Systems

Teleprocessing
Preinstallation Guide for

IBM 3704 and 3705
Communications Controllers

IBM

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Preinstallation Guide for**

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This publication is an aid to defining an emulation program or a network control program (version 1, 2, or 5) for an IBM 3704 or 3705 Communications Controller. It identifies network configuration parameters that must be specified to the control program and gives the value(s) appropriate to each type of station and line set accommodated by the program.

Properly specifying these parameters is essential to successful communication between the teleprocessing access method in the host processor and the stations in the network. The appropriate values for these parameters are in most instances already determined before the controller is installed, because they reflect the choices made for types of stations, line sets, and communication facilities. This is especially true when the network to be operated by the controller is already in existence.

The time interval between ordering and installing an IBM 3704 or 3705 Communications Controller (the "preinstallation interval") should be used to gather and record the required information about the network configuration. Doing so during the preinstallation interval eliminates the need to gather the information later while defining the program. Coding time and effort can thus be saved and errors in parameter specification minimized.

The parameter information appears in this guide in the form of "parameter selection tables"– one table for each type of station and each type of line set accommodated by the program.

A companion publication, *Teleprocessing Installation Record for IBM 3704 and 3705 Communications Controllers* (GC30-3021) should be used with this guide. The installation record is furnished as a set of formatted sheets representing the communications controller and the attached lines, with labeled spaces suitable for recording the parameter values appropriate for the teleprocessing network being documented.

For information on coding an emulation program or network control program, and for explanations of the configuration parameters listed in this guide, see the appropriate guide and reference manual:

> *IBM 3704 and 3705 Communications Controllers:*
>
> > *Emulation Program Generation and Utilities* (GC30-3002)
> >
> > *Network Control Program Generation and Utilities (for OS/MFT and OS/MVT TCAM Users)* (GC30-3000)
> >
> > *IBM 3704 and 3705 Control Program Generation and Utilities Guide and Reference Manual* (GC30-3007)
> >
> > *IBM 3704 and 3705 Control Program Generation and Utilities Guide and Reference Manual* (GC30-3008)

Successful communication between the teleprocessing access method in the host processor and a teleprocessing network depends on proper specification of the control program resident in the IBM 3704 or 3705 Communications Controller.

The parameters by which you specify the control program fall into two main categories:

- Parameters that specify the equipment configuration

- Parameters that specify procedural options

The first category includes such parameters as the transmission speeds and codes used by stations in the network, the type of communication line facilities (nonswitched or switched, half-duplex or duplex), and various features or options with which terminals and modems may be equipped.

Parameters in the second category govern message flow (for example, the number of consecutive transmissions to be accepted from stations), internal operations of the controller (for example, the size of buffers used), and auxiliary functions (for example, diagnostic and service aids).

In general, successful communication between the access method and stations does not principally depend on specifying particular values for the procedural options. For example, communication can take place whether the buffer size in the control program is 60 bytes or 80 bytes, whether the maximum number of consecutive transmissions accepted is one or five, or whether the line trace diagnostic aid is included in the program. Often, the default values resulting from omission of such parameters will yield acceptable operation of the network, at least until experience reveals a need for different values. Thus, procedural options generally allow optimizing network operations for a particular application.

By contrast, proper specification of equipment parameters is essential to establishing communication between the access method and the network. Communicating over a given line cannot occur unless the type of station and type of line control, among other parameters, are identified to the control program.

WHAT THIS GUIDE IS FOR

This guide gives configuration parameters essential to establishing communication between the access method and each of the types of stations supported by the emulation program and network control program. The parameters fall

into two groups: (1) those whose choice depends in part upon the type of station attached to a given communication line, and (2) those whose choice depends on the type of line set to which the line is attached. (The line set is the controller's interface to communication lines.) This guide therefore contains two groups of parameter selection tables: one group for the stations accommodated by the communications controller, and the other for the line sets that can be installed in the controller.

The stations and line sets appear in alphameric sequence within their respective groups, for easy reference.

The tables indicate, for each parameter they contain:

- Whether the parameter is applicable for the type of station or line set the table represents.

- The value or values of the parameter appropriate for the specific station or line set represented.

- The name of the operand by which the parameter is specified. (Refer to the generation and utilities manuals [listed in the Preface] for the macro(s) in which the operands can be coded. The appropriate macro in some cases depends on whether a network control program or an emulation program is being defined.)

- Explanatory notes, where appropriate.

Listed below (after *How to Use this Guide*) are the communications facility codes (C1, C2, etc.) used in the parameter selection tables, and the description of the facility represented by each. This is useful when conferring with representatives of communications common carriers.

Important: The parameters and values given in this guide are those generally applicable to the standard types of stations and line sets accommodated by the network control program or emulation program. The information given may or may not apply to nonstandard and specially modified stations, line sets, and modems. If in doubt about the applicability to the devices in your network configuration, consult your IBM representative.

HOW TO USE THIS GUIDE

For each communication line in the network to be controlled by the network control program or emulation program:

1. Turn to the parameter selection tables for the type of station connected to the line and for the line set to which the line is attached. (The type of line set is specified when the 3704 or 3705 is ordered. If you do not have this information, ask your IBM representative who can determine for you the type of line set associated with each line interface address in the controller.)

2. Examine the information given for each parameter indicated (by a ● in the "yes" column) as applicable. If a single value is given, that is the correct value to specify in the operand appearing at the right. If more than one value is given, select the appropriate one. In many cases your familiarity with the network will enable you to make the appropriate choice. (For example, you may know the transmission speeds of each of the stations in your network.) If you do not know the correct choice, however, consult your IBM representative, except when a note indicates that you should consult the communications common carrier furnishing your communications facilities.

3. Record your parameter choices for later use in defining the program. For this purpose you should use the teleprocessing installation record mentioned in the Preface.

Once you have selected and recorded the applicable parameters for all lines, retain the installation record for use when defining network control programs or emulation programs for the communications controller.

Note: The "applicable" column of each table indicates whether or not specifying the parameter is appropriate to the type of station or line set the table represents. (In some cases it is appropriate to specify the parameter only for operation of the line in emulation mode, but not for network control mode, or vice versa.) If a parameter is shown as not applicable, it is not necessary to code the operand in the program; omitting it causes the program to assume the appropriate default value.

Communications Facilities

Listed below are each of the communications facility codes (C1, C2, etc.) referred to in the parameter selection tables, with the description of the facility represented by the code. When consulting the communications common carrier, refer to a line by its description, not by the code.

Code	Description of Facility
C1	Start-stop operation at 300 bps on the public switched telephone network
C1M	Start-stop operation at 134.5 bps or 300 bps on the public switched telephone network via stand-alone DCEs (data communications equipment) attached under the provisions of the IBM Multiple Supplier Systems Policy
C2	Start-stop operation at 110 bps, 134.5 bps, or 150 bps on the TWX network
C3	Synchronous operation at 600 bps on the public switched telephone network
C3M	Synchronous operation at 600 bps on the public switched telephone network via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
C4	Synchronous operation at 1200 bps on the public switched telephone network
C4M	Synchronous operation at 1200 bps on the public switched telephone network via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
C5	Synchronous operation at 2400 bps on the public switched telephone network
C5M	Synchronous operation at 2000 or 2400 bps on the public switched telephone network via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
C6	Synchronous operation at 4800 bps on the public switched telephone network
C6M	Synchronous operation at 4800 bps on the public switched telephone network via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
C7	Synchronous operation at 50,000 bps on the switched wide band service
D1	Point-to-point or multipoint start-stop operation at 134.5 bps or 300 bps on a half-duplex Type 3002 (or equivalent) channel
D1M	Point-to-point or multipoint start-stop operation at 134.5 bps or 300 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
D2	Point-to-point or multipoint start-stop or synchronous operation at 600 bps on a half-duplex or duplex Type 3002 (or equivalent) channel
D2M	Point-to-point or multipoint start-stop or synchronous operation at 600 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
D3	Point-to-point or multipoint start-stop or synchronous operation at 1200 bps on a half-duplex or duplex Type 3002 (or equivalent) channel
D3M	Point-to-point or multipoint start-stop or synchronous operation at 1200 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy

