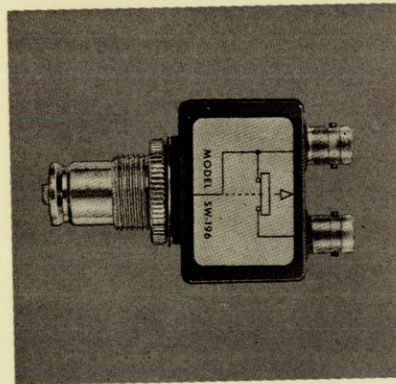
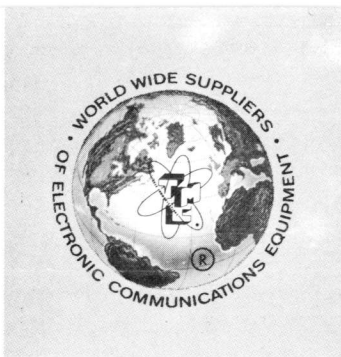


CONNECTOR

PRODUCTS DIVISION

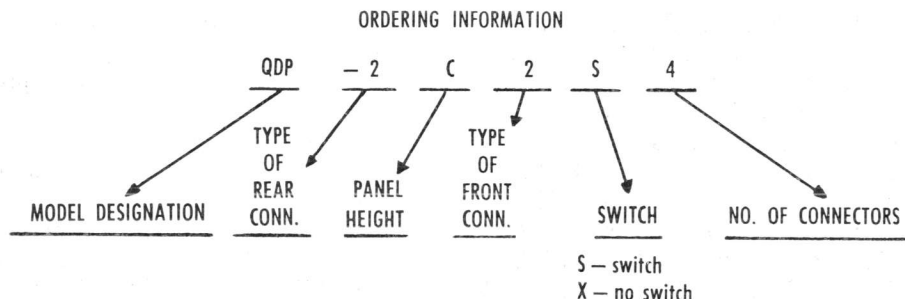


THE TECHNICAL MATERIEL CORPORATION
MAMARONECK NEW YORK



QUICK DISCONNECT RF PATCHING PANELS

QDP



QDP (SEE PAGE 1 FOR ORDERING CODE)



QDP-7A1X11

TYPE UHF TO QDS
11 CONNECTORS

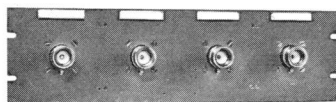
PANEL HEIGHT
3½"



QDP-4A3X16

TYPE BNC TO QDM
16 CONNECTORS

PANEL HEIGHT
1¾"



QDP-9C2S4

TYPE LC TO QDL
4 CONNECTORS
WITH INTERLOCK SWITCHES

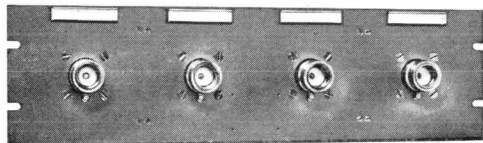
PANEL HEIGHT
5¼"



QDP-4B3X32

TYPE BNC TO QDM
32 CONNECTORS

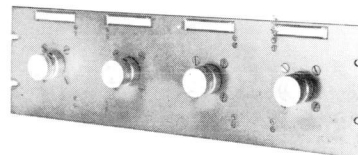
PANEL HEIGHT
3½"



QDP-PA-103

2 TYPE QDL TO QDL
2 TYPE ¼ EIA TO QDL
WITH 2 INTERLOCK SWITCHES
AND ELEC. RECEPTACLE CONN.

PANEL HEIGHT
7"



QDP-RG164C2X4

TYPE RG-164 CABLE TO QDL
4 CONNECTORS

PANEL HEIGHT
5¼"

QUICK DISCONNECT RF PATCHING PANELS



QDP

The TMC Series QDP RF Patching Panels utilize the unique Quick Disconnect type coaxial connectors. The series consists of three types, the QDL, Quick Disconnect Large, replacing the LC series (thread type), the QDS, Quick Disconnect Small, replacing type UHF, N or C and the new QDM, Quick Disconnect Miniature, replacing type BNC. The QDL connectors are for use with the 10,000 volt rated cables such as RG 211, 217, 218 as well as RG-17, 18, 34, 35 and 164/U. The QDS series is rated at 4,000 volts, and is used with cable types RG 213, 214, 215, 216 as well as RG-8, 10, 11, 12. The compact QDM series has a rating of 500 volts and can be used with cables such as RG-58/U, RG-59/U, RG-223/U, etc.

