2566-00 81,31,4 2933-00 23,24,26 3221-00 37,38 BB-03 6,41 PJM-24 5 2579-08 60 2935-00 23,24,26 3231-00 37,38 BB-06 6,41 PJM-36 5 2579-08 55 2936-00 23,24,26 3233-00 37,38 BB-10 6,41 PJM-48 5 2580-08 73 2937-00 23,24,26 3232-00 22 BB-16 6,41 PJM-48 5 2580-08 72 2938-00 23,24,26 3838-03 41 BB-25 6,41 PJM-72 5 2687-00 43,44 2941-00 30,32 3838-03 41 BB-35 6,41 PP-01 6 2687-00	2537-08	43,44	2929-00	74,76	3200-00	33,34,40	5B5B-15	41	PJD-48	5,47
2549 11,12,27 2932-00 23,24,26 3227-08 56 BB-01 6,41 PJM-12 5 2556-00 8,13,14 2933-00 23,24,26 3228-00 37,38 BB-02 6,41 PJM-18 5 2571-08 60 2935-00 23,24,26 3232-00 37,38 BB-06 6,41 PJM-36 5 2579-08 55 2936-00 23,24,26 3232-00 37,38 BB-06 6,41 PJM-36 5 2580-08 73 2937-00 23,24,26 3242-00 22 BB-16 6,41 PJM-60 5 2582 13,14 2938-00 23,24,26 383B-03 41 BB-35 6,41 PJM-72 5 2642-08 72 2939-00 23,24,26 383B-03 41 BB-55 6,41 PJM-71 8 2680-08 74,76 2943-00 74,76 383B-08 41 BB-60 6,41 PP-01 6 2690-08 <t< td=""><td>2543-08</td><td>43,44</td><td>2930-00</td><td>23,24,26</td><td>3206-08</td><td>51,52</td><td>5B5B-20</td><td>41</td><td>PJD-60</td><td>5,47</td></t<>	2543-08	43,44	2930-00	23,24,26	3206-08	51,52	5B5B-20	41	PJD-60	5,47
2552-00 8,13,14 2933-00 23,24,26 3228-00 2,5,47,48 BB-02 6,41 PJM-18 5 2566-08 43,44 2934-00 23,24,26 3231-00 37,38 BB-03 6,41 PJM-24 5 2579-08 55 2936-00 23,24,26 3233-00 37,38 BB-10 6,41 PJM-86 5 2580-08 73 2937-00 23,24,26 3233-00 37,38 BB-10 6,41 PJM-86 5 2580-08 73 2938-00 23,24,26 383B-02 41 BB-33 6,41 PJM-77 5 2642-08 72 2939-00 23,24,26 383B-03 41 BB-33 6,41 PJM-77 5 26873-00 43,44 2941-00 30,32 383B-03 41 BB-66 6,41 PP-01 6 2689-08 55 2947-00 35 383B-15 41 BB-06 6,41 PP-06 6 2691-08 <	2546-08	33,34	2931-00	23,24,26	3208-08	65,66	5B5B-30	41	PJD-72	5,47
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2571-08	2552-00	8,13,14	2933-00	23,24,26	3228-00	2,5,47,48	BB-02	6,41	PJM-18	
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輸入取扱商品 Imported/Distributed Product in Japan

DIGISPY デジタルオーディオ伝送解析器

DIGITAL AUDIO TRANSMISSION ANALYZER



デジタルオーディオ伝送ライン・プロトコルの解析

Protocols of digital audio transmission lines

ディスプレイ Display

オーディオレベルのディスプレイ

Audio Levels

モニター Monitor

オーディオ信号のモニター

Audio Signals

••• We make digital audio transmission lines transparent

デジタルオーディオの 伝送ラインが見える!



DIGIspy combines an IEC 958 protocol analyzer, level meter, and vector oscilloscope in a single unit. A headphone monitor output is available as well.

DIGISPY is capable of processing signals of any standardized sampling frequency up to 96 kHz. Its inputs accept symmetrical AES/EBU signals as well as S/P-DIF data streams (coaxial and optical).

Because of its compact and light-weight design, DIGIspy is ideally suited for doing measurements in the field. Its big LC display is back-lighted for improved readability even at bad lighting conditions. It can run more than 250 individual measurements without recharging.

一つのキー操作のみでいつどこでもデジタルオーディオ伝送ラインの最も重要なパラメーターを表示します。それが DIGIspy の基本設計です。

DIGIspy はIEC 958プロトコル・アナライザー、レベルメーター、ベクトルスコープを一つの画面上に表示します。ヘッドフォン用のモニター出力も取れます。

DIGIspy は96kHzまでのどのような標準サンプリング周波数の信号も処理できます。同軸ケーブルまたは光ファイバーを使用するS/P-DIFデータストリームと、AES/EBU信号のどちらも入力出来ます。 この小型軽量化により、DIGIspy は作業現場での測定器具として最適な計器です。また、バックラ

		は暗い場所でも読み取り易く、再充電なしに250もの個別測定が出来ます。
	Interface	IEC 958 AES/EBU or S/P-DIF,coaxial/optical, 32 to 96 kHz
Display		LCD 60 x 80 mm with back light

Interface	IEC 958 AES/EBU or S/P-DIF,coaxial/optical, 32 to 96 kHz	
Display	LCD 60 x 80 mm, with back light	
Transmission quality 5-level quality indicator (influenced by error rate and eye diagr		
indicators	input signal), error counter, error protocol with time stamp	
Control data display	Mode of channel status and user data, validity, emphasis, origin and	
	destination data, multi-channel format, copy protection, category code	
Level meter	Peak level meter according to IEC268-18, peak hold, clipping indicator	
Vector oscilloscope Two-dimensional display of stereo signal amplitude(Goniometer)		
Monitor output	16-bit D/A converter, adjustable volume, selectable channel mapping	
	(output of left, right, or both channels)	
Power supply	NiMH AA accumulators × 2, power supply/charger, car adapter, dry cells	
Dimensions and weight	83 x 152 x 34mm³, 300g	
Accessories included	Power supply/charger, soft leather case, XLR/Cinch adapter	





多機能

Versatile

強力

Powerful

携帯性

Portable

簡単操作

Easy To Use

低価格

Affordable



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Manabu Hirabayashi, for providing specifications (technical and graphical data.) Yasuhiro Nakano, for providing numbers and measured data. Leonard Marshall, for a substantial business collaboration that made this possible. John Caldwell, for assistance in the composition of the English copy. The many colleagues at MOGAMI, our vendors of raw materials and parts, and our global distributors, working with us today and throughout our past.

All our customers around the world who have continued to support our lives.



MIT INC.

MONDO UMEGAOKA BLDG. 2F, 1-33-9, UMEGAOKA, SETAGAYA-KU, TOKYO 154-0022, JAPAN

Phone (03)3439-3755 Facsimile (03)3439-3877

URL:http://www.mogami-wire.co.jp/ E-mail:mit@mogami.com