D4	Point-to-point or multipoint start-stop or synchronous operation at 2400 bps on a half-duplex or duplex Type 3002 with C1 conditioning (or equivalent) channel
D4M	Point-to-point or multipoint start-stop or synchronous operation at 200 or 2400 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
D4SB	Point-to-point or multipoint synchronous operation at 2400 bps on a Type 3002 with C1 conditioning (or equivalent) channel with back-up at 2400 bps or 1200 bps on the public switched telephone network
D5	Point-to-point or multipoint synchronous operation at 4800 bps on a duplex Type 3002 with C1 conditioning (or equivalent) channel
D5M	Point-to-point or multipoint synchronous operation at 4800 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
D5SB	Point-to-point or multipoint synchronous operation at 4800 bps on a duplex Type 3002 with C1 conditioning (or equivalent) channel with back-up at 4800 bps on the public switched telephone network
D6	Point-to-point or multipoint synchronous operation at 7200 bps on a duplex Type 3002 with C2 conditioning (or equivalent) channel
D6M	Point-to-point or multipoint synchronous operation at 7200 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
D6SB	Point-to-point or multipoint synchronous operation at 7200 bps on a duplex Type 3002 with C2 conditioning (or equivalent) channel with back-up at 3600 bps on the public switched telephone network
D7M	Point-to-point or multipoint synchronous operation at 9600 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
X1M	Point-to-point or multipoint synchronous operation at 2400 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
X2M	Point-to-point or multipoint synchronous operation at 4800 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy
X3M	Point-to-point or multipoint synchronous operation at 9600 bps via stand-alone DCEs attached under the provisions of the IBM Multiple Supplier Systems Policy

Index to Parameter Selection Tables ---- Stations

The parameter selection tables for stations appear in the sequence below. (Turn page for index to tables for line sets.)

Index to Parameter Selection Tables ---- Line Sets

The parameter selection tables for line sets appear in the
sequence below.

Line Set	Description
1A	Low Speed --- External Modem
1C	Low Speed --- Local Attachment
1D	Medium Speed --- External Modem
1E	External Auto Call Unit Interface
1F	Medium Speed --- Local Attachment
1G	High Speed --- External Modem
1H	Medium Speed --- Duplex --- External Modem
1J	High Speed --- External Modem (Mil std. 188)
1L	IBM 2400/1200 bps Leased Point-to-Point Integrated Modem
1M	IBM 2400/1200 bps Leased Multipoint Integrated Modem
1P	IBM 2400/1200 bps Switched Network Integrated Modem
1Q	IBM 2400/1200 bps Switched Network Integrated Modem with Auto Call Originate
1S	Common Carrier 56,000 bps Attachment
1X	IBM 2400/1200 bps Leased Point-to-Point Duplex Data Integrated Modem
1Y	IBM 2400/1200 bps Multipoint Master Duplex Data Integrated Modem
2A	Telegraph Single Current
3A	IBM Limited Distance Type 1 Modem, 2-wire
3B	IBM Limited Distance Type 1 Modem, 4-wire
4A	IBM Limited Distance Type 2 Modem
4B	IBM Leased Line Modem, 2-wire
4C	IBM Leased Line Modem, 4-wire
5A	IBM 2400/1200 bps Leased Point-to-Point Integrated Modem
5B	IBM 2400/1200 bps Multipoint Master Integrated Modem
6A	IBM 2400/1200 bps Switched Network Integrated Modem
7	IBM 2400/1200 bps Switched Network Integrated Modem with Auto Call Originate
8A	IBM 1200 bps Leased Line Integrated Modem
8B	IBM 1200 bps Switched Network Integrated Modem
8C	IBM 1200 bps Leased Line Integrated Modem with Break
8D	IBM 1200 bps Switched Network Integrated Modem with Break
9	IBM 1200 bps Switched Network Integrated Modem with Auto Call Originate
9A	IBM 1200 bps Switched Network Integrated Modem with Auto Call Originate
10A	IBM 1200 bps Leased Line Duplex Data Integrated Modem
11A	IBM 2400/1200 bps Leased Point-to-Point Duplex Data Integrated Modem
11B	IBM 2400/1200 bps Leased Multipoint Master Duplex Data Integrated Modem
12A	IBM 1200 bps Leased Line Integrated Modem with Break
12B	IBM 1200 bps Switched Network Integrated Modem with Break

PARAMETER SELECTION TABLES: STATIONS

IBM 1030 Data Collection System (supported only in emulation mode)	1030

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Type of station** 1030	**TERM=** 1030	
●		**Type of line (nonswitched or switched)** Nonswitched	**DIAL=** NO	

●		**Half-duplex or duplex facility**
		 If line set is 1A, 1D, or 4A:
		   Half-duplex
		
		 If line set is 1C or 4C:
		   Duplex
			DUPLEX=
			
			 HALF
			
			 FULL	

●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 600	**SPEED=** 600	
	●	**Transmission code used by station**	**CODE=**	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

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1030	IBM 1030 Data Collection System

Applicable					
Yes	No	Parameter	Operand	Remarks	
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC=		
			EOB=		
			EOT=		
			WTTYEOB=		
			WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
	●	New sync option required for modem at controller	NEWSYNC=		

IBM 1050 Data Communication System

1050

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 1050	**TERM=** 1050	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		If line set is 2A or 4A:
		  Half-duplex
		
		If line set is 1A, 1C, 1D, or 4C:
		  Duplex
			DUPLEX=
			
			HALF
			
			FULL	

●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 75 134.5	**SPEED=** 75 134	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** BCD Extended BCD	**CODE=** (specify only for network control operation) BCD EBCD	
●		**Terminal equipped with record checking (LRC)** YES	**FEATURE=** LRC (specify only for emulation operation)	
	●	**Type of cluster control unit**	**CUTYPE=**	

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1050	IBM 1050 Data Communication System

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	

●		Check data carrier detect option required
		Yes (CHECK=DCD) if line set and switched facility are both duplex
		and if data security requires that the carrier detect signal be monitored
		when the line is in receive state; otherwise, No (CHECK=NODCD)
			CHECK=
			    DCD
			
			    NODCD	

	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required for modem at controller	NEWSYNC=	

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IBM 1060 Data Communication System
(supported only in emulation mode)

1060

Applicable		Parameter	Operand	Remarks
Yes	**No**			
●		**Type of station** 1060	**TERM=** 1060	
●		**Type of line (nonswitched or switched)** Nonswitched	**DIAL=** NO	

●		**Half-duplex or duplex facility**
		If line set is 4A or 4B:
		  Half-duplex
		
		If line set is 1A, 1C, 1D, or 4C:
		  Duplex
			DUPLEX=
			
			HALF
			
			FULL	

●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 134.5	**SPEED=** 134	
	●	**Transmission code used by station**	**CODE=**	
●		**Terminal equipped with record checking (LRC)** YES	**FEATURE=** LRC	
	●	**Type of cluster control unit**	**CUTYPE=**	

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1060

IBM 1060 Data Communication System

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required for modem at controller	NEWSYNC=	

| IBM 1130 Computing System | 1130 |

Applicable Yes No	Parameter	Operand	Remarks
●	**Type of station** 1130	**TERM=** 1130	
●	**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●	**Half-duplex or duplex facility**
	If line set is 1P, 1Q, 6A, or 7: Half-duplex
	If line set is 1D:
	   If communication facility is C4, C4M, C5, or C5M:
	     Half-duplex
	   If communication facility is D3M, D4, D4M, X1M,
	    or X2M:
	      Half-duplex if facility is half-duplex;
	      Duplex if facility is duplex.
	   If communication facility is D5 or D5M: Duplex
	If line set is 1F: Duplex
	If line set is 1L, 1M, 5A, or 5B:
	   Half-duplex if communication facility is half-duplex;
	   Duplex if facility is duplex.
		DUPLEX=
		HALF
		
		HALF
		
		HALF
		FULL
		FULL
		FULL
		
		HALF
		FULL
			Consult communication facility page of this guide for meaning of communication facility codes.
			