The Patch Panel Models QDP are available to adapt between series, such as QDL to N, QDS to UHF, QDM to BNC, etc., wherever a termination and/or adaptation is required. It should also be noted that cable terminations to Quick Disconnect connectors form an important part of the series, such as Helix to type QDL (EIA Flange to QDL), for use in rigid transmission systems, or Styroflex to UHF, etc. Direct termination of subterranean cables are

accomplished in this manner, without use of additional connector plugs.

Panels may also include DPST switch assemblies for safety interlocking purposes. Panels so equipped are limited to four (4) connectors. Variations include interlocking and DC path connections with indicator lamps.

Straight adapter panels are supplied with as many as 16 miniature QDM connectors on a 1¾" panel height (Military "A" Panel) increasing patching density area an additional 70% over existing panels. A maximum of 11 small (QDS) connectors can be mounted on 1¾" panel height. Type QDL (Large) fittings are mounted four to a panel, 5¼" "C" panel with or without safety interlock switches.

Patching Cables to mate the TMC series QDP Panels are available in all sizes and cable types. See pages headed "CA" for mating assemblies. All cable assemblies are made of MIL-C-17 specification cable, and utilize TMC "RTG" coaxial connector construction.

For permanent or semi-permanent installations requiring thread or bayonet type fittings, see Models JPP for Jack Patching Panels and Models SPP for Switch Patch Panels.

SPECIFIC ORDERING INFORMATION FOR QDP, SPP AND JPP

CONNECTOR CODE

1	QDS	4	BNC	6	N	8	HN
2	QDL	5	C	7	UHF	9	LC
3	QDM					10	LT

PANEL HEIGHT

A	1¾	E	8¾	H	14	L	19¾
B	3½	F	10½	J	15¾	M	21
C	5¼	G	12¾	K	17½	P	22¾
D	7						

REAR CABLE CONNECTIONS

CABLE	ST 7 1625	
	IMPEDANCE	CABLE DIA.
ST (SYROFLEX)	5 (50 ohms)	500 (½")
SL (SPIRAFIL)	7 (70 ohms)	750 (¾")
SF (SPIROFOAM)		875 (7/8")
SR (SPIROLINE)		1125 (1½")
FX (FOAMFLEX)		1625 (1⅝")
HX (HELIAX)		3125 (3⅛")
RG8 (RG-8/U)		
RG10 (RG-10/U)		
RG11 (RG-11/U)		
RG12 (RG-12/U)		
RG17 (RG-17/U)		
RG35 (RG-35/U)		
RG164 (RG-164/U)		
RG216 (RG-216/U)		
EIA (EIA FLANGE)		



CONNECTOR ADAPTER

TCA

The Connector Adapter series, Models TCA is for use in communication transmission systems where a requirement exists for terminating incoming RG-17, 85, etc., and adapting to a female coaxial receptacle. The series also includes adapters for the semi-rigid cables, Styroflex, Spirafil, Spiroline, Foamflex and Heliac.

The TCA-85/UHF, for example is for use with RG-85/U subterranean coaxial cable, adapting to UHF receptacle SO-239. This unit is equivalent to BuShips RW491625. The connector body is made of cast bronze, machined, and utilizes teflon gaskets for sealing.

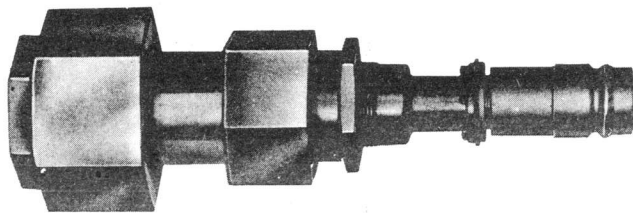
The Model TCA-85/QDS Connector Adapter incorporates the new series QDS Quick Disconnect family,

and is the equivalent of UG-1210/U, BuShips Dwg REC49355. The unit is supplied with mating plug, TMC Part PL-149, for use with 4000 volt rated cables such as RG-8, 10, 11 & 12/U.

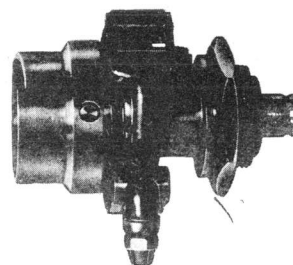
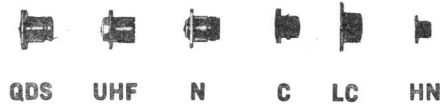
Model TCA-85/QDL was designed to adapt from RG-85 to QDL, the Quick Disconnect series replacing LC series. The series is used in systems where peak power does not exceed 10,000 volts.

The connector adapters for semi-rigid cables are constructed of brass or aluminum and appropriately finished to insure mechanical and electrical compatibility with the cables.

