

USOC WIRING GUIDE

NOTICE

The information contained herein has been compiled for use by our distributors and others in the telecommunications field desiring pertinent facts relative to the USOC (Universal Systems Ordering Code) numbers. The descriptions are considered to be basically equivalent to similar descriptions contained within part 68 subpart F of the code of Federal Regulations, and to the best of our knowledge believed to be correct.

The primary purpose of the material covered on the following pages is to give Suttle part numbers which meet USOC requirements, assisting our valued Suttle customers in ordering appropriate products.

There are five basic types of telephone company-provided jacks used for the connection of registered equipment to telecommunications network:

1. THE MINIATURE 6-POSITION JACK (miniature)

The miniature 6-position jacks provide bridged connections to the tip and ring conductors of a telephone line.

2. THE WEATHER-PROOF JACK

The weather-proof jack is used to provide bridged connections to the tip and ring conductors in environments exposed to moisture.

3. THE 50-POSITION MINIATURE RIBBON JACK (miniature ribbon)

The 50-position miniature ribbon is used when registered equipment is connected to several telephone lines.

4. THE MINIATURE 8-POSITION JACK (non-keyed)The miniature 8-position series jack provides series connections to the tip and ring conductors.

5. THE MINIATURE 8-POSITION KEYED JACK (keyed)

The miniature 8-position keyed jack is for data equipment providing bridged connections to the tip and ring conductors of a telephone line and mode indication leads for use with an exclusion key telephone set if required.

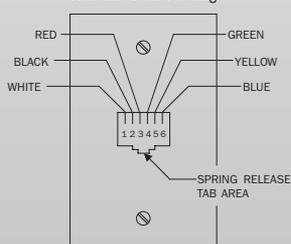
Each type, except for the weather proof and 8-position keyed jacks, may be arranged to provide bridge connections of A and A1 conductors.

USOC NOTES

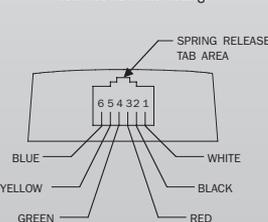
RJ (Registered Jack) numbers end with a letter designating wiring or mounting arrangement.

- The Letter "C" in the USOC indicates the jack is baseboard or flush mounted for a desk type unit.
"W" indicates the jack is for a wall mounted unit.
"M" is for multiple mounting arrangements.
"X" is a single series connection.
- RJA1X converts a 4-hole jack to a miniature-bridged jack.
- RJA2X converts a single jack to a duplex jack.
- RJA3X converts a 12-hole jack to a miniature-bridged jack.
- RJ37X is used with registered telephone set equipped with an exclusion key for a data application.

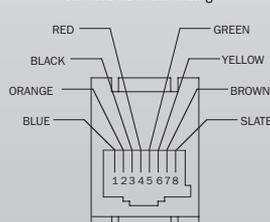
Wall Flush Mount Version of the Miniature Modular Jack Showing Pin Placement and Associated Color Coding.



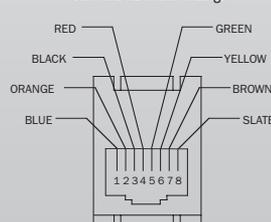
Surface Mount Version of the Miniature Modular Jack Showing Pin Placement and Associated Color Coding.

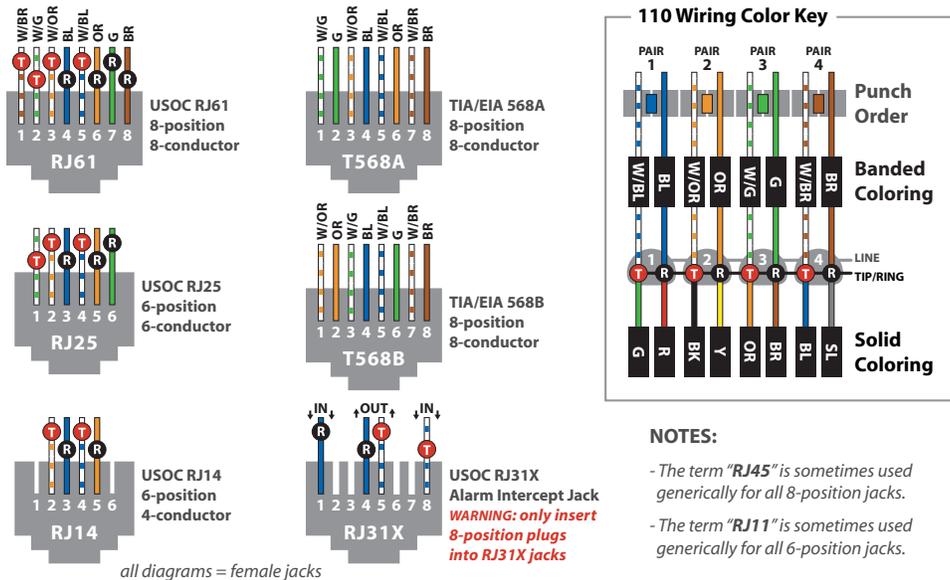


Keyed, 8-Position Modular Jack Showing Pin Placement and Associated Color Coding.



Non-Keyed, 8-Position Modular Jack Showing Pin Placement and Associated Color Coding.





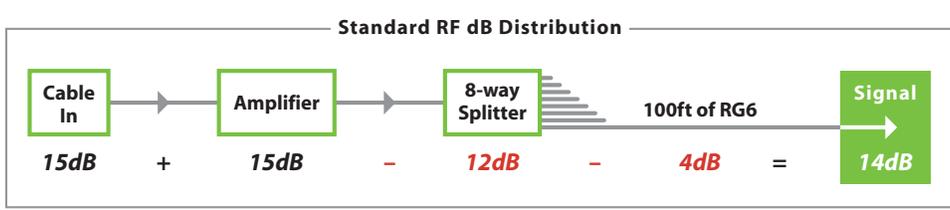
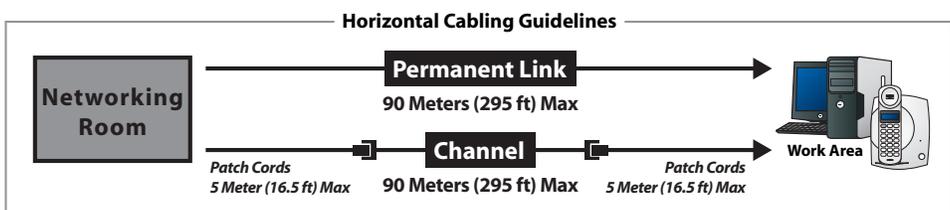
Application Specific Pair Assignments (8-position jacks)

PINS	1-2	3-6	4-5	7-8	2-7	1-8
Analog USOC	-	T2/R2	R1/T1	-	T3/R3	T4/R4
10/100 Base TX	TX	RX	-	-	-	-
Token Ring	-	TX	RX	-	-	-
TP-PMD	TX	-	-	RX	-	-
ATM User	TX	-	-	RX	-	-
ATM Hub	RX	-	-	TX	-	-
1000 BASE-T	TX/RX	TX/RX	TX/RX	TX/RX	-	-
T2/T3	RX	-	TX	-	-	-
ISDN	Power	RX	TX	Power	-	-

