

**REGISTRATION INTERFACE**  
**INSTALLATION, CONNECTIONS, AND MAINTENANCE**  
**RJ71C**  
**SERIES MULTIPLE TIP AND RING ARRANGEMENTS**

**1. GENERAL**

**1.01** This section provides information on a standard jack arrangement to be provided under the Federal Communications Commission (FCC) Registration Program for use with registered terminal equipment, such as telephones, ancillary equipment, data equipment, and protective circuitry and to registered systems, such as PBXs and key telephone systems (KTSs).

*Note:* Registered data equipment connected to the network via the connecting block in this section must have a fixed signal power level under -9 dBm. See Section 590-101-103 for connection of other data devices.

**1.02** This section is reissued to:

- (a) Rate 66M4-50R connecting block manufacture discontinued (MD)
- (b) Add information on the 700B-66-B1-12 jack.

Revision arrows are used to emphasize the more significant changes.

**1.03** Arrangement RJ71C provides a series connection of tip and ring only for a maximum of 12 lines. The A and A1 leads for KTSs are not supplied. The plug (male) in the registered equipment must be a compatible 50-pin miniature ribbon connector.

**1.04** Uniform Service Order Code (USOC) RJ71C requires the installation of a 66M4-50R connecting block (MD) or a 700B-66-B1-12 jack. These interfaces consist of a 66M-type connecting block wired to a 50-pin ribbon connector (female) which provides the means of connecting to the registered equipment. A prewired bridging adapter is shipped

loose for use in providing the series connection when the plug to the registered equipment is not connected. The bridging adapter is fastened to the interface during installation to avoid misplacement.

*Note:* The 66M4-50 connecting block (MD) is very similar in appearance to the 66M3-50R connecting block (MD) and the 700A-66-B1-25 jack is very similar in appearance to the 700B-66-B1-12 jack. However, the internal wiring between the terminals of the connecting block and the pins of the 50-pin ribbon connector is different and the two are not interchangeable. **Do not attempt to use a 66M3-50R connecting block (MD) in installations requiring a 66M4-50R connecting block (MD) or a 700A-66-B1-25 jack requiring a 700B-66-B1-12 jack.**

**1.05** The USOC RJ71C provides a series connection from the incoming tip and ring, through the customer-provided equipment (CPE) or telephone company (TELCO)-provided equipment connected to the ribbon connector, to the outgoing tip and ring. With the plug inserted in the connector, loop continuity must be maintained through the registered equipment either by a metallic series circuit or by transformer coupling. Any time the plug is removed from the connector, the bridging adapter must be plugged into the connector or the tip and ring will be open on all lines beyond that point.

**1.06** On the 66M4-50R connecting block (MD) and the 700B-66-B1-12 jack incoming lines are terminated on the first 12 pairs of terminals of column A (rows 1 through 24). On the 66M4-50R (MD) outgoing lines to other CPE or TELCO-provided equipment are terminated on the next 12 pairs of terminals of column A (rows 25 through 48). Rows 49 and 50 are unwired. On the 700B-66-B1-12 jack outgoing lines to

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Bell System except under written agreement

other CPE or TELCO-provided equipment are terminated on rows 27 through 50. Rows 25 and 26 are unwired. The incoming lines should be terminated in the sequence specified by the customer without skipping any positions. The C bridging clips must then be installed between columns B and C **on both the incoming and outgoing clips**. Refer to Section 461-604-105 for complete information on interface type connecting blocks.

**1.07** If the plug to the registered equipment is not available at the time of installation, the bridging adapter supplied with the connecting block must be plugged into the connector to provide continuity to any downstream equipment.

## 2. CONNECTIONS

**2.01** Install the 66M4-50R connecting block (MD) as follows:

- (1) Install the 66M4-50R connecting block (MD) in a location mutually agreeable to the TELCO and the customer. The 66M4-50R connecting block (MD) is applicable to color-coded modular backboards, but a size variance will not permit mounting of additional 66M-type blocks butting directly above or below it.
- (2) Connect the incoming lines and outgoing lines to other equipment on column A as shown in Table A. Place C bridging clips between columns B and C on all rows — both incoming and outgoing. Install cover on connecting block. Fasten the bridging adapter to one of the clips on the 89C bracket using the fastener supplied.
- (3) Plug the bridging adapter into the ribbon connector and test all connected lines for continuity. If the customer is not ready, secure the bridging adapter in place. If the customer has the registered equipment wired at the time of installation, have them connect their plug to the ribbon connector and secure in place. Internal wiring of the 66M4-50R connecting block (MD) is shown in Fig. 1.