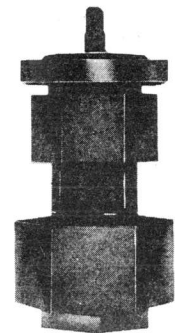
The Model TCA-ST71625/QDS for example is for use with semi-rigid cable, Styroflex 70 ohm 1 5/8" diameter and adapting to a QDS receptacle.



TCA-85/QDL

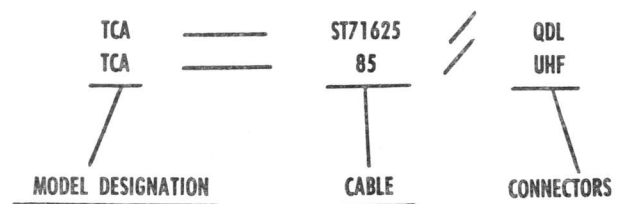


TCA-ST-51625/QDS



TCA-85/EIA51625

CABLE CODE			CONN.
CABLE	IMPEDANCE	CABLE DIA.	
HX (HELIAX)	5 (50 ohms)	500 (1/2")	QDL
FX (FOAMFLEX)	7 (70 ohms)	750 (3/4")	QDS
SF (SPIROFOAM)		875 (7/8")	QDL
SL (SPIRAFIL)		1125 (1 1/4")	QDM
SR (SPIROLENE)		1625 (1 3/4")	BNC
ST (STYROFLEX)		3125 (3 1/4")	C
17 (RG-17/U)			N
35 (RG-35/U)			UHF
85 (RG-85/U)			HN
164 (RG-164/U)			LC
EIA (EIA-Flange)			LT



CONNECTOR PRODUCTS DIVISION OF

For further information or Application Engineering contact • **THE TECHNICAL MATERIEL CORP.**

MAMARONECK, NEW YORK, 10544

END SEAL



ES

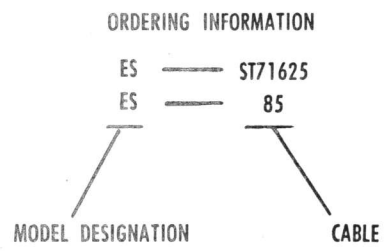
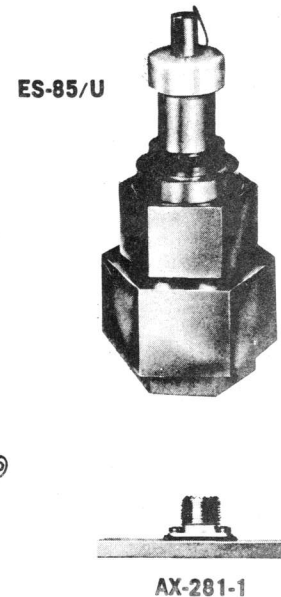
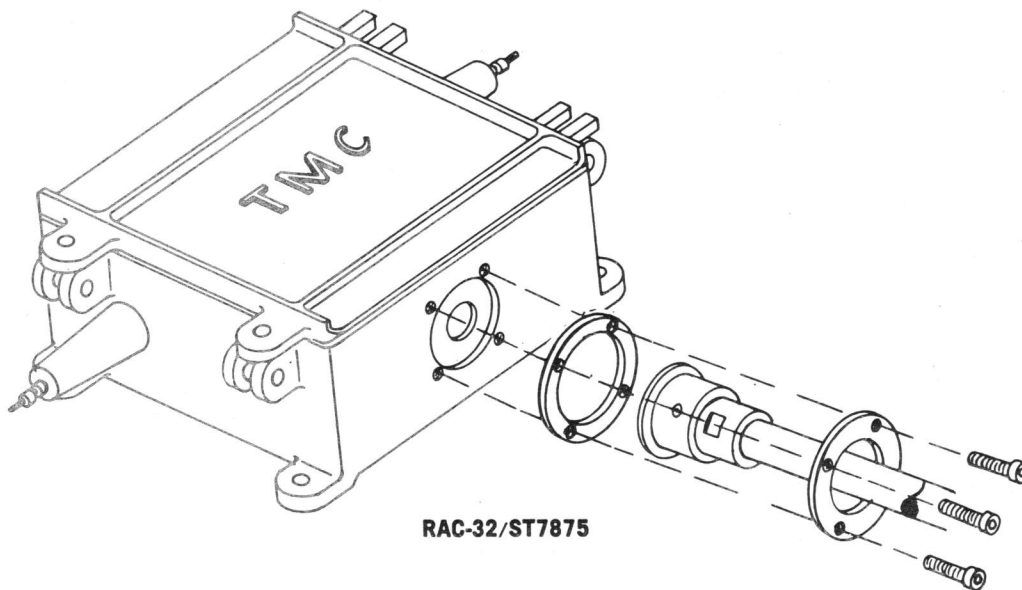
The Models ES End Seals are coaxial cable terminators for RG-85/U, RG-35/U, etc., as well as the semi-rigid Styroflex, Spirafil, Spirofoam, Spiroline, Foamflex and Heliac. The units include connector nut to mate the flange assembly AX-274 on the TMC series RAC, BAC, and TRC Antenna Couplers.