			*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●	**Type of line control** BSC	**LNCTL=** BSC	
●	**Transmission speed of station (bps)** 600 1200 2000 2400 4800	**SPEED=** 600 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●	**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
●	**Type of cluster control unit**	**CUTYPE=**	

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1130	IBM 1130 Computing System

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required for modem at controller	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 1800 Data Acquisition and Control System

1800

Applicable Yes	No	Parameter	Operand	Remarks
●		**Type of station** 1800	TERM= 1800	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		  If communication facility is C4M, C5, or C5M:
		    Half-duplex
		  If communication facility is D3M, D4, D4M,
		    X1M, or X2M:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex.
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex.
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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1800	IBM 1800 Data Acquisition and Control System

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required for modem at controller	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2260 Display Station
(supported only in emulation mode)

2260

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** 2260	TERM= 2260	
●		**Type of line (nonswitched or switched)** Nonswitched	DIAL= NO	
●		**Half-duplex or duplex facility** DUPLEX	DUPLEX= FULL	
●		**Type of line control** Start-stop	LNCTL= SS	
●		**Transmission speed of station (bps)** 1200 2400 4800	SPEED= 1200 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
	●	**Transmission code used by station**	CODE=	
●		**Terminal equipped with record checking (LRC)** Yes	FEATURE= LRC	
●		**Type of cluster control unit** 2848	CUTYPE= 2848	

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2260	IBM 2260 Display Station

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
●		Multiple display terminals on line Yes, if more than one 2848 is connected to the line; No, if only one 2848 on line	MULTI= YES NO	Specify only for operation in emulation mode.
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required for modem at controller	NEWSYNC=	

IBM 2265 Display Station (supported only in emulation mode)	2265

Applicable				
Yes	No	Parameter	Operand	Remarks
●		Type of station 2265	TERM= 2265	
●		Type of line (nonswitched or switched) Nonswitched	DIAL= NO	
●		Half-duplex or duplex facility DUPLEX	DUPLEX= FULL	
●		Type of line control Start-stop	LNCTL= SS	
●		Transmission speed of station (bps) 1200 2400	SPEED= 1200 2400	If in doubt as to the line speed used, consult your IBM representative.
	●	Transmission code used by station	CODE=	
●		Terminal equipped with record checking (LRC) Yes	FEATURE= LRC	
●		Type of cluster control unit 2845	CUTYPE= 2845	

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| 2265 | IBM 2265 Display Station |

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC=		
			EOB=		
			EOT=		
			WTTYEOB=		
			WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
●		Multiple display terminals on line Yes, if more tahn one 2845 is connected to the line; No, if only one 2845 on line	MULTI= YES NO	Specify only for operation in emulation mode.	
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
	●	New sync option required for modem at controller	NEWSYNC=		

IBM 2701 Data Adapter Unit	2701

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** 2701	**TERM=** 2701	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex
		If line set is 1D:
		  If communication facility is C4, C4M, C5, or C5M:
		    Half-duplex
		  If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, or X2M:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		  If communication facility is D5, D5M, D5SB, D6, D6M,
		    or D6SB†: Duplex
		If line set is 1F, 1G or 1S: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**LNCTL=** BSC	

●		**Transmission speed of station (bps)**
		  1200
		  2000
		  2400
		  4800
		  7200
		  19200
		  40800
		  50000
			SPEED=
			  1200
			  2000
			  2400
			  4800
			  7200
			  19200
			  40800
			  50000
				If in doubt as to the line speed used, consult your IBM representative.

●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

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2701	IBM 2701 Data Adapter Unit

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
●		Tributary address required for controller to which station attached	TADDR=	
		Yes, if controller is a tributary station on a multipoint line that is under the control of the remote 2701.	(specify address)	
		No, if controller is not a tributary station.	(omit operand)	
●		New sync option required for modem at controller	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2703 Transmission Control	2703

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2703	**TERM=** 2703	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		  If communication facility is C4M, C5, or C5M:
		  Half-duplex
		  If communication facility is D3, D3M, D4, D4M,
		  or D4SB†:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
		  If communication facility is D5, D5M, or D5SB:
		  Duplex
		If line set is 1F, 1G, or 1S: Duplex
		If line set is 1L, 1M, 5A, 5B:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	**SPEED=** 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

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2703	IBM 2703 Transmission Control

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
●		Tributary address required for controller to which station attached Yes, if controller is a tributary station on a multipoint line that is under the control of the remote 2703. No, if controller is not a tributary station.	TADDR= (specify address) (omit operand)	
●		New sync option required for modem at controller Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2715 Transmission Control (Model 2)	2715

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2715 Model 2	TERM= 2715	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, or 7: Half-duplex If line set is 1D: 　If communication facility is C4M, C5, or C5M: 　　Half-duplex 　If communication facility is D3M, D4, or D4M: 　　Half-duplex if facility is half-duplex; 　　Duplex if facility is duplex* 　If communication facility is D5 or D5M: Duplex If line set is 1F: Duplex If line set is 1L, 1M, 5A, or 5B: 　Half-duplex if facility is half-duplex; 　Duplex if facility is duplex*	DUPLEX= HALF HALF HALF FULL FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC	CODE= EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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2715	IBM 2715 Transmission Control (Model 2)

Applicable					
Yes	No	Parameter		Operand	Remarks
	●	Unit exception option required		UNITXC=	
	●	Teletypewriter ending characters		CHAREC=	
				EOB=	
				EOT=	
				WTTYEOB=	
				WTTYEOT=	
	●	Immediate end option required		FEATURE=	
	●	Space on downshift option available (teletypewriters)		FEATURE=	
	●	Multiple display terminals on line		MULTI=	
	●	Check data carrier detect option required		CHECK=	
	●	Tributary address required for controller to which station attached		TADDR=	
●		New sync option required for modem at controller		NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)		YES	
		No, if the requirements above for "yes" are not met.		NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2740 Communications Terminal (Model 1)　　　　2740-1

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2740 Model 1	**TERM=** 2740-1	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	
●		**Half-duplex or duplex facility** If line set is 1A, 1D, or 3B: Duplex If line set is 1C, 3A, 4A, or 4B: Half-duplex If line set is 4C: 　　If line is point-to-point: Half-duplex 　　If line is multipoint: Duplex	**DUPLEX=** FULL HALF HALF FULL	
●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 134.5	**SPEED=** 134	
●		**Transmission code used by station** BCD Extended BCD Correspondence	**CODE=** BCD EBCD COR	Specify code only for operation in network control mode
●		**Terminal equipped with record checking (LRC)** Yes, if terminal equipped with feature code 6114, No, if not.	**FEATURE=** LRC (emulation operation) CHECK (network control operation) NOLRC (emulation operation) NO CHECK (network control operation)	
	●	**Type of cluster control unit**	**CUTYPE=**	