TX = Transmit RX = Receive

TIA/EIA 606-A Termination Hardware Color Designation

Color (-xx)	Description	Examples
White (-85)	1st Level Backbone	MC/IC
Red (-53)	Key System Connection	NA
Gray (-48)	2nd Level Backbone	IC/HC
Yellow (-56)	Miscellaneous	Auxiliary Alarms
Blue (-62)	Horizontal Cable Terms	Station Cable
Green (-51)	Network Connections	Customer Side Demarc
Purple (-57)	Common Equipment	PBX, Host, LANs, MUXES
Orange (-97)	Demarcation Point	C.O. Termination
Brown (- - -)	Interbuilding Backbone	Cable Between Buildings



General Rule for Calculating Signal Loss or Gain

Device	Signal Loss
2-way Splitter	-4.0 dB
3-way Splitter	-6.5 dB
4-way Splitter	-8.0 dB
8-way Splitter	-12 dB
100ft of RG6	-4.0 dB

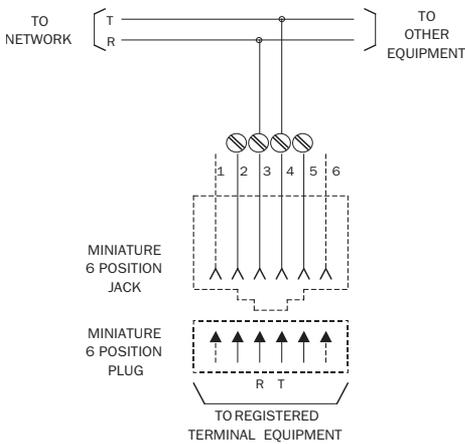
Coax Comparison

RG6 Coax	vs	RG59 Coax
18 AWG Center Conductor		20 AWG Center Conductor
Lower Attenuation / ft		Higher Attenuation / ft
Used for Long Distances		Used for Short Distances
Used for Higher Frequency		Used for Lower Frequency
Best for CATV or Satellite		Best for Composite Video

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USOC WIRING DIAGRAMS

RJ11C and RJ11W



USOC RJ11C: Surface or flush mounted jacks.

USOC aRJ11W: Wall mounted equipment.

Mechanical Arrangement: Miniature 6-position jack.

Typical Usage: Single line non-key telephones and ancillary devices.

Electrical Network Connection: Single line bridged tip and ring.

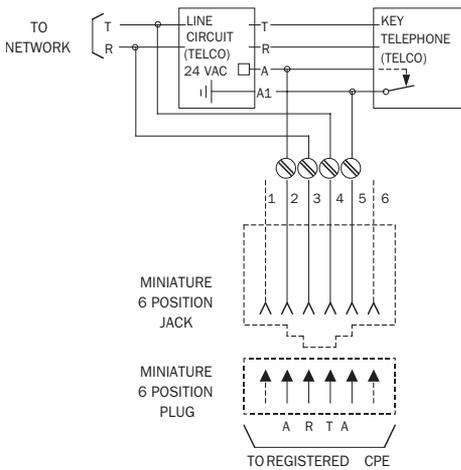
Subtle products which can be used for USOC RJ11C:

103A4	2-1001	625B1-4	625FE-4
104A4	2-2001	625B1E-4	625FS4
104B4	2-3001	625B2-4	625S4
105AF4	305C	625B3-4	625SA4
106AFD4	305D	625B3E-4	625T4
1542AM	333AE4	625B3EF4	625TD1
16150-4	404M	625B4-4	630AB4
16152L7-4	468DV48	625B4E-4	630ABC4
16152L7E-4	468L44	625B4EF4	630ABS4
16152L8-4	625A4	625C2-4	630AC4
16152L8E-4	625A2-4	625C4	630ANS4
19316L7-4	625A3-4	625D4	635B
19316L7E-4	625B	625F4	635D

Subtle Products which can be used for USOC RJ11W:

630ABC4	630AD4	630B4	632A
630AC4	630AP4	631A	633A

RJ12C and RJ12W



USOC RJ12C: Surface or flush mounted jacks.

USOC RJ12W: Wall mounted equipment.

Mechanical Arrangement: Miniature 6-position jack.

Typical Usage: Single line non-keyed telephone sets and ancillary devices connected to a key system where registered terminal equipment is not compatible with electrical characteristics of tip and ring behind line circuit.

Electrical Network Connection: Single line bridged tip and ring ahead of the line circuit of a key system, with A and A1 leads.

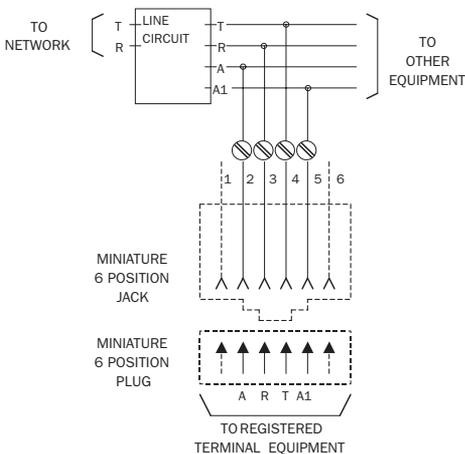
Subtle Products which can be used for USOC RJ12C:

103A4	2-1001	625B2-4	625S4
104A4	2-2001	625B2E-4	625SA4
104B4	2-3001	625B3-4	625T4
105AF4	305C	625B3EF4	625TD1
106AFD4	305D	625B3E-4	630AB4
1542AM	333AE4	625B4-4	630ABC4
16150-4	404M	625B4E-4	630ABS-4
16152L7-4	468L44	625B4EF4	630ANS4
16152L7E-4	625A2-4	625C4	630AC4
16152L8-4	625A3-4	625D4	635B
16152L8E-4	625B	625F4	635D
19316L7-4	625B1-4	625FE-4	
19316L7E-4	625B1E-4	625FS4	

Subtle Products which can be used for USOC RJ11W:

630A4	630AP4	630B4	632A
630ABC4	630AD4	631A	633A
630AC4			

RJ13C and RJ13W



USOC RJ13C: Surface or flush mounted jacks.

USOC RJ13W: Wall mounted equipment.

Mechanical Arrangement: Miniature 6-position jack.

Typical Usage: Single line non-key telephone sets and ancillary devices connected to a key system.

Electrical Network Connection: Single line bridged tip and ring, A and A1 leads behind the line circuit of a key system.

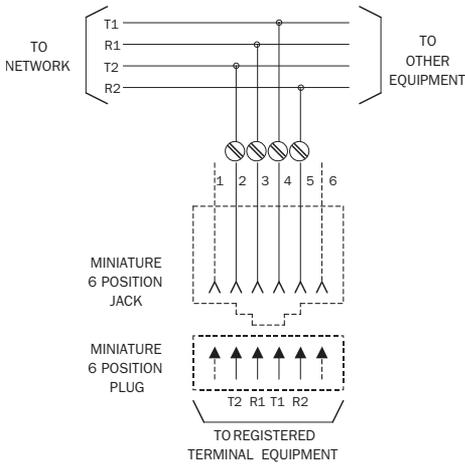
Subtle Products which can be used for USOC RJ13C:

103A4	2-1001	625B1E-4	625S4
104A4	2-2001	625B2-4	625SA4
104B4	2-3001	625B3-4	625T4
105AF4	305C	625B3E-4	625TD1
106AFD4	305D	625B3EF4	630AB4
180ST	333AE4	625B4-4	630ABC4
1650-4	404M	625B4E-4	630ABS4
16152L7-4	468L44	625B4EF4	630AC4
16152LE-4	625A4	625C4	630ANS4
16152L8-4	625A2-4	625D4	635B
16152L8E-4	625A3-4	625F4	635D
19316L7-4	625B	625FE-4	
19316L7E-4	625B1-4	625FS4	

Subtle Products which can be used for USOC RJ11W:

630A4	630AD4	630B4	632A
630ABC4	630AP4	631A	633A
630AC4			

RJ14C and RJ14W



NOTE: The telephone company will wire the lines to the jack in the sequence designated by the customer.