**2.02** Install the 700B-66-B1-12 jack as follows:

- (1) Install the 700B-66-B1-12 jack on a 183C6 backboard in a location mutually agreeable to the TELCO and the customer.
- (2) Connect the incoming lines and outgoing lines to other equipment on column A as shown in Table B. Place C bridging clips between columns B and C on all rows — both incoming and outgoing. Install cover on connecting block. Fasten the bridging adapter using the fastener supplied.
- (3) Plug the bridging adapter into the ribbon connector and test all connected lines for continuity. If the customer is not ready, secure the bridging adapter in place. If the customer has the registered equipment wired at the time of installation, have them connect their plug to the ribbon connector and secure in place. Internal wiring of the 700B-66-B1-12 jack is shown in Fig. 2.

## 3. MAINTENANCE

**3.01** Maintenance of the wiring arrangements covered in this section is limited to verification of the TELCO wiring and equipment and assurance the required leads are supplied in the interface used for CPE connection.



***No attempt should be made to test, modify, or repair customer-owned and maintained equipment.***

**3.02** When in the judgment of repair personnel the trouble is located in or caused by the CPE, the Repair Service Bureau should be notified so proper Maintenance of Service Charge Billing can be initiated as required and as outlined in Section 660-101-312 — Maintenance of Service Charge on Services With Customer-Provided Equipment (CPE) and Section 660-101-318 — Tariff and Registration Violation Notice Procedures.

TABLE A

## TERMINATIONS FOR RJ71C IN 66M4-50R CONNECTING BLOCK (MD)

LINE	INCOMING TERMINATIONS			OUTGOING TERMINATIONS		
	COLUMN A/B	COLUMN C	CONNECTING TERMINAL	COLUMN A/B	COLUMN C	CONNECTING TERMINAL
T(1)	1	1	26	25	25	1
R(1)	2	2	27	26	26	2
T(2)	3	3	28	27	27	3
R(2)	4	4	29	28	28	4
T(3)	5	5	30	29	29	5
R(3)	6	6	31	30	30	6
T(4)	7	7	32	31	31	7
R(4)	8	8	33	32	32	8
T(5)	9	9	34	33	33	9
R(5)	10	10	35	34	34	10
T(6)	11	11	36	35	35	11
R(6)	12	12	37	36	36	12
T(7)	13	13	38	37	37	13
R(7)	14	14	39	38	38	14
T(8)	15	15	40	39	39	15
R(8)	16	16	41	40	40	16
T(9)	17	17	42	41	41	17
R(9)	18	18	43	42	42	18
T(10)	19	19	44	43	43	19
R(10)	20	20	45	44	44	20
T(11)	21	21	46	45	45	21
R(11)	22	22	47	46	46	22
T(12)	23	23	48	47	47	23
R(12)	24	24	49	48	48	24

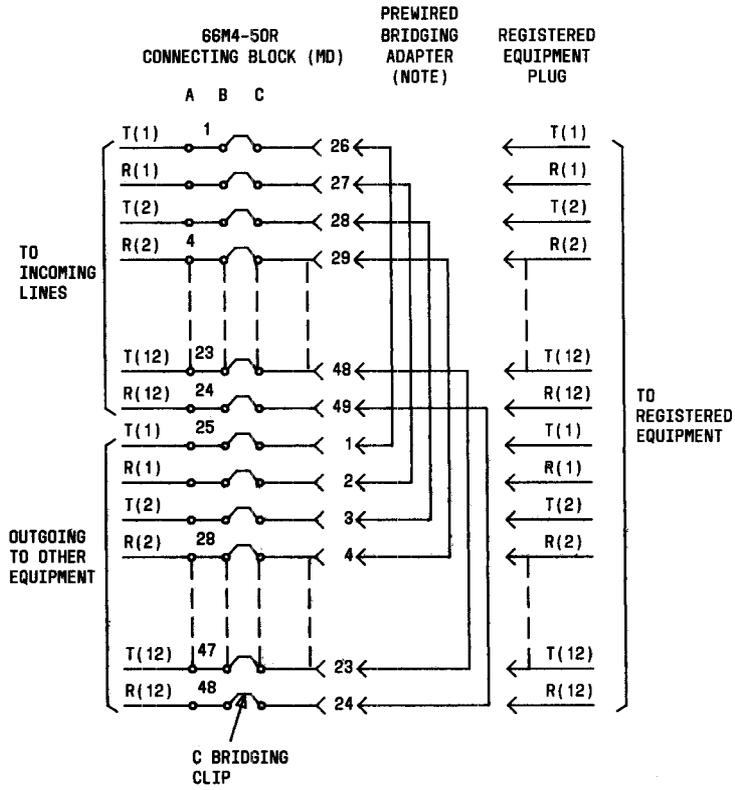


Fig. 1—Schematic for USOC RJ71C Using 66M4-50R Connecting Block (MD)