The End Seal prevents moisture or humidified air from entering the antenna coupling boxes or the cable layers. The assembly also affords protection if

the splice joints should leak, thereby preventing moisture from drawing into the cable layers.

The adapter assembly, TMC SA-108 terminates the armor and lead sheath of RG-85/U at a bulkhead, permitting extension of the wire conductor, dielectric and shield.

The TMC Model ES-85/PT terminates RG-85/U to 3/4" pipe fitting allowing cable with dielectric to proceed into building.



CABLE CODE		
CABLE	IMPEDANCE	CABLE DIA.
HX (HELIAX)	5 (50 ohms)	500 (1/2")
FX (FOAMFLEX)	7 (70 ohms)	750 (3/4")
SF (SPIROFOAM)		875 (7/8")
SL (SPIRAFIL)		1125 (1 1/8")
SR (SPIROLENE)		1625 (1 5/8")
ST (STYROFLEX)		3125 (3 1/8")
17 (RG-17/U)		
35 (RG-35/U)		
85 (RG-85/U)		
164 (RG-164/U)		

Forming Clamps, A-882 for use with RG-85/U are separately available.

Other adapter configurations are available from stock, or can be made to customer specifications, and we invite your inquiries.

RF SWITCHING PATCH PANELS



SPP

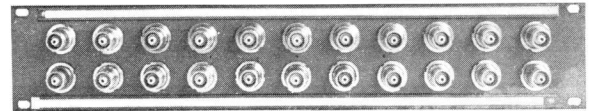
The TMC Series SPP RF Switching Patch Panels are "normal thru" type and are provided in standard series, such as type N, C, UHF, etc. to type QDS and QDM Quick Disconnect Series. These connectors utilize a special patented switch jack assembly which permits completely coaxial RF Switching without frictional sliding contacts. The switch mechanism is completely sealed, and the assemblies use

TMC "RTG"* construction throughout. These units have exceeded shock and vibration test of MIL-S-901 and MIL-STD-167. The VSWR via normal or "switched" path does not exceed 1.02/1 over the frequency range of 2 to 32 mcs. Isolation from jack to jack with "normals" terminated is 55 db at 8 mcs., 42 db at 30 mcs. Mating cable assembly CA-480** series are recommended for use with this series.



TMC MODEL SPP-1

Model SPP-1 has been nomenclatured SA-598/U and contains 11 "normal thru" switch assemblies providing single front panel QDS to dual rear UHF.



TMC MODEL SPP-3

Model SPP-3, nomenclatured SB-932/U, is a dual QDS to dual UHF Panel Assembly providing "normal thru" operation of 11 circuits and permitting patching to either side independently as illustrated on page 4.

*Rhodium-Teflon-Gold

**see CABLE ASSEMBLY SECTION (CA) for details

TECHNICAL SPECIFICATIONS

<p>SPP-1 Single QDS to dual UHF (SA-598/U) (11 switches) 11 connectors front 22 connectors rear Panel height 1 3/4"</p>	<p>SPP-4 Dual QDS to dual BNC (11 switches) 22 connectors front 22 connectors rear Panel height 3 1/2"</p>	<p>SPP-14 11 single QDS to dual C 11 connectors front 22 connectors rear Panel height 1 3/4"</p>
<p>SPP-2 Single QDS to dual BNC (11 switches) 11 connectors front 22 connectors rear Panel height 1 3/4"</p>	<p>SPP-5 Dual QDS to dual N (11 switches) 22 connectors front 22 connectors rear Panel height 3 1/2"</p>	<p>SPP-15 11 dual QDS to dual C 22 connectors front 22 connectors rear Panel height 3 1/2"</p>
<p>SPP-3 Dual QDS to dual UHF (SB-932/U) (11 switches) 22 connectors front 22 connectors rear Panel height 3 1/2"</p>		