USOC RJ14C: Surface or flush mounted jacks.

USOC RJ14W: Wall mounted equipment.

Mechanical Arrangement: Miniature 6-position jack.

Typical Usage: Two line non-key telephone sets and ancillary devices. Two separate telephone lines.

Electrical Network Connection: Two line bridged tip and ring.

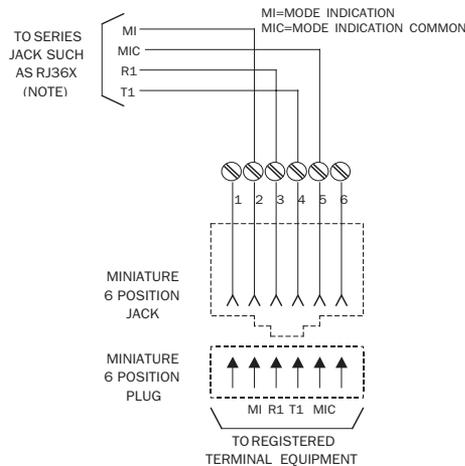
Subtle Products which can be used for USOC RJ14C:

103A4	193416L7E-4	625B1-4	625F4
104A4	2-1001	625B1E-4	625FE-4
104B4	2-2001	625B2-4	625FS4
105AF4	2-3001	625B3-4	625S4
106AFD4	333AE4	625B3E-4	625SA4
16150-4	404M	625B3EF4	625T4
16152L7-4	468L44	625B4-4	625TD1
16152L7E-4	625A4	625B4E-4	630AB4
16152L8-4	625A2-4	625B4EF4	630ABC4
16152L8E-4	625A3-4	625C4	630ABS4
19316L7-4	625B	625D4	630AC4

Subtle Products which can be used for USOC RJ14W:

630A4	630AC4	630AP4	631A	633A
630ABC4	630AD4	630B4	632A	630A4

RJ16X



NOTE: MI and MIC leads are typically wired to an RJ36X series jack which can be used to connect an exclusion key telephone set ahead of the data equipment.

USOC RJ16X: Surface or flush mounted jacks.

Mechanical Arrangement: Miniature 6-position jack.

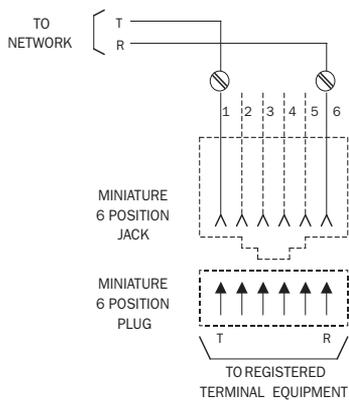
Typical Usage: 9dBm (Permissive) data equipment with MI (mode indications) and MIC (mode indication common) leads.

Electrical Network Connection: Single line bridged tip and ring with mode indication to a series connection ahead of the bridged connection.

Subtle products which can be used for USOC RJ16X (including RJ36X jack):

625MB	635B	635D	635B68
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RJ17C



USOC RJ17C: Surface or flush mounted jack.

Mechanical Arrangement: Miniature 6-position jack.

Typical Usage: Special non-key telephone set or certain hospital ancillary equipment in hospital critical care areas.

Use is restricted to devices which comply with Article 517 of the 1978 National Electrical Codes.

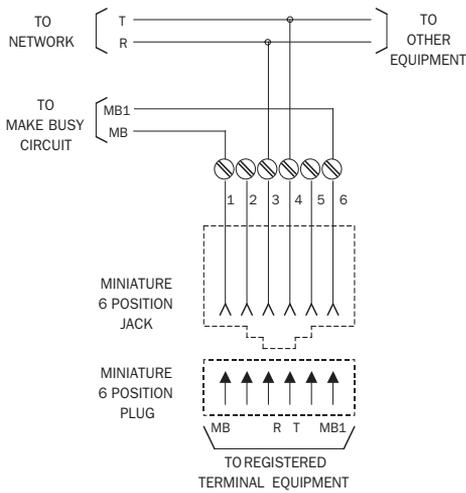
Electrical Network Connection: Single line bridged tip and ring leads. Tip and ring appear on pins 1 and 6 rather than 3 and 4. Positions 2, 3, 4 and 5 are not equipped with contacts.

Subtle Products which can be used for USOC RJ17C:

102A6	630B6	630AP6	630AD6
468L66	697B68H102A6	630P6	630AP6
625B2	468L66	697B68H102A6	630B6
625D6	625B2	468L66	697B68H102A6
625TD2	625D6	625B2	468L66
630A6	625TD2	625D6	625B2
630AD6	630A6	625TD2	
630AP6	630AD6	630A6	

NOTE: EQUIPMENT
MUST COMPLY WITH
ARTICLE 517 OF THE
NATIONAL ELECTRIC CODE

RJ18C



USOC RJ18C: Surface or flush mounted jack.

Mechanical Arrangement: Miniature 6-position jack.

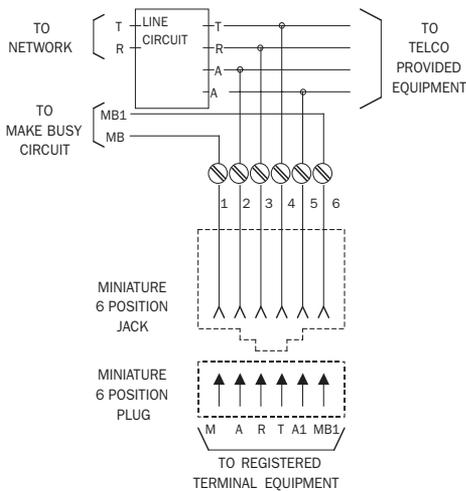
Typical Usage: When the registered equipment provides a contact closure between the MB and MB1 leads, a make-busy indication is transmitted to the network equipment busying out the line from further incoming calls. It is recommended that the busy indication (contact closure) be provided while line is in idle state.

Electrical Network Connection: A bridged connection of single line tip and ring with make busy leads MB/MB1.

Subtle Products which can be used for USOC RJ18C:

102A6	468L66	625D6	630AC6
103A6	625A6	625FS6	630AD6
104B6	625A2-6	625S6	630ANS6
16150-6	625A3-6	625SA6	630AP6
16152L7-6	625B3-6	625T6	630B6
19316L7-6	625B3E-6	625TD2	635B
2-1002	625B3EF6	630A6	635D
2-2003	625B4-6	630AB6	697B68H102A6
2-3003	625B4E-6	630ABC6	102A6
333AE6	625B4EF6	630ABS6	104B6

RJ19C



USOC RJ19C: Surface or flush mounted jacks.

Mechanical Arrangement: Miniature 6-position jack.