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| 2740-1 | IBM 2740 Communications Terminal (Model 1) |

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	

●		Check data carrier detect option required
		Yes (CHECK=DCD) if line set and switched facility are both duplex
		and if data security requires that the carrier detect signal be monitored
		when the line is in receive state; otherwise, No (CHECK=NODCD)
			CHECK=
			  DCD
			
			  NODCD	

	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required for modem at controller	NEWSYNC=	

| IBM 2740 Communications Terminal (Model 2) | 2740-2 |

Applicable

Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2740 Model 2	TERM= 2740-2	
●		**Type of line (nonswitched or switched)** Nonswitched	DIAL= NO	
●		**Half-duplex or duplex facility** If line set is 1C, 3B, or 4C: Duplex If line set is 1A: If communication facility is D1 or D1M: Duplex If communication facility is D2 or D2M: Half-duplex If line set is 1C, 3B, or 4C: Duplex If line set is 1A: If communication facility is D1 or D1M: Duplex If communication facility is D2 or D2M: Half-duplex If line set is 1D: If communication facility is D1 or D1M: Duplex If communication facility is D2 or D2M: Half-duplex If line set is 2A, 3A, 4A, or 4B: Half-duplex	DUPLEX= FULL FULL HALF FULL FULL HALF FULL HALF HALF	Consult communication facility page of this guide for meaning of communications facility codes.
●		**Type of line control** Start-stop	LNCTL= SS	
		Transmission speed of station (bps) 75 134.5 600	SPEED= 75 134 600	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** BCD Extended BCD Correspondence	CODE= BCD EBCD COR	Specify code only for operation in network control mode
●		**Terminal equipped with record checking (LRC)** Yes, if terminal equipped with feature code 6114 No, if not.	FEATURE= LRC (emulation operation) CHECK (network control operation) NOLRC (emulation operation) NOCHECK (network control operation)	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

2740-2	IBM 2740 Communications Terminal (Model 2)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required	NEWSYNC=	

IBM 2741 Communications Terminal	2741

Applicable

Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2741	TERM= 2741	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 1A, 1C, 1D, 3B, or 4C: Duplex If line set is 3A, 4A, or 4B: Half-duplex	DUPLEX= FULL HALF	
●		**Type of line control** Start-stop	LNCTL= SS	
●		**Transmission speed of station (bps)** 134.5	SPEED= 134	
●		**Transmission code used by station** BCD Extended BCD Correspondence	CODE= BCD EBCD COR	Specify code only for operation in network control mode
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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| 2741 | IBM 2741 Communications Terminal |

| Applicable | | | | |
Yes	No	Parameter	Operand	Remarks
●		**Unit exception option required** No, if 2741 is equipped with break feature, otherwise Yes	UNITXC= NO YES	
	●	**Teletypewriter ending characters**	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	**Immediate end option required**	FEATURE=	
	●	**Space on downshift option available (teletypewriters)**	FEATURE=	
	●	**Multiple display terminals on line**	MULTI=	

●		**Check data carrier detect option required**
		Yes (CHECK=DCD) if line set and switched communication facility are both
		duplex and if data security requires that the carrier detect signal be monitored
		when the line is in receive state; otherwise, No (CHECK=NODCD)
			CHECK=
			    DCD
			
			      NODCD	

	●	**Tributary address required for controller to which station attached**	TADDR=	
	●	**New sync option required**	NEWSYNC=	

IBM 2770 Data Communication System

2770

Applicable		Parameter	Operand	Remarks
Yes	**No**			
●		**Type of station** 2770	**TERM=** 2770	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, or 7: Half-duplex If line set is 1D: If communication facility is C4M, C5, or C5M: Half-duplex If communication facility is D3M, D4, D4M, D4SB, X1M, or X2M†: Half-duplex if facility is half-duplex; Duplex if facility is duplex* If communication facility is D5, D5M, D5SB, D6, D6M, or D6SB†: Duplex If line set is 1F: Duplex If line set is 1L, 1M, 5A, or 5B: Half-duplex if facility is half-duplex; Duplex if facility is duplex*	**DUPLEX=** HALF HALF HALF FULL FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility. †If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800 7200	**SPEED=** 1200 2000 2400 4800 7200	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

2770	IBM 2770 Data Communication System

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2780 Data Transmission Terminal	2780

| Applicable | | Parameter | Operand | Remarks |
Yes	No			
●		**Type of station** 2780	TERM= 2780	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		   If communication facility is C4M, C5, or C5M:
		     Half-duplex
		   If communication facility is D3M, D4, D4M, D4SB,
		    X1M, or X2M†:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		   If communication facility is D5, D5M, or D5SB: Duplex
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		   Half-duplex if facility is half-duplex;
		   Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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2780	IBM 2780 Data Transmission Terminal

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO		 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 2972 General Banking Terminal System	2972

Applicable

Yes	No	Parameter	Operand	Remarks
●		**Type of station** 2980	**TERM=** 2980	(2972, representing the terminal control unit, is coded in the CUTYPE= operand)
●		**Type of line (nonswitched or switched)** Nonswitched	**DIAL=** NO	

●		**Half-duplex or duplex facility**
		
		If line set is 1D:
		    If communication facility is D3M, D4, D4M, or D4SB†:
		        Half-duplex if facility is half-duplex;
		        Duplex if facility is duplex*
		    If communication facility is D5 or D5M: Duplex
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			HALF
			FULL
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	**SPEED=** 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC	**CODE=** EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
●		**Type of cluster control unit** 2972	**CUTYPE=** 2972	

(continued on reverse)

2972	IBM 2972 General Banking Terminal System

| Applicable | | Parameter | Operand | Remarks |
Yes	No			
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3275 Display Station

3275

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Type of station** 3275	**TERM=** 3275	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1D:
		  If communication facility is C3M, C4, or C4M:
		    Half-duplex
		  If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, or X2M†:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		  If communication facility is D5, D5M, D5SB, D6, D6M,
		    or D6SB†: Duplex
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, 5B or 8A:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
		If line set is 8B, 9, or 9A: Half-duplex
			DUPLEX=
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
			HALF
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control**	**LNCTL=**	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200 9600	**SPEED=** 600 1200 2000 2400 4800 7200 9600	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
●		**Type of cluster control unit** 3275	**CUTYPE=** 3275	

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3275	IBM 3275 Display Station

Applicable				
Yes	No	Parameter	Operand	Remarks
	•	Unit exception option required	UNITXC=	
	•	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	•	Immediate end option required	FEATURE=	
	•	Space on downshift option available (teletypewriters)	FEATURE=	
	•	Multiple display terminals on line	MULTI=	
	•	Check data carrier detect option required	CHECK=	
	•	Tributary address required for controller to which station attached	TADDR=	
•		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3277 Display Station

3277

Applicable					
Yes	No	Parameter	Operand		Remarks
●		Type of station 3277	TERM= 3277		
●		Type of line (nonswitched or switched) Nonswitched	DIAL= NO		
●		Half-duplex or duplex facility Duplex	DUPLEX= FULL		
●		Type of line control BSC	LNCTL= BSC		
●		Transmission speed of station (bps) 1200 2000 2400 4800 7200	SPEED= 1200 2000 2400 4800 7200		If in doubt as to the line speed used, consult your IBM representative.
●		Transmission code used by station EBCDIC USASCII	CODE= EBCDIC USASCII		
	●	Terminal equipped with record checking (LRC)	FEATURE=		
●		Type of cluster control unit 3271	CUTYPE= 3271		

(continued on reverse)

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3277	IBM 3277 Display Station