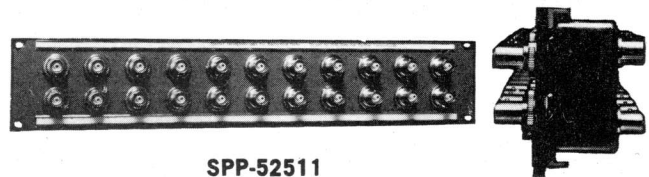
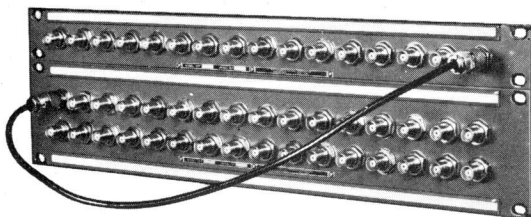
RF SWITCHING PATCH PANELS

SPP

TMC, continuing to pioneer in applications engineering, has expanded its SPP series of RF Switching Patch Panels to include the new QDM Quick Disconnect Miniature Coaxial connectors. Their use on a Standard "A" (1¾") panel increases the density of RF patching by nearly 70%.

Model SPP-30416, for example, includes 16 single to 16 dual contacts in panel space formerly occupied by 11 assemblies in the SPP-2 Switching Patch Panel. Model SPP-40416, on a "B" (3½") panel, permits 16 dual to 16 dual assemblies where again only 11 maximum could be used.

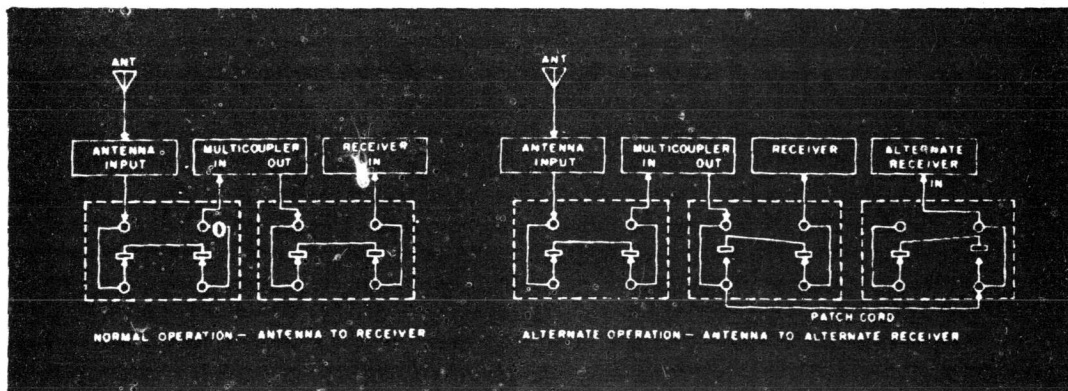
Series SPP RF Switching Patch Panels are available in either single or dual switch assemblies with type "BNC to BNC" or type "C to C" connectors. This is another variation of the versatile SPP Switching Panels available to meet your exacting requirements.



SPP-52511

DUAL C TO DUAL C
(11 SWITCHES)
22 CONNECTORS FRONT
22 CONNECTORS REAR

PANEL HEIGHT
3½"



PATCHING CABLES



CA

TMC PART NO.	RG-/U CABLE	CABLE OHMS	CONNECTORS EACH END	REMARKS
CA-480- 5	RG-58/U	50	BNC	
CA-480- 6	RG-59/U	70	BNC	
CA-480-17	RG-8/U	50	QDS	
CA-480-18	RG-11/U	70	QDS	
CA-480-19	RG-59/U	70	QDS	
CA-480-20	RG-216/U	70	QDS	
CA-480-21	RG-10/U	50	QDS	
CA-480-22	RG-12/U	70	QDS	
CA-480-23	RG-8/U	50	QDS	w/Face Washer
CA-480-24	RG-11/U	70	QDS	w/Face Washer
CA-480-25	RG-8/U	50	QDS	Connectors Angle
CA-480-26	RG-11/U	70	QDS	Connectors Angle
CA-480-27	RG-8/U	50	QDS	Conn. Angle w/Face Washer
CA-480-28	RG-11/U	70	QDS	Conn. Angle w/Face Washer
CA-480-29	RG-8/U	50	QDS-UHF	QDS. w/Face Washer
CA-480-30	RG-11/U	70	QDS-UHF	
CA-480-31	RG-8/U	50	UHF	
CA-480-32	RG-11/U	70	UHF	
CA-480-33	RG-8/U	50	C	
CA-480-34	RG-8/U	50	N	
CA-480-35	RG-11/U	70	N	
CA-480-36	RG-8/U	50	HN	
CA-480-37	RG-17/U	50	QDL	
CA-480-38	RG-164/U	70	QDL	
CA-480-39	RG-17/U	50	QDL	Connectors Angle
CA-480-40	RG-164/U	70	QDL	Connectors Angle
CA-480-43	RG-216/U	70	QDS	
CA-480-46	RG-55/U	50	QDS	
CA-480-49	RG-17/U	50	QDS-LC	Connectors Angle
CA-480-50	RG-214/U	50	QDS	
CA-480-51	RG-17/U	50	QDL	One Connector Angle
CA-480-59	RG-164/U	70	QDL-LC	Connectors Angle
CA-480-61	RG-164/U	70	QDL-LC	
CA-480-69	RG-58/U	50	QDM	
CA-480-70	RG-59/U	70	QDM	
CA-480-78	RG-213/U	50	QDS	
CA-480-79	RG-218/U	50	QDL	
CA-480-80	RG-218/U	50	QDL	Connectors Angle
CA-480-89	RG-62/U	93	QDM	
CA-480-93	RG-55/U	50	QDM	
CA-480-98	RG-213/U	50	C	