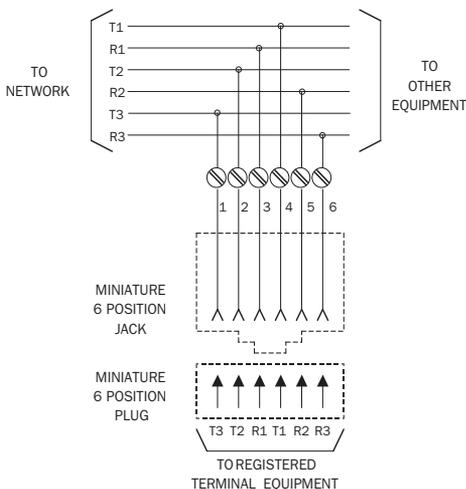
Typical Usage: When the registered equipment provides a contact closure between the MB and MB1 leads, a make-busy indication is transmitted to the network equipment busying out the line from further incoming calls. It is recommended that the busy indication (contact closure) be provided while line is in idle state.

Electrical Network Connection: A bridged connection of single line tip and ring behind a key system line circuit, with A and A1 lead control, and a direct connection for MB/MB1 make-busy leads.

Subtle Products which can be used for USOC RJ19C:

102A6	468L66	625D6	630AC6
103A6	625A6	625FS6	630AD6
104B6	625A2-6	625S6	630ANS6
16150-6	625A3-6	625SA6	630AP6
16152L7-6	625B3-6	625T6	630B6
19316L7-6	625B3E-6	625TD2	635B
2-1002	625B3EF6	630A6	635D
2-2003	625B4-6	630AB6	697B68H
2-3003	625B4E-6	630ABC6	102A6
333AE6	625B4EF6	630ABS6	103A6

RJ25C



USOC RJ25C: Surface or flush mounted jack.

Mechanical Arrangement: Miniature 6-position jack.

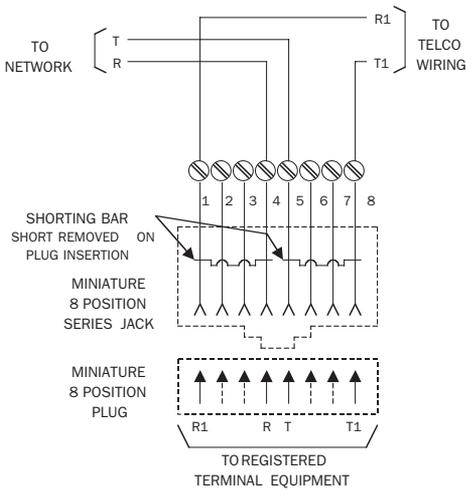
Typical Usage: Three line non-key telephone sets, ancillary devices, including message registration, automatic identification, outward dialing and off-premise station.

Electrical Network Connection: Up to three lines bridged connection.

Subtle Products which can be used for USOC RJ25C:

102A6	2-3003	625B4EF6	630ANS6
103A6	333AE6	625D6	630AP6
104A6	625A6	625FS6	630ABC6
104B6	625A2-6	625S6	630ABS6
106AFD6	625A3-6	625SA6	630AC6
16150-6	625B3-6	625T6	630B6
16152L7-6	625B3E-6	625TD2	635B
19316L7-6	625B3EF6	630A6	635D
2-1002	625B4-6	630AB6	697B68H
2-2003	625B4E-6	630AD6	102A6

RJ31X



Mechanical Arrangement: Miniature 8-position series on non-keyed jack with shorting bars.

Typical Usage: Alarm reporting device.

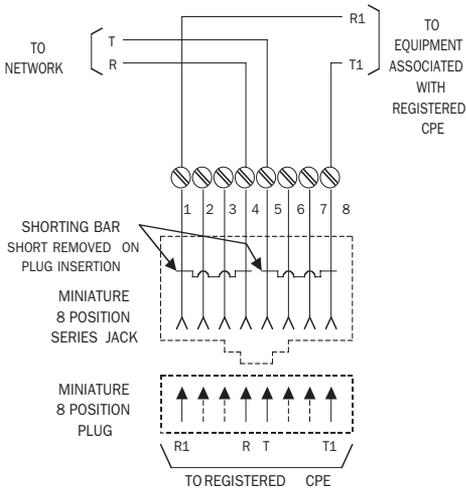
Electrical Network Connection: Series tip and ring ahead of all station equipment. Single line telephone.

Subtle Products which can be used for USOC RJ31X:

468A	635A	*635B68	648C8SB
625A28SB	635B	*635B68F	97D
625A38SB			

**Asterisked products are those which include the RJ11C Jack.*

RJ32X



Mechanical Arrangement: Miniature 8-position series on non-keyed jack with shorting bars.

Typical Usage: Automatic dialer.

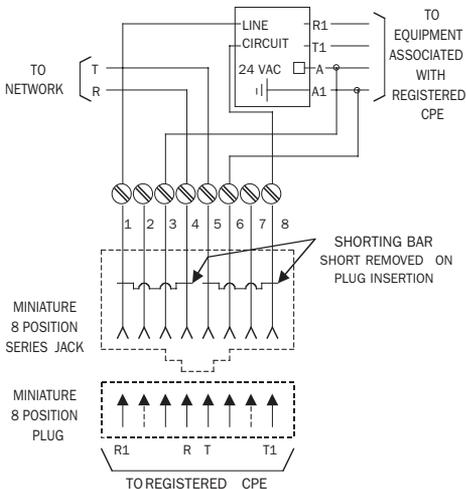
Electrical Network Connection: Series tip and ring at the station. Single line telephone.

Subtle Products which can be used for USOC RJ32X:

625A28SB	635A	*635B68	648A
625A38SB	635A8	648C8SB	*97D

**Asterisked products are those which include the RJ11C Jack.*

RJ33X



Mechanical Arrangement: Miniature 8-position series non-keyed jack with shorting bars.

Typical Usage: Series ancillary devices connected to a key system where registered terminal equipment is not compatible with electrical characteristics of tip and ring behind line circuit.

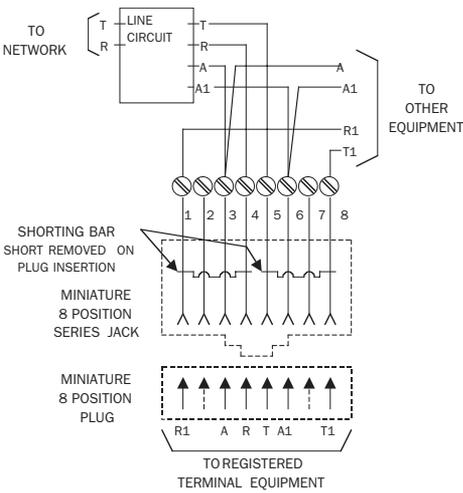
Electrical Network Connection: Series tip and ring ahead of the line circuit of a key system with A and A1 leads.

Subtle Products which can be used for USOC RJ33X:

625A28SB	635A	*635B68	*97D
625A38SB	635A8	648C8SB	

**Asterisked products are those which include the RJ11C Jack.*

RJ34X



Mechanical Arrangement: Miniature 8-position series non-keyed jack with shorting bars.

Typical Usage: A single line set with exclusion or series ancillary device connected to a key system.

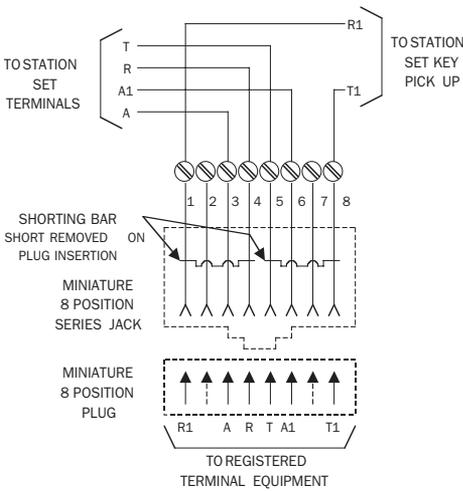
Electrical Network Connection: Series tip, ring, A and A1 leads behind the line circuit of a key system.