♦TABLE B♦

## TERMINATIONS FOR RJ71C IN 700B-66-B1-12 JACK

LINE	INCOMING TERMINATIONS			OUTGOING TERMINATIONS		
	COLUMN A/B	COLUMN D	CONNECTING TERMINAL	COLUMN A/B	COLUMN D	CONNECTING TERMINAL
T(1)	1	1	26	27	27	1
R(1)	2	2	27	28	28	2
T(2)	3	3	28	29	29	3
R(2)	4	4	29	30	30	4
T(3)	5	5	30	31	31	5
R(3)	6	6	31	32	32	6
T(4)	7	7	32	33	33	7
R(4)	8	8	33	34	34	8
T(5)	9	9	34	35	35	9
R(5)	10	10	35	36	36	10
T(6)	11	11	36	37	37	11
R(6)	12	12	37	38	38	12
T(7)	13	13	38	39	39	13
R(7)	14	14	39	40	40	14
T(8)	15	15	40	41	41	15
R(8)	16	16	41	42	42	16
T(9)	17	17	42	43	43	17
R(9)	18	18	43	44	44	18
T(10)	19	19	44	45	45	19
R(10)	20	20	45	46	46	20
T(11)	21	21	46	47	47	21
R(11)	22	22	47	48	48	22
T(12)	23	23	48	49	49	23
R(12)	24	24	49	50	50	24

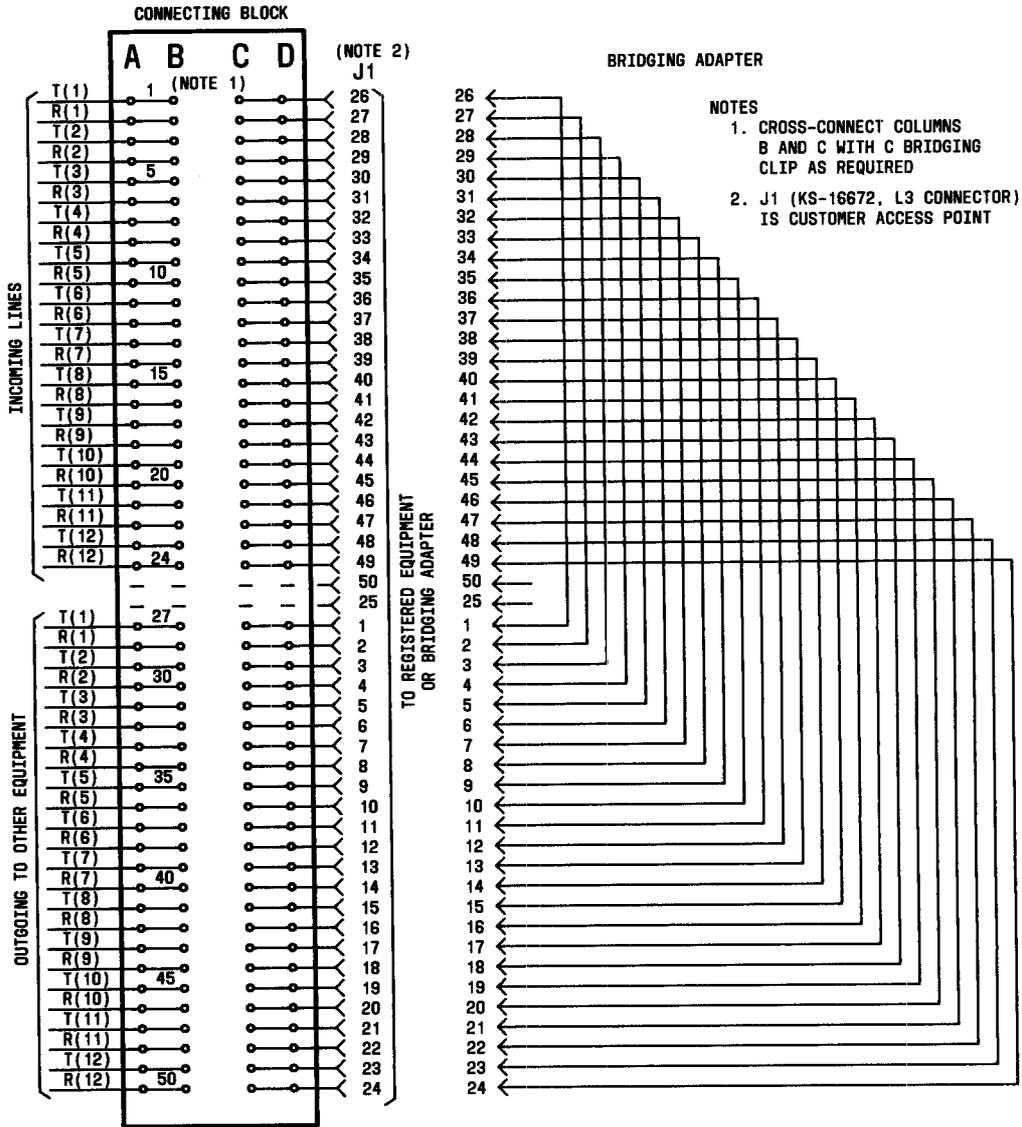


Fig. 2—Wiring of 700B-66-B1-12 Jack