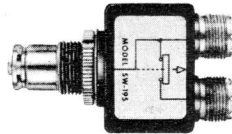
REPLACEMENT COMPONENTS

MODEL SPP

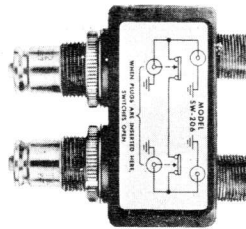
SWITCHING PATCH PANEL

- SPP-1 SW-195 & SA-598/U
- SPP-2 SW-192
- SPP-3 SW-206
- SPP-4 SW-224
- SPP-5 SW-225

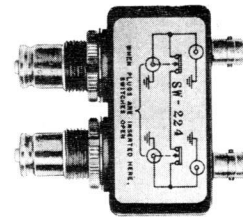
- SPP-7 SW-206
- SPP-8 SW-206 & JJ-147
- SPP-9 SW-206 & JJ-147
- SPP-10 SW-206 & JJ-147
- SPP-11 SW-263



SW-195

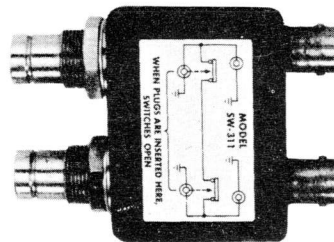


SW-206

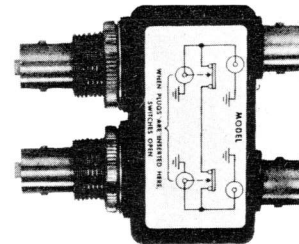


SW-224

- SPP-12 SW-206 & JJ-147
- SPP-13 SW-206 & JJ-147
- SPP-14 SW-282
- SPP-15 SW-284



SW-305



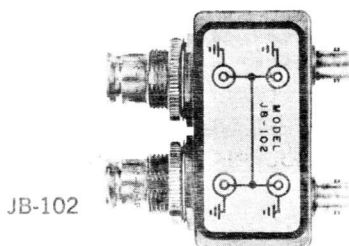
SW-348
(SPP 525 B11)

- SPP-30416 SW-305
- SPP-30516 SW-306
- SPP-30616 SW-307
- SPP-30716 SW-308
- SPP-40616 SW-309
- SPP-40516 SW-310
- SPP-40516 SW-311
- SPP-40716 SW-312

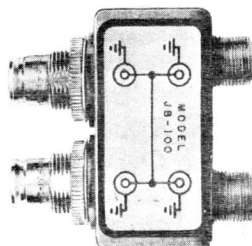
MODEL BJP

BRIDGING JACK PANEL

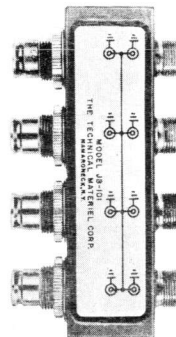
- BJP-1 - JB-103 Triple QDS to Triple UHF
- BJP-2 - JB-100 Dual QDS to Dual UHF
- BJP-3 - JB-102 Dual QDS to Dual BNC
- BJP-4 - JB-101 Dual QDS to Quad UHF
- BJP-6 - JB-104 Quad QDS to Quad BNC
- BJP-7 - JB-105 Triple QDS to Triple BNC
- BJP-8 - JB-104 Quad QDS to Quad BNC
- BJP-40616 - JB-107 Quad QDM to Quad N
- BJP-40016 - JB-108 Quad QDM—No connections rear
- BJP-40416 - JB-109 Quad QDM to Quad BNC