Subtle Products which can be used for USOC RJ34X:

625A28SB	635A	*635B68	648C8-SB
625A38SB	635A8		

**Asterisked products are those which include the RJ11C Jack.*

RJ35X



Mechanical Arrangement: Miniature 8-position series on non-keyed jack with shorting bars.

Typical Usage: Series ancillary devices connected to key telephone sets.

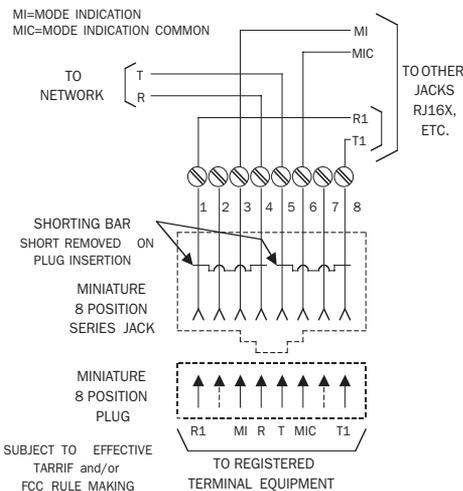
Electrical Network Connection: Series connection to the multiplied tip, ring, A and A1 leads behind the pick-up keys of a key telephone.

Subtle Products which can be used for USOC RJ35X:

625A28SB	635A	*635B68	648C8SB
625A38SB	635A8		

**Asterisked products are those which include the RJ11C Jack.*

RJ36X



Mechanical Arrangement: Miniature 8-position series non-keyed jack with shorting bars.

Typical Usage: Mode indication (exclusion key) telephone set in series with jack for data equipment.

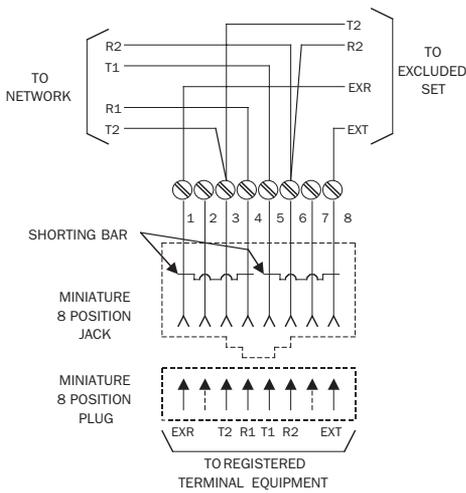
Electrical Network Connection: Series tip and ring with mode indication to station behind series connection.

Subtle Products which can be used for USOC RJ36X:

625A28SB	635A	635B68	*97D
625A38SB	635A8	648C8SB	

**Asterisked products are those which include the RJ11C Jack.*

RJ37X



NOTE: The telephone company will wire the lines to the jack in the sequence designated by the customer.
Mechanical Arrangement: Miniature 8-position series non-keyed jack with shorting bars.

Typical Usage: Two line telephone with the exclusion on one line.

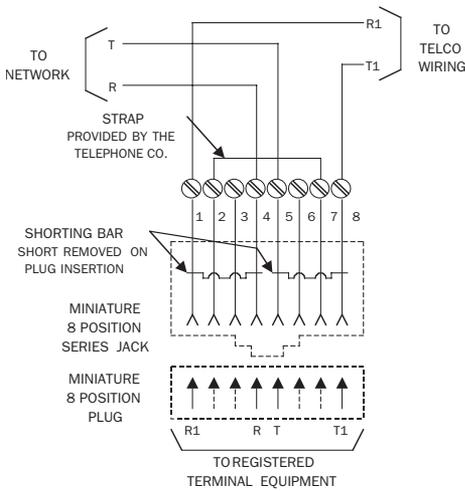
Electrical Network Connection: Two line bridged tip and ring with exclusion on line 1.

Subtle Products which can be used for USOC RJ37X:

625A28SB	635A	*635B68	*97D
625A38SB	635A8	648C8-SB	

**Asterisked products are those which include the RJ11C Jack.*

RJ38X



Mechanical Arrangement: Miniature 8-position series non-keyed jack with shorting bars.

Typical Usage: Registered alarm dialers.

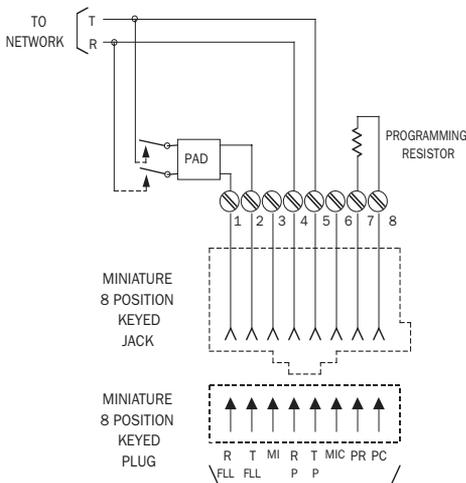
Electrical Network Connection: Series connection to the tip and ring of telephone line identical to that of JR31X. Strap provides a continuity circuit between 2 and 7, which is used as an indication that the plug of the registered equipment is engaged with the jack. The jack is wired ahead of all station equipment electrically.

Subtle Products which can be used for USOC RJ32X:

625A28SB	635A	*635B68	*97D
625A38SB	635A8	648C8SB	

**Asterisked products are those which include the RJ11C Jack.*

RJ41S

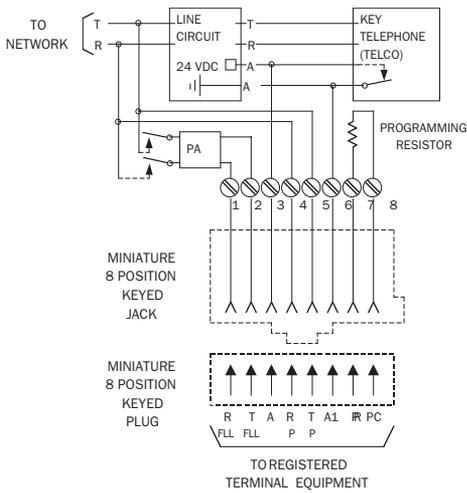


Mechanical Arrangement: Single miniature 8-position keyed jack for surface mounting.

Typical Usage: Universal jack for fixed loss loop (FLL) or programmed (P) types of data equipment.

Electrical Network Connection: Single line bridged tip and ring.

RJ42S

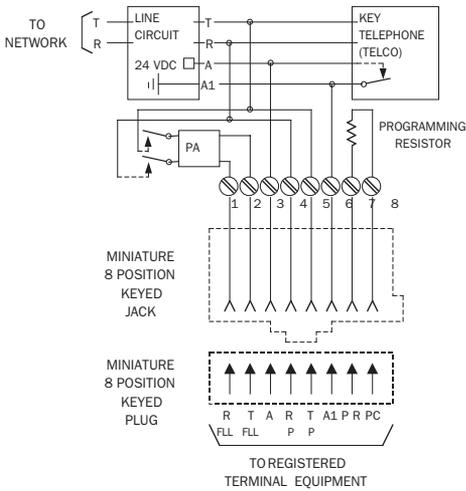


Mechanical Arrangement: Single miniature 8-position keyed jack for surface mounting.
Typical Usage: Universal jack for fixed loss loop (FLL) or programmed (P) types of data equipment.
Electrical Network Connection: Single line bridged tip and ring.