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3600 Finance Communication System	3600

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)** Nonswitched	DIAL= NO	

●		**Half-duplex or duplex facility**
		
		If line set is 1D:
		    If communication facility is D3, D3M, D4, D4M, X1M,
		    X2M, or X3M:
		        Half-duplex if facility is half-duplex;
		        Duplex if facility is duplex*
		    If communication facility is D5, D5M, D6, D6M, or D7M:
		        Duplex
		If line set is 1H, 1Y, 10A, or 11B: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		        Half-duplex if communication facility is half-duplex;
		        Duplex if communication facility is duplex
			DUPLEX=
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control** SDLC	LNCTL= SDLC	
●		**Transmission speed of station (bps)** 1200 2400 4800 9600	SPEED= 1200 2400 4800 9600	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
●		**Type of cluster control unit** SDLC	CUTYPE= SDLC1	

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3600	IBM 3600 Finance Communication System

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3614 Consumer Transaction Facility	3614

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	Type of station	TERM=	
●		Type of line (nonswitched or switched)	DIAL=	
		Nonswitched	NO	
●		Half-duplex or duplex facility	DUPLEX=	
		If line set is 1D:		Consult communication facility page of
		If communication facility is D3, D3M, D4, D4M, X1M,		this guide for meaning of communication
		or X2M		facility codes.
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	*If in doubt whether facility is half-duplex
		If communication facility is D5, or D5M: Duplex	FULL	or duplex, consult communications
		If line set is 1H, 1Y, 10A, or 11B: Duplex	FULL	common carrier furnishing the facility.
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if communication facility is half-duplex;	HALF	
		Duplex if communication facility is duplex	FULL	
●		Type of line control	LNCTL=	
		SDLC	SDLC	
●		Transmission speed of station (bps)	SPEED=	
		1200	1200	
		2400	2400	
		4800	4800	
	●	Transmission code used by station	CODE=	
	●	Terminal equipped with record checking (LRC)	FEATURE=	
●		Type of cluster control unit	CUTYPE=	
		SDLC	SDLC1	

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3614

IBM 3614 Consumer Transaction Facility

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3650 Retail Store System (BSC)	3650 (BSC)
(supported only in emulation mode)	

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	DUPLEX=	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1P, 1Q, 6A, 7, or 7A: Half-duplex	HALF	
		If line set is 1D:		
		If communication facility is C5: Half-duplex	HALF	*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		If communication facility is D4, or D4SB†:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If communication facility is D5: Duplex	FULL	†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
		If line set is 1L, 1M, 5A, or 5B:		
		Half-duplex if communication facility is half-duplex;	HALF	
		Duplex if communication facility is duplex*	FULL	
●		**Type of line control**	LNCTL=	
		BSC	BSC	
●		**Transmission speed of station (bps)**	SPEED=	
		2400	2400	
		4800	4800	
●		**Transmission code used by station**	CODE=	
		EBCDIC	EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3650 (BSC)	**IBM 3650 Retail Store System (BSC)** (supported only in emulation mode)

Applicable			Parameter	Operand	Remarks
Yes	**No**				
	●		Unit exception option required	UNITXC=	
	●		Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●		Immediate end option required	FEATURE=	
●			Space on downshift option available (teletypewriters)	FEATURE=	
	●		Multiple display terminals on line	MULTI=	
	●		Check data carrier detect option required	CHECK=	
	●		Tributary address required for controller to which station attached	TADDR=	
●			New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3650 Retail Store System (SDLC)	3650 (SDLC)
(supported only in network control mode)	

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
●		**Half-duplex or duplex facility**	DUPLEX=	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is D4, or D4SB†:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		If communication facility is D5: Duplex	FULL	
		If line set is 1L, 1M, 5A, or 5B:		
		Half-duplex if communication facility is half-duplex;	HALF	
		Duplex if communication facility is duplex*	FULL	†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
		If line set is 1Y or 11B: Duplex	FULL	
		If line set is 1H: Duplex	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		2400	2400	
		4800	4800	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
●		**Type of cluster control unit**	CUTYPE=	
		SDLC	SDLC1	

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3650 (SDLC)

IBM 3650 Retail Store System (SDLC)
(supported only in network control mode)

Applicable			Parameter	Operand	Remarks
Yes	No				
	•		Unit exception option required	UNITXC=	
	•		Teletypewriter ending characters	CHAREC=	
				EOB=	
				EOT=	
				WTTYEOB=	
				WTTYEOT=	
	•		Immediate end option required	FEATURE=	
	•		Space on downshift option available (teletypewriters)	FEATURE=	
	•		Multiple display terminals on line	MULTI=	
	•		Check data carrier detect option required	CHECK=	
	•		Tributary address required for controller to which station attached	TADDR=	
•			New sync option required	NEWSYNC=	
			Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
			No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

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IBM 3660 Supermarket System (BSC)	3660 (BSC)
(supported only in emulation mode)	

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Type of station	TERM=	
●		Type of line (nonswitched or switched)	DIAL=	
		Switched	YES	
●		Half-duplex or duplex facility	DUPLEX=	.
		Half-duplex	HALF	
●		Type of line control	LNCTL=	
		BSC	BSC	
●		Transmission speed of station (bps)	SPEED=	
		2400	2400	
●		Transmission code used by station	CODE=	
		EBCDIC	EBCDIC	
	●	Terminal equipped with record checking (LRC)	FEATURE=	
	●	Type of cluster control unit	CUTYPE=	

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3660 (BSC)

IBM 3660 Supermarket System (BSC)
(supported only in emulation mode)

Applicable					
Yes	No	Parameter		Operand	Remarks
	●	Unit exception option required		UNITXC=	
	●	Teletypewriter ending characters		CHAREC=	
				EOB=	
				EOT=	
				WTTYEOB=	
				WTTYEOT=	
	●	Immediate end option required		FEATURE=	
	●	Space on downshift option available (teletypewriters)		FEATURE=	
	●	Multiple display terminals on line		MULTI=	
	●	Check data carrier detect option required		CHECK=	
	●	Tributary address required for controller to which station attached		TADDR=	
●		New sync option required		NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)		YES	
		No, if the requirements above for "yes" are not met.		NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3660 Supermarket System (SDLC)	3660 (SDLC)
(supported only in network control mode)	

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Type of station	TERM=	
●		Type of line (nonswitched or switched)	DIAL=	
		Switched	NO	Nonswitched line control is used after the switched line connection is established.
●		Half-duplex or duplex facility	DUPLEX=	
		Half-duplex	HALF	
●		Type of line control SDLC	LNCTL= SDLC	
●		Transmission speed of station (bps) 2400	SPEED= 2400	
	●	Transmission code used by station	CODE=	
	●	Terminal equipped with record checking (LRC)	FEATURE=	
●		Type of cluster control unit SDLC	CUTYPE= SDLC1	

3660 (SDLC)	IBM 3660 Supermarket System (SDLC)
	(supported only in network control mode)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3670 Brokerage Communication System

(supported only in emulation mode)

3670

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** 3670	**TERM=** 3671	(note that system is specified as 3671, not 3670)
●		**Type of line (nonswitched or switched)** Nonswitched	**DIAL=** NO	
●		**Half-duplex or duplex facility** Duplex	**DUPLEX=** FULL	
●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 2400 4800 7200	**SPEED=** 2400 4800 7200	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC	**CODE=** EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

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3670	IBM 3670 Brokerage Communication System

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3704 Communications Controller (BSC)