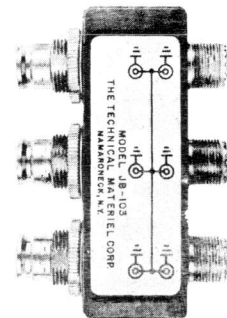
JB-102



JB-100



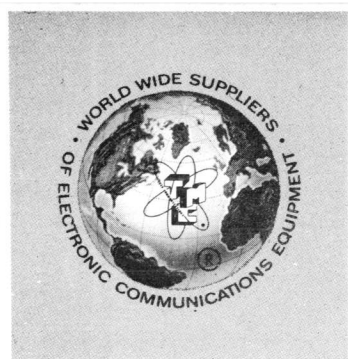
JB-101



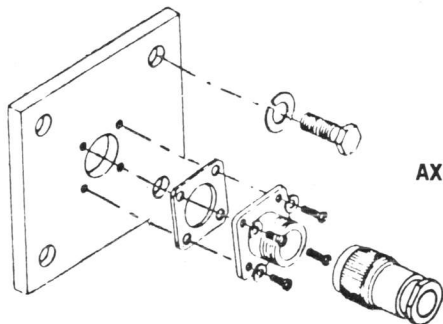
JB-103

MOUNTING PLATE ASSEMBLIES

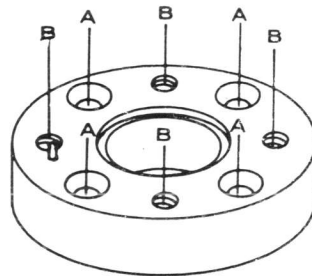
Plate-Connector assemblies are designed as accessories for convenient adaptation of a wide variety of RF Coaxial Cable entry to TMC's family of transmitting and receiving balanced to unbalanced Broadband RF transformers, (TRC, RAC, HLC, BAC), terminating resistors and dummy loads (TER and RTB), as well as adapting low and high power unbalanced transmitter outputs to EIA coax.



AX



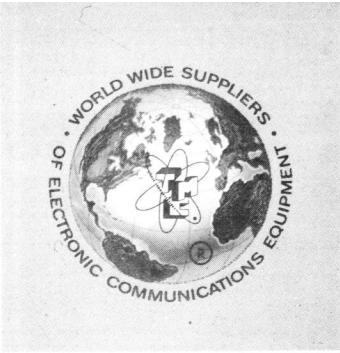
AX-259-2



AX-272

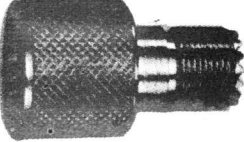
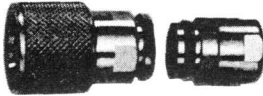
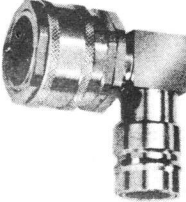

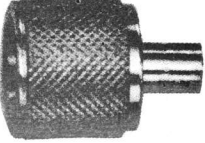
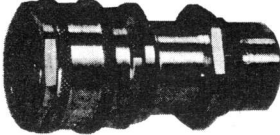
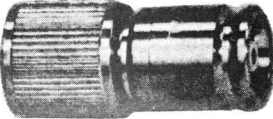
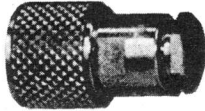
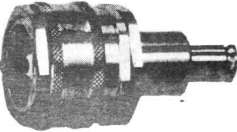
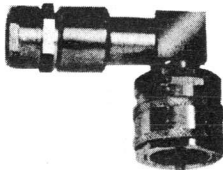
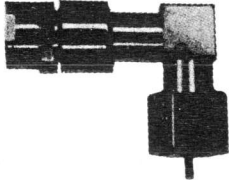
TMC ASSY NO.	SERIES	CABLE	RECEPTACLE	MATING PLUG
AX-256-2	UHF-(L)	RG-34/U	UG-357/U	UG-358/U
AX-259-2	N (50)	RG-8-9-10-213-214-215/U	UG-58/U	UG-21B/U
AX-259-3	N	RG-11-12-13-216	JJ-222	UG-94A/U
AX-271-1	EIA	PM-708, 1-5/8", 70 ohm	PM-708	EIA Flange
AX-272-1	EIA	PM-708, 1 1/8", 50 ohm	PM-708	EIA Flange
AX-273-1	QDL	RG-17-18-35-164-218-219/U	JJ-137	PL-136
AX-274-2	ES	RG-85/U	PM-107	ES-85/U
AX-276-2	LC	PM-722, 3/8" EIA Flange	JJ-229	PL-214
AX-277-2	LC	PM-722, 3/8" EIA Flange	JJ-229	PL-214
AX-278-1	EIA	3/8" to 1 1/8" - 50 ohm	EIA 3/8"	EIA 1 1/8"
AX-279-1	EIA	3/8" to 1 1/8" - 70 ohm	EIA 3/8"	EIA 1 1/8"
AX-281-2	UHF	RG-8-9-10-11-13/U	JJ-214	PL-259A
AX-282-2	UHF(T)	RG-22A/U	UG-422/U	UG-421/U
AX-283-2	BN	RG-55-58-59-62-71-223/U	UG-87/U	UG-85/U
AX-284-2	BNC	RG-59-62-71/U	UG-447/U	UG-260P/U
AX-284-3	BNC	RG-55-58-223/U	UG-447/U	UG-88D/U
AX-285-2	HN	RG-17-18-35-164-218-219/U	UG-496/U	UG-495D/U
AX-285-3	HN	RG-8-10/U	UG-560/U	UG-59E/U
AX-286-2	C	RG-8-9-213-214/U	UG-568/U	UG-573A/U
AX-287-2	LC	RG-17-18-218-219/U	UG-352/U	UG-154A/U
AX-287-6	LC	RG-17-18-35-164-218-219/U	JJ-229	PL-214
AX-288-2	QDM	RG-55-58/U	JJ-276	PL-223
AX-288-3	QDM	RG-59-62-71/U	JJ-276	PL-224
AX-289-2	QDS	RG-9-10-11-12-13-213-214-215-216/U	JJ-164	PL-149
AX-300	QDL	Adapter, 3/8" - 50 ohm	JJ-225	PL-136
AX-301	QDL	Adapter, 3/8" - 70 ohm	JJ-225	PL-136
AX-310	1/2" Stuffing Tube	Cables to .500" Dia.		Cable
AX-406-1	EIA	7/8" - 50 ohm	PM-822	7/8" Cable
AX-408-1	EIA	7/8" - 70 ohm	PM-822	7/8" Cable
AX-421-2	LC-(10)	RG-211/U	JJ-288	PL-235
AX-452-1	EIA	6 1/8" to 7/8" - EIA - 50 ohm	PM-1035	7/8" EIA