Suttle Products which can be used for USOC RJ42S:

97AB

RJ43S

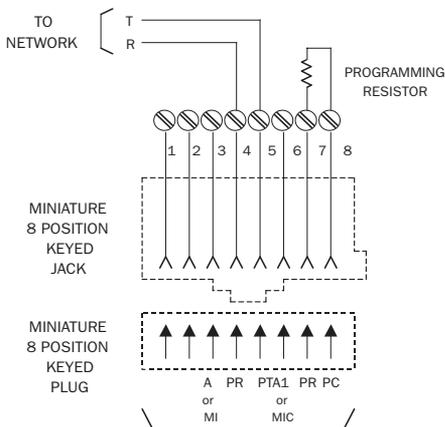


Mechanical Arrangement: Single miniature 8-position keyed jack.
Typical Usage: Universal jack for fixed loss loop (FLL) or programmed (P) types of data equipment.
Electrical Network Connection: Single line bridged tip and ring.

Suttle Products which can be used for USOC RJ43S:

97AB

RJ45S



Mechanical Arrangement: Single miniature 8-position keyed jack.
Typical Usage: Programmed data equipment.
Electrical Network Connection: Single line bridged tip and ring.

Suttle Products which can be used for USOC RJ45S:

103AY8

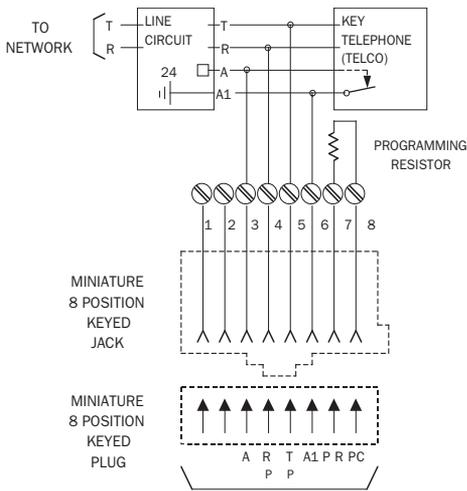
625A28KR

697B8

97B

**Asterisked products are those which include the RJ11C Jack.*

RJ46S



Mechanical Arrangement: Single miniature 8-position keyed jack.

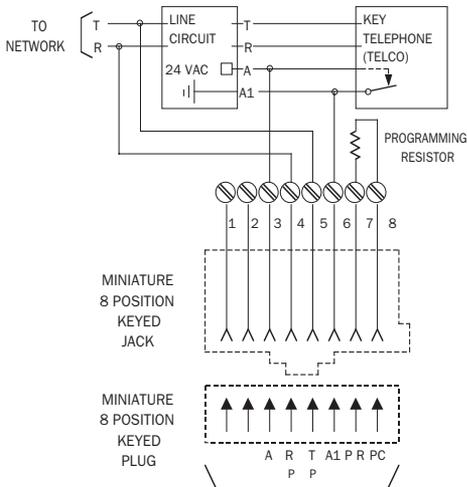
Typical Usage: Programmed data equipment connected to a key system where the registered terminal equipment is not compatible with electrical characteristics of tip and ring ahead of the line circuit.

Electrical Network Connection: Programmed 8-position keyed jack with T/R connected ahead of the line circuit.

Subtle Products which can be used for USOC RJ46S:

103AY8	625A28KR	697B8	97B
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RJ47S



Mechanical Arrangement: Single miniature 8-position keyed jack.

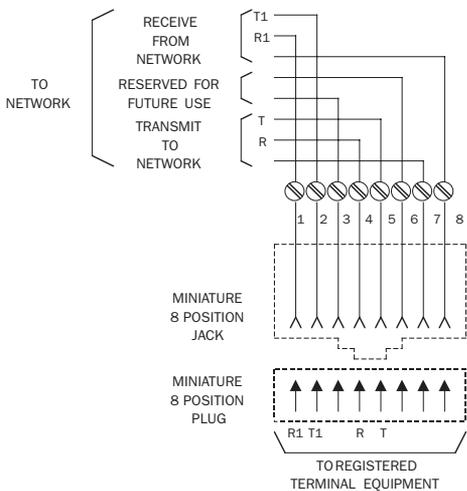
Typical Usage: Programmed data equipment connected to a key system.

Electrical Network Connection: Programmed keyed data jack with T/R connected behind the line circuit.

Subtle Products which can be used for USOC RJ47S:

625A28KR	697B8	97B
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RJ48C



Mechanical Arrangement: Miniature 8-position jack.

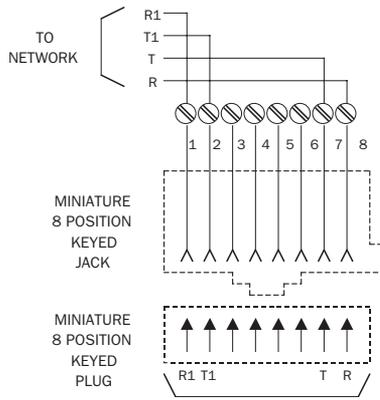
Typical Usage: 1.544 Mbps digital services.

Electrical Network Connection: Tip and Ring, T1 R1. Conductors 7 and 8 provide cable shield integrity. Conductors 3 and 6 are reserved for future use.

Subtle Products which can be used for USOC RJ48C:

102A8	105AF	106BFD	625A2-8
103A8	106AFD	625B3-8	625A3-8
104A8			

RJ48S



Mechanical Arrangement: Miniature 8-position keyed jack.

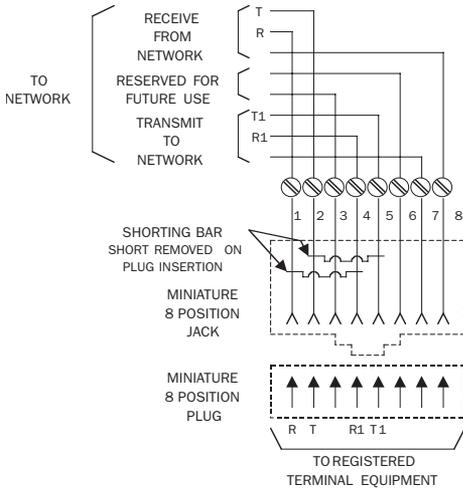
Typical Usage: Local area data channels/subrate digital services.

Electrical Network Connection: One or two line Tip and Ring or T&R, T1 R1.

Subtle Products which can be used for USOC RJ48S:

104B8	625A28-K	625B3-8	697B8LR
106BFD	625A38-K		

RJ48X



Mechanical Arrangement: Miniature 8-position jack.

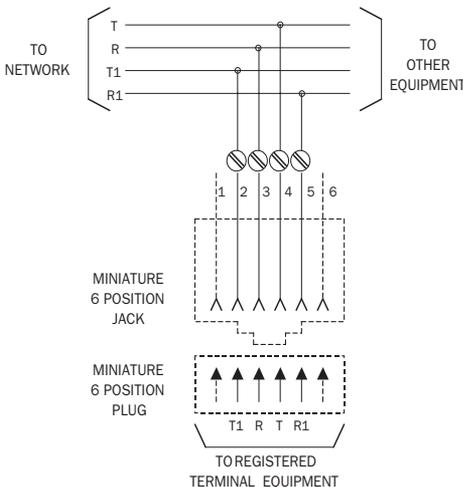
Typical Usage: 1.544 Mbps digital services.