Applicable Yes	No	Parameter	Operand	Remarks
●		**Type of station** 3704	TERM= 3704	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, 7, 8B, 9, and 9A: Half-duplex
		If line set is 1D:
		    If communication facility is C3, C3M, C4, C4M, C5, or
		    C5M: Half-duplex
		    If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, X2M, or X3M†:
		        Half-duplex if facility is half-duplex;
		        Duplex if facility is duplex*
		    If communication facility is D5, D5M, D5SB, D6, D6M,
		    or D6SB†: Duplex
		If line set is 1F, 1G, or 1S: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200 9600 19200 40800 50000	SPEED= 600 1200 2000 2400 4800 7200 9600 19200 40800 50000	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3704	IBM 3704 Communications Controller

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
●		Tributary address required for controller to which station attached Yes, if controller is a tributary station on a multipoint line that is under the control of the remote 3704. No, if controller is not a tributary station.	TADDR= (specify address) (omit operand)	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3704 Communications Controller (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
●		**Half-duplex or duplex facility**	DUPLEX=	Consult communication facility pages of this guide for meaning of communication facility codes.
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	
		If line set is 1D:		
		If communication facility is C3, C3M, C4, C4M, C5, or C5M: Half-duplex	HALF	*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		If communication facility is D3, D3M, D4, D4M, D5, D5M, D6, D6M, X1M, X2M, or X3M:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If line set is 1G, 1H, 1S, 1X, 1Y, 10A, 11A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if communication facility is half-duplex;	HALF	
		Duplex if communication facility is duplex*	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		600	600	
		1200	1200	
		2000	2000	
		2400	2400	
		4800	4800	
		7200	7200	
		9600	9600	
		19200	19200	
		40800	40800	
		50000	50000	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

3704 (SDLC)	IBM 3704 Communications Controller (SDLC)

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO		(The IBM 1200 bps integrated modems cannot use the new sync function.)

| IBM 3705 Communications Controller (BSC) | 3705 (BSC) |

Applicable Yes	No	Parameter	Operand	Remarks
●		**Type of station** 3705	TERM= 3705	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex
		If line set is 1D:
		  If communication facility is C3, C3M, C4, C4M, C5, or
		   C5M: Half-duplex
		  If communication facility is D3, D3M, D4, D4M, D4SB,
		   X1M, X2M, or X3M†:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
		  If communication facility is D5, D5M, D5SB, D6, D6M,
		   or D6SB†: Duplex
		If line set is 1F, 1G, or 1S: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200 9600 19200 40800 50000 56000	SPEED= 600 1200 2000 2400 4800 7200 9600 19200 40800 50000 56000	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

3705 (BSC)	IBM 3705 Communications Controller (BSC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
●		Tributary address required for controller to which station attached Yes, if controller is a tributary station on a multipoint line that is under the control of the remote 3705. No, if controller is not a tributary station.	TADDR= (specify address) (omit operand)	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3705 Communications Controller (SDLC)	3705 (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
●		**Half-duplex or duplex facility**	DUPLEX=	
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility pages of
		If line set is 1D:		this guide for meaning of communication
		If communication facility is C3, C3M, C4, C4M, C5, or		facility codes.
		C5M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M, D5, D5M,		*If in doubt whether facility is half-duplex
		D6, D6M, X1M, X2M, or X3M:		or duplex, consult communications common
		Half-duplex if facility is half-duplex;	HALF	carrier furnishing the facility.
		Duplex if facility is duplex*	FULL	
		If line set is 1G, 1H, 1S, 1X, 1Y, 10A, 11A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if communication facility is half-duplex;	HALF	
		Duplex if communication facility is duplex*	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		600	600	
		1200	1200	
		2000	2000	
		2400	2400	
		4800	4800	
		7200	7200	
		9600	9600	
		19200	19200	
		40800	40800	
		50000	50000	
		56000	56000	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3705 (SDLC)	IBM 3705 Communications Controller (SDLC)

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3735 Programmable Buffered Terminal

3735

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** 3735	**TERM=** 3735	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, 7, 8B, 9, and 9A: Half-duplex If line set is 1D: 　If communication facility is C4, C4M, C5, or C5M: 　　Half-duplex 　If communication facility is D3, D3M, D4, D4M, D4SB, 　　X1M, or X2M†: 　　　Half-duplex if facility is half-duplex; 　　　Duplex if facility is duplex* 　If communication facility is D5, D5M, or D5SB: 　　Duplex If line set is 1F: Duplex If line set is 1L, 1M, 5A, or 5B, or 8A: 　Half-duplex if facility is half-duplex; 　Duplex if facility is duplex*	**DUPLEX=** HALF HALF HALF FULL FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility. †If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	**SPEED=** 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

3735	IBM 3735 Programmable Buffered Terminal

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3741 Data Station	3741

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 3741	TERM= 3741	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex If line set is 1D: 　If communication facility is C4, C4M, C5, or C5M: 　　Half-duplex 　If communication facility is D3, D3M, D4, D4M, or X1M: 　　Half-duplex if facility is half-duplex; 　　Duplex if facility is duplex* If line set is 1F: Duplex If line set is 1L, 5A, or 8A: 　Half-duplex if facility is half-duplex; 　Duplex if facility is duplex*	DUPLEX= HALF HALF HALF FULL FULL HALF FULL	Consult communication facility page of this guide for emaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400	SPEED= 1200 2000 2400	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC	CODE= EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3741	IBM 3741 Data Station

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3747 Data Converter	3747

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 3747	**TERM=** 3747	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex
		If line set is 1D:
		    If communication facility is C4, C4M, C5, or C5M:
		      Half-duplex
		    If communication facility is D3, D3M, D4, D4M, or X1M:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		If line set is 1F: Duplex
		If line set is 1L, 5A, or 8A:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400	**SPEED=** 1200 2000 2400	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC	**CODE=** EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

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3747	IBM 3747 Data Converter

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3767 Communication Terminal (Start-Stop)

3767 (SS)

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** supported as 2740-1, 2740-2, or 2741	**TERM=** 2740-1, 2740-2, or 2741	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 8B, 8C, 8D, 12A, or 12B: Half-duplex
		If line set is 1A, 1D, or 8A:
		    Half-duplex if communication facility is half-duplex;
		    Duplex if communication facility is duplex*
		If line set is 1F:
			DUPLEX=
			
			HALF
			
			HALF
			FULL
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control**	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 300 600 1200	**SPEED=** 300 600 1200	
●		**Transmission code used by station** Correspondence EBCDIC	**CODE=** COR EBCDIC	
	/●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

| 3767 (SS) | IBM 3767 Communication Terminal (Start-Stop) |

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC=		
			EOB=		
			EOT=		
			WTTYEOB=		
			WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
	●	New sync option required	NEWSYNC=		

IBM 3767 Communication Terminal (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	DUPLEX=	
		If line set is 1P, 6A, 8B, 8C, 8D, 12A, or 12B: Half-duplex	HALF	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is C3, C3M, C4, C4M, C5, or C5M: Half-duplex	HALF	
		If communication facility is D2, D2M, D3, D3M, D4, D4M, or X1M		*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If line set is 1H or 11B: Duplex	FULL	
		If line set is 5A, 5B, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If line set is 10A:	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		600	600	
		1200	1200	
		2400	2400	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3767 (SDLC)	IBM 3767 Communication Terminal (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3771 Communication Terminal (BSC)

3771 (BSC)

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Type of station** 3771 (supported as 2770)	TERM= 2770	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, 7, 8B, 9, and 9A: Half-duplex
		If line set is 1D:
		   If communication facility is C4, C4M, C5, C5M, C6, or
		    C6M: Half-duplex
		   If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, or X2M:
		     Half-duplex if facility is half-duplex;
		     Duplex if facility is duplex*
		   If communication facility is D5, D5M, or D5SB†: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		   Half-duplex if facility is half-duplex;
		   Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	
●		**Transmission code used by station** EBCDIC	CODE= EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3771 (BSC)