ACCESSORIES



Between Series Adapters are a series of in-line connectors allowing adaptation of one type of coaxial fitting to another type, thereby eliminating the necessity of costly end cable replacements. By use of these adapters it is possible to make rapid temporary or permanent connections between dissimilar coaxial cables.

TMC "RTG" connector construction is used throughout.

	<p>SA-101 Adapter, Receptacle QDS Male to UHF Female</p>		<p>PL - 149 Plug Connector, QDS Terminates Cables RG 8-9-10-11-12-213-215-216/U</p>
	<p>SA - 102 Adapter, Receptacle, Angle QDL Male to QDL Female</p>		<p>PL - 159 Plug Connector, QDS Terminates Cables RG 59/U</p>
	<p>SA - 105 Adapter, Receptacle QDS Male to BNC Female</p>		<p>PL - 136 Plug Connector QDL Terminates Cables RG 17-18-35-164-217-218/U</p>
	<p>SA - 106 Adapter, Receptacle QDS Female to UHF Male</p>		<p>PL - 223 Plug Connector QDM Terminates Cables RG 55-58/U</p>
	<p>SA - 118 Adapter, Receptacle QDL Male to QDS Female</p>		<p>PL - 141 Plug Connector, QDL, Angle Terminates Cables RG 17-18-35-164-217-218/U</p>
	<p>SA - 127 Adapter, Receptacle QDS Male to N Female</p>		<p>PL - 197 Plug Connector, LC, Angle Terminates Cables RG 17-18-35-164-217-218/U</p>

CONNECTOR PRODUCTS DIVISION OF

For further information or Application Engineering contact • **THE TECHNICAL MATERIEL CORP.**

MAMARONECK, NEW YORK, 10544

PRODUCT APPLICATIONS

Within this catalogue, we have provided practical and dependable, easy to use quality connector products and accessories for the RF oriented engineer, technician and electronic component purchaser.

These TMC products have found universal acceptance by all major communication systems manufacturers and users.

The TMC motto is "quality production to quality standards" of precisely engineered connectors designed by qualified RF technical specialists.

The connectors used in our products are fabricated to rigid TMC specifications and utilize our standard "RTG" construction wherever practicable.

RHODIUM FLASH PLATING — Over silver plate on all components, resulting in extreme hardness, low noise frequency caused by oxidation and long lasting attractiveness.

TEFLON INSULATION — Virgin Teflon dielectric material providing low loss, high insulation resistance.

GOLD PLATED CONTACTS — Gold electro-plating on beryllium copper, phosphor bronze, or brass contacts and contacts shielding fingers, providing high conductivity and extremely low contact noise and resistance.

SOME TYPICAL PRODUCT APPLICATIONS