Electrical Network Connection: Tip and Ring, T1 R1. Conductors 7 and 8 provide cable shield integrity. Conductors 2 and 6 are reserved for future use.

Subtle Products which can be used for USOC RJ48X:

625A28K-2	625A28NK-2	625A38K-2	648C848X625A28K-2
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RJ1DC



Mechanical Arrangement: Miniature 6-position jack.

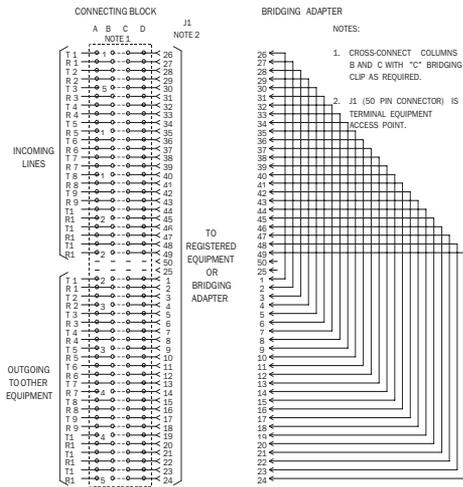
Typical Usage: Terminal equipment and systems requiring 4-wire exchange access.

Electrical Network Connection: Single line bridged 4-wire, tip/ring and T1/R1.

Subtle Products which can be used for USOC RJ1DC:

103A4	2-2001	625B2-4	625FS4
104B4	2-3001	625B3-4	625S4
105AF4	333AE4	625B3E-4	625SA4
106AFD4	404M	625B3EF4	625T4
16150-4	625A4	625B4-4	630AB4
16152L7-4	625A2-4	625B4E-4	630ABC4
16152LE-4	625A3-4	625B4EF4	630ABS4
19316L7-4	625B	625C4	630AC4
19316LE-4	625B1-4	625F4	630ANS4
2-1001	625B1E-4	625FE-4	635D

RJ71C

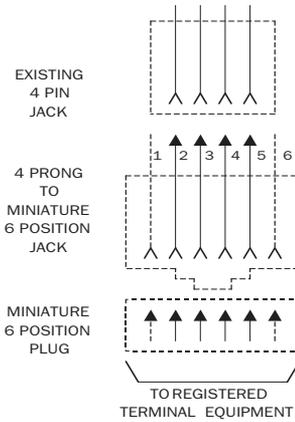


Connecting Block.

Subtle Products which can be used for USOC RJ71C:

AJK-700-66-B1-12B Connecting Blk.

RJA1X



Mechanical Arrangement: Miniature 6-position jack to 4-pin plug adapter.

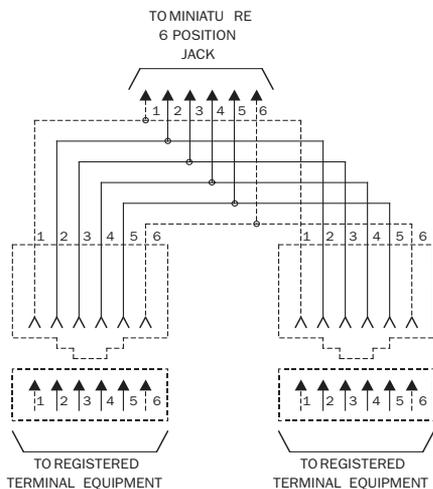
Typical Usage: Single line non-key telephone sets or ancillary devices where a working 4-pin jack exists and the registered terminal equipment is equipped with a miniature 6-position plug.

Electrical Network Connection: Single line bridged tip and ring. Adapter.

Subtle Products which can be used for USOC RJA1X:

283M

RJA2X



Mechanical Arrangement: Miniature 6-position plug to duplex (2) miniature 6-position jack-adaptor.

Typical Usage: Single line non-key telephone sets or ancillary device where a working miniature 6-position jack exists.

Electrical Network Connection: Single line bridged tip and ring. Adapter.

Subtle Products which can be used for USOC RJA2X:

267A

267E

USOC INDEX

USOC	DESCRIPTION	TYPICAL APPLICATION
RJ11W (Wall) RJ11C	Bridged configurations other than data; single line connections; bridged T/R; 6 position jack.	Single line non-key telephone, ancillary devices, PBXS and key telephone systems.
RJ12W (Wall) RJ12C	Bridged T/R ahead of the line circuit of a key telephone system with A/A1; 6 position jack.	Single line non-key telephone sets and ancillary devices connected to a key system where registered terminal equipment is not compatible with electrical characteristics of tip and ring behind line circuit.
RJ13W (Wall) RJ13C	Bridged T/R behind of the line circuit of a key telephone system with A/A1; 6 position jack.	Single line non-key telephone sets and ancillary devices connected to a key system.
RJ14W (Wall) RJ14C	Two line bridged T/T; 6 position jack.	Two line non-key telephone sets and ancillary devices.
RJ15C	Bridged T/R; 3 position weatherproof jack.	Providing telephone service to boats and marinas.
RJ16X	Bridged tip and ring with mode Indication to A Series Connection ahead of bridged connector: 6 position jack.	9dBm (Permissible data equipment with MI (mode indication) and MIC (mode indication common) leads.
RJ17C	Single line bridged tip and ring leads. Tip and ring appear on pins 1 and 6 rather than 3 and 4. Positions 2,3,4 and 5 are not equipped with contacts, 6 position jack.	Special non-key telephone set or certain hospital ancillary equipment in hospital critical care areas.
RJ18C	A bridged connection of a single line tip and ring with make-busy leads MB/MB1. 6 position jack.	When the registered equipment provides a contact closure between the MB and MBI leads, a make busy indication is transmitted to the network equipment busying out the line from further incoming calls.
RJ19C	Bridged tip and ring behind key telephone Line Circuit plus A, A1 and Make busy Control. 6 position jack.	When the registered equipment provides a contact closure between the MB and MBI leads, a make busy indication is transmitted to the network equipment busying out the line from further incoming calls.
RJ21X	Multiple line; up to 25 bridged T/R; 50 position jack.	Traffic data recording equipment.
RJ22X	Multiline: up to 12 bridged T/R ahead of the line circuit of a key telephone system with A/A1 connections; 50 position jack.	2 to 12 ancillary devices connected to a key system at one location where registered terminal equipment is not compatible with electrical characteristics of tip and ring behind the line circuit.
RJ23X	Multiline: up to 12 bridged T/R ahead of the line circuit of a key telephone system with A/A1 connections; 50 position jack.	2 to 12 ancillary devices connected to a key system at one location.
RJ24X	Multiline: up to 5 bridged T/R behind the line circuit of a key telephone system. This arrangement has the same wiring arrangement as a standard 5 line key telephone set.	Ancillary devices connected to a key system such as 5 line conferencing devices.
RJ2MB	Multiline bridge tip ending with make busy indication.	2 to 12 non-key telephone and ancillary devices connected directly to c.o. lines with make busy requirement.
RJ25C	Up to three lines bridged connection 6-position jack.	Three line non-key telephone sets, ancillary devices, including message registration, automatic identification, outward dialing, and off-premises station.
RJ26X	Data: bridged T/R; 50 position ribbon jack, universal.	Universal jack for fixed loss loop (FLL) or programmed (P) types of data equipment.
RJ27X	Bridged T/R; 50 position ribbon jack, programmed.	Programmed jack for programmed (P) types of data equipment.
RJ31M	Multiline: up to 8 position series jacks.	Multiple series T/R ahead of all station equipment (reference section 68.502 (b) (1). FCC.
RJ31X	Series T/R ahead of all station equipment; 8 position series jack.	Alarm reporting devices.
RJ32M	Multiline: up to 8 position series jacks.	Multiple series T/R at station (reference section 68.502 (b) (2). FCC.
RJ32X	Series T/R at station; 8 position series jack.	Series ancillary devices such as automatic dialers. Single line sets with exclusion.
RJ32X	Series T/R at station; 8 position series jack.	Series ancillary devices such as automatic dialers. Single line sets with exclusion.
RJ33M	Multiline: up to 8 position series jacks.	Multiple series T/R ahead of the line circuits of a key telephone system, with A/A1 (reference section 68.502 (b) (3). FCC.
RJ33X	Series T/R behind the line circuit of a key telephone system with A/A1; 8 position series jack.	Series ancillary devices connected to a key system where registered terminal equipment is not compatible with electrical characteristics of tip and ring behind line circuit.
RJ34M	Multiline: up to 8 position series jacks.	Multiple series T/R behind the line circuits of a key telephone system with A/A1 (reference section 68.502 (b) (4). FCC.
RJ34X	Series T/R behind the line circuit of a key telephone system with A/A1; 8 position series jack.	A single line set with exclusion or series ancillary device connected to a key system. This arrangement is preferred to arrangement shown in subsection (b) (3). FCC.
RJ35M	Multiline: up to 8 position series jacks.	Multiple series T/R behind the line circuits leading to one key telephone station instrument of a key telephone system, with A/A1.
RJ35X	Series T/R at key telephone station, line circuit of a key telephone system with A/A1; 8 position series jack.	Series ancillary devices connected to a key telephone set.
RJ36X	Series T/R with mode indication signal; 6 position jack.	Mode indication (exclusion key) telephone set in series with data jack. Customer shall specify whether a closure or open shall indicate "exclusion" mode.