IBM 3771 Communication Terminal (BSC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

| IBM 3771 Communication Terminal (SDLC) | 3771 (SDLC) |

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	DUPLEX=	
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is C4, C4M, C5, C5M, C6, or C6M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M, X1M, or X2M:		*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If communication facility is D5 or D5M: Duplex	FULL	
		If line set is 1H, 1Y, 10A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		1200	1200	
		2400	2400	
		4800	4800	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3771 (SDLC)	IBM 3771 Communication Terminal (SDLC)

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
●		New sync option required	NEWSYNC=		
		Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES		
		No, if the requirements above for "yes" are not met.	NO		(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3773 Communication Terminal (BSC)	3773 (BSC)

Applicable Yes	No	Parameter	Operand	Remarks
		Type of station	**TERM=**	
●		3773 (supported as 2770)	2770	
		Type of line (nonswitched or switched)	**DIAL=**	
●		Nonswitched	NO	
		Switched	YES	
		Half-duplex or duplex facility	**DUPLEX=**	
●		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is C4, C4M, C5, C5M, C6, or C6M: Half-duplex	HALF	*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		If communication facility is D3, D3M, D4, D4M, D4SB, X1M, or X2M†:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
		If communication facility is D5, D5M, or D5SB†: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		Type of line control	**LNCTL=**	
●		BSC	BSC	
		Transmission speed of station (bps)	**SPEED=**	
●		1200	1200	
		2000	2000	
		2400	2400	
		4800	4800	
		Transmission code used by station	**CODE=**	
●		EBCDIC	EBCDIC	
		Terminal equipped with record checking (LRC)	**FEATURE=**	
	●			
		Type of cluster control unit	**CUTYPE=**	
	●			

(continued on reverse)

3773 (BSC)	IBM 3773 Communication Terminal (BSC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	•	Unit exception option required	UNITXC=	
	•	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	•	Immediate end option required	FEATURE=	
	•	Space on downshift option available (teletypewriters)	FEATURE=	
	•	Multiple display terminals on line	MULTI=	
	•	Check data carrier detect option required	CHECK=	
	•	Tributary address required for controller to which station attached	TADDR=	
•		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3773 Communication Terminal (SDLC)

3773 (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	**TERM=**	
●		**Type of line (nonswitched or switched)**	**DIAL=**	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	**DUPLEX=**	
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is C4, C4M, C5, C5M, C6, or C6M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M, X1M, or X2M:		*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If line set is 1H, 1Y, 10A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
●		**Type of line control**	**LNCTL=**	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	**SPEED=**	
		1200	1200	
		2400	2400	
		4800	4800	
	●	**Transmission code used by station**	**CODE=**	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

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3773 (SDLC)	IBM 3773 Communication Terminal (SDLC)

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3774 Communication Terminal (BSC)

3774 (BSC)

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** 3774 (supported as 2770)	TERM= 2770	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex If line set is 1D: 　If communication facility is C4, C4M, C5, C5M, C6, or 　　C6M: Half-duplex 　If communication facility is D3, D3M, D4, D4M, D4SB, 　　X1M, or X2M†: 　　　Half-duplex if facility is half-duplex; 　　　Duplex if facility is duplex* 　If communication facility is D5, D5M, or D5SB†: Duplex If line set is 1L, 1M, 5A, 5B, or 8A: 　Half-duplex if facility is half-duplex; 　Duplex if facility is duplex*	DUPLEX= HALF HALF HALF FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility. †If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	
●		**Transmission code used by station** EBCDIC	CODE= EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3774 (BSC)	IBM 3774 Communication Terminal (BSC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3774 Communication Terminal (SDLC)	3774 (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)**	DIAL=	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	DUPLEX=	
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility page of
		If line set is 1D:		this guide for meaning of communication
		If communication facility is C4, C4M, C5, C5M, C6, or		facility codes.
		C6M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M,		*If in doubt whether facility is half-duplex
		X1M, or X2M:		or duplex, consult communications common
		Half-duplex if facility is half-duplex;	HALF	carrier furnishing the facility.
		Duplex if facility is duplex*	FULL	
		If communication facility is D5, or D5M: Duplex	FULL	
		If line set is 1H, 1Y, 10A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
●		**Type of line control**	LNCTL=	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	SPEED=	
		1200	1200	
		2400	2400	
		4800	4800	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3774 (SDLC)

IBM 3774 Communication Terminal (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3775 Communication Terminal (BSC)

Applicable Yes	No	Parameter	Operand	Remarks
●		**Type of station** 3775 (supported as 2770)	**`TERM=`** 2770	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**`DIAL=`** NO YES	

●		**Half-duplex or duplex facility**
		
		 If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex
		 If line set is 1D:
		    If communication facility is C4, C4M, C5, C5M, C6, or
		    C6M: Half-duplex
		    If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, or X2M†:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		    If communication facility is D5, D5M, or D5SB†: Duplex
		 If line set is 1L, 1M, 5A, 5B, or 8A:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
			`DUPLEX=`
			
			 HALF
			
			 HALF
			
			 HALF
			 FULL
			 FULL
			
			 HALF
			 FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				 *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				 †If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**`LNCTL=`** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	**`SPEED=`** 1200 2000 2400 4800	
●		**Transmission code used by station** EBCDIC	**`CODE=`** EBCDIC	
	●	**Terminal equipped with record checking (LRC)**	**`FEATURE=`**	
	●	**Type of cluster control unit**	**`CUTYPE=`**	

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| 3775 (BSC) | IBM 3775 Communication Terminal (BSC) |

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

| IBM 3775 Communication Terminal (SDLC) | 3775 (SDLC) |

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
	●	**Type of station**	**TERM=**	
●		**Type of line (nonswitched or switched)**	**DIAL=**	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	**DUPLEX=**	
		If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex	HALF	Consult communication facility page of
		If line set is 1D:		this guide for meaning of communication
		If communication facility is C4, C4M, C5, C5M, C6, or		facility codes.
		C6M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M,		*If in doubt whether facility is half-duplex
		X1M, or X2M:		or duplex, consult communications common
		Half-duplex if facility is half-duplex;	HALF	carrier furnishing the facility.
		Duplex if facility is duplex*	FULL	
		If communication facility is D5, or D5M: Duplex	FULL	
		If line set is 1H, 1Y, 10A, or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B, or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
●		**Type of line control**	**LNCTL=**	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	**SPEED=**	
		1200	1200	
		2400	2400	
		4800	4800	
	●	**Transmission code used by station**	**CODE=**	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

3775 (SDLC)

IBM 3775 Communication Terminal (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3776 Communication Terminal (BSC)

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
•		**Type of station** 3776 (supported as 2770)	TERM= 2770	
•		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

•		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		  If communication facility is C5, C5M, C6, or C6M:
		    Half-duplex
		  If communication facility is D4, D4M, D4SB, X1M, or X2M†:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
		  If communication facility is D5, D5M, or D5SB†: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

•		**Type of line control** BSC	LNCTL= BSC	
•		**Transmission speed of station (bps)** 2000 2400 4800	SPEED= 2000 2400 4800	
•		**Transmission code used by station** EBCDIC	CODE= EBCDIC	
	•	**Terminal equipped with record checking (LRC)**	FEATURE=	
	•	**Type of cluster control unit**	CUTYPE=	

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3776 (BSC)	IBM 3776 Communication Terminal (BSC)