USOC	DESCRIPTION	TYPICAL APPLICATION
RJ37X	Series T/R on first line and bridged T/R on second line; 8 position series jack.	Two line telephones with exclusion on one line.
RJ38X	Series connection identical to RJ31X. Strap provides a continuity circuit between 2 and 7, which is used as an indication that the plug of the equipment is engaged with the jack strap provided by telephone company.	Registered alarm dialers.
RJ41M	Data: multiple bridged T/R; 8 position keyed data jack, universal.	Multiple installations of fixed loss loop or programmed types of data equipment.
RJ41S	Data: bridged T/R; 8 position keyed data jack, universal.	Universal jack for fixed loss loop (FLL) or programmed (P) types of data equipment.
RJ42S	Data: multiple tip and ring. A and A1. Tip and ring ahead of line circuit; 8 position keyed data jack.	Universal jack for FLL or Programmed (P) types of data equipment connected to a key system where the registered terminal equipment is not compatible with electrical characteristics of tip and ring behind the line circuit.
RJ42M	Data: multiple tip and ring connected ahead of the line circuit. 8 position keyed data jack.	Multiple installations of fixed loss loop or programmed types of data equipment.
RJ43S	Data: multiple tip and ring A/A1. Tip and ring behind line circuit; 8 position keyed data jack.	Universal jack for FLL or Programmed types of data equipment connected to a key system.
RJ43M	Data: multiple tip and ring A/A1 tip and ring behind line circuit; 8 position keyed data jack.	Multiple installation of FLL or P data equipment.
RJ45M	Data: multiple bridged T/R; 8 position keyed data jack.	Multiple installations of programmed types of data equipment.
RJ45S	Data: bridged T/R; 8 position keyed data jack, programmed.	Programmed data equipment.
RJ46S	Data: Single Line bridged tip and ring. A/A1 tip and ring ahead of line circuit; 8 position keyed.	Programmed data equipment connected to a key system where the registered terminal equipment is not compatible with electrical characteristics of tip and ring ahead line circuit.
RJ46M	Same as RJ46S only in Multiple Mounting arrangements bridged tip and ring with or without A/A1.	Programmed data equipment connected to a key system.
RJ47M	Data same as RJ47S only in Multiple Mounting arrangements.	Programmed data equipment connected to a key system.
RJ47S	Data: Single Line bridged tip and ring. A/A1 tip and ring behind line circuit; 8 position keyed.	Programmed data equipment connected to a key system where the registered terminal equipment is not compatible with electrical characteristics of tip and ring behind line circuit.
RJ48C	8 position digital services jack.	Network connection for ISDN terminal equipment using 1.544 Mbps.
RJ48M	50 position miniature ribbon connector for digital services.	Multiline (8 T & R, 8 T1 R1) connections for terminal equipment using 1.544 Mbps.
RJ48S	8 position keyed digital services jack.	Network connection for local area data channels and/or substrate digital services.
RJ48T	50 position miniature ribbon connector.	Multiline network connection for local area data channels and/or substrate digital services.
RJ48X	8 position digital services jack with shorting bars.	Network connection for ISDN terminal equipment using 1.544 Mbps.
RJM2X	Wall or rack mounting enclosure for use with multiple lines of data and voice blocks and adapters.	
RJ51X	Data: bridged T/R with A/A1 and Mode Indication; 50 position ribbon jack, universal; T/R connected ahead of the line circuit.	Universal jack for fixed loop (FLL) or programmed (p) types of data equipment requiring both Mode Indication function and A/A1 connections to a key telephone system. This configuration will normally be used in conjunction with RJ36X series configuration.
RJ52X	Data: bridged T/R with A/A1 and Mode Indication; 50 position ribbon jack, programmed; T/R connected ahead of the line circuit.	Universal jack for fixed loop (FLL) or programmed (P) types of data equipment requiring both Mode Indication function and A/A1 connections to a key telephone system. This configuration will normally be used in conjunction with RJ36X series configuration.
RJ53X	Data: bridged T/R with A/A1 and Mode Indication; 50 position ribbon jack, programmed. T/R connected ahead of the line circuit.	Programmed jack for programmed (P) types of data equipment requiring both Mode Indication function and A/A1 connections to a key telephone system. This configuration will normally be used in conjunction with RJ36X series configuration.
RJ54X	Data: bridged T/R and A/A1 and Mode Indication; 50 position ribbon jack, programmed. T/R connected behind the line circuit.	Programmed jack for programmed (P) types of data equipment requiring both Mode Indication function and A/A1 connections to a key telephone system. This configuration will normally be used in conjunction with RJ36X series configuration.
RJ71A	8 position jack.	
RJ71M	50 position ribbon.	
RJA1X	Adapter between non-standard square-array 4 pin jack and standard 6 position plug.	Single line non-key telephone set or ancillary devices where a working 4 pin jack exists and the registered terminal equipment is equipped with a miniature 6 position plug.
RJA2X	Adapters between one standard 6 position jack and two standard 6 position plugs ("cube tap" or "T" adapter).	Single line non-key telephone set or ancillary device where a working miniature 6 position jack exists.
RJA3X	Adapter between non-standard 12 pin jack and standard 6 position plug.	Single line non-key telephone set or ancillary devices where a working 12 pin jack exists and the registered terminal equipment is equipped with a miniature 6 position plug.
RJA4X	Adapter between non-standard rectangular-array 6 pin jack and standard 6 position plug.	Single line non-key telephone set or ancillary devices where a working rectangular-array jack exists and the registered terminal equipment is equipped with a miniature 6 position plug.
RJ1DC	Single line bridged 4-Wire tip/ring and T1/R1.	Terminal equipment and systems requiring 4-wire exchange access.