Applicable Yes	Applicable No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3776 Communication Terminal (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Type of station	TERM=	
●		Type of line (nonswitched or switched) Nonswitched Switched	DIAL= NO YES	

●		Half-duplex or duplex facility
		
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		  If communication facility is C4M, C5, or C5M:
		    Half-duplex
		    If communication facility is D4, D4M, X1M, or X2M:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		  If communication facility is D5, or D5M: Duplex
		If line set is 1H, 1Y, 10A, or 11B: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		Type of line control	LNCTL=	
●		Transmission speed of station (bps) 2400 4800	SPEED= 2400 4800	
	●	Transmission code used by station	CODE=	
	●	Terminal equipped with record checking (LRC)	FEATURE=	
	●	Type of cluster control unit	CUTYPE=	

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3776 (SDLC)

IBM 3776 Communication Terminal (SDLC)

Applicable		Parameter	Operand	Remarks
Yes	No			
	•	Unit exception option required	UNITXC=	
	•	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	•	Immediate end option required	FEATURE=	
	•	Space on downshift option available (teletypewriters)	FEATURE=	
	•	Multiple display terminals on line	MULTI=	
	•	Check data carrier detect option required	CHECK=	
	•	Tributary address required for controller to which station attached	TADDR=	
•		New sync option required	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM 3780 Data Communications Terminal

3780

Applicable Yes No	Parameter	Operand	Remarks
●	**Type of station** 3780	TERM= 3780	
●	**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●	**Half-duplex or duplex facility**
	If line set is 1P, 1Q, 6A, or 7: Half-duplex
	If line set is 1D:
	  If communication facility is C4M, C5, or C5M:
	    Half-duplex
	  If communication facility is D3M, D4, D4M, D4SB,
	    X1M, or X2M†:
	      Half-duplex if facility is half-duplex;
	      Duplex if facility is duplex*
	  If communication facility is D5, D5M, D5SB, D6, D6M,
	    or D6SB†: Duplex
	If line set is 1F: Duplex
	If line set is 1L or 5A:
	  Half-duplex if facility is half-duplex;
	  Duplex if facility is duplex*
		DUPLEX=
		HALF
		
		HALF
		
		HALF
		FULL
		
		FULL
		FULL
		
		HALF
		FULL
			Consult communication facility page of this guide for meaning of communication facility codes.
			
			*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
			
			†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●	**Type of line control** BSC	LNCTL= BSC	
●	**Transmission speed of station (bps)** 1200 2000 2400 4800 7200	SPEED= 1200 2000 2400 4800 7200	If in doubt as to the line speed used, consult your IBM representative.
●	**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
●	**Terminal equipped with record checking (LRC)**	FEATURE=	
●	**Type of cluster control unit**	CUTYPE=	

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3780	IBM 3780 Data Communications Terminal

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the line set to which the line is attached is *not* a line set 8A, 8B, or 9A, *and* any of the following is true: (1) The communications controller is the multipoint master (*not* tributary) station for a multipoint (duplex or half-duplex) line; *or*, (2) The line is a nonswitched, point-to-point, duplex line and the remote station controls the carrier signal transmitted by the remote station's modem by alternately energizing and deenergizing its 'request-to-send' signal (this condition is *not* satisfied if the modem sends carrier continuously; *or*, (3) The line is a switched, half-duplex line. No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	

IBM 3790 Communication System

3790

Applicable Yes	No	Parameter	Operand	Remarks
	●	**Type of station**	TERM=	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 8B: Half-duplex If line set is 1D: If communication facility is C4, C4M, C5, or C5M: Half-duplex If communication facility is D3, D3M, D4, D4M, X1M, X2M, or X3M: Half-duplex if facility is half-duplex; Duplex if facility is duplex* If line set is 1H, 1Y, 10A, or 11B: Duplex If line set is 1L, 1M, 5A, or 5B: Half-duplex if facility is half-duplex; Duplex if facility is duplex*	DUPLEX= HALF HALF HALF FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
●		**Type of line control** SDLC	LNCTL= SDLC	
●		**Transmission speed of station (bps)** 1200 2400 4800 7200 9600	SPEED= 1200 2400 4800 7200 9600	
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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3790

IBM 3790 Communication System

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM System/3

System/3

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Type of station** System/370 Model 115 (3115)	TERM= 3115	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		  If communication facility is C3, C3M, C4, C4M, C5, or
		    C5M: Half-duplex
		  If communication facility is D3, D3M, D4, D4M, D4SB,
		    X1M, or X2M†:
		      Half-duplex if facility is half-duplex;
		      Duplex if facility is duplex*
		  If communication facility is D5, D5M, D5SB, D6, D6M,
		    or D6SB†: Duplex
		If line set is 1F, 1G, or 1S: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of
				this guide for meaning of communication
				facility codes.
				
				*If in doubt whether facility is half-duplex
				or duplex, consult communications common
				carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the
				switched backup line are attached to the
				communications controller through the
				same modem, DUPLEX=HALF is required,
				even if the primary line is duplex.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200 9600 19200 40800 50000	SPEED= 600 1200 2000 2400 4800 7200 9600 19200 40800 50000	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

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System/3	IBM System/3

Applicable					
Yes	No	Parameter	Operand		Remarks
	•	Unit exception option required	UNITXC=		
	•	Teletypewriter ending characters	CHAREC=		
			EOB=		
			EOT=		
			WTTYEOB=		
			WTTYEOT=		
	•	Immediate end option required	FEATURE=		
	•	Space on downshift option available (teletypewriters)	FEATURE=		
	•	Multiple display terminals on line	MULTI=		
	•	Check data carrier detect option required	CHECK=		
	•	Tributary address required for controller to which station attached	TADDR=		
•		New sync option required	NEWSYNC=		
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES		
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)	

IBM System/7 (BSC)	System/7 (BSC)
(supported only in emulation mode)	

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** System/7	TERM= SYS7	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		 If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex
		 If line set is 1D:
		   If communication facility is C4, C4M, C5, or C5M:
		     Half-duplex
		   If communication facility is D3, D3M, D4, D4M,
		   X1M, or X2M:
		       Half-duplex if facility is half-duplex;
		       Duplex if facility is duplex*
		   If communication facility is D5, D5M, D6, or D6M: Duplex
		 If line set is 1G or 1S: Duplex
		 If line set is 1L, 1M, 5A, 5B, or 8A:
		   Half-duplex if facility is half-duplex;
		   Duplex if facility is duplex*
			DUPLEX=
			 HALF
			
			 HALF
			
			 HALF
			 FULL
			 FULL
			 FULL
			
			 HALF
			 FULL
				Consult communication facility page of
				 this guide for meaning of communication
				 facility codes.
				
				 *If in doubt whether facility is half-duplex
				 or duplex, consult communications common
				 carrier furnishing the facility.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800 7200 19200 40800 50000	SPEED= 1200 2000 2400 4800 7200 19200 40800 50000	
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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System/7 (BSC)	IBM System/7 (BSC)
	(supported only in emulation mode)

Applicable					
Yes	No	Parameter	Operand	Remarks	
	●	Unit exception option required	UNITXC=		
	●	Teletypewriter ending characters	CHAREC=		
			EOB=		
			EOT=		
			WTTYEOB=		
			WTTYEOT=		
	●	Immediate end option required	FEATURE=		
	●	Space on downshift option available (teletypewriters)	FEATURE=		
	●	Multiple display terminals on line	MULTI=		
	●	Check data carrier detect option required	CHECK=		
	●	Tributary address required for controller to which station attached	TADDR=		
●		New sync option required	NEWSYNC=		
		Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES		
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)	

IBM System/7 (start-stop)

Applicable Yes	No	Parameter	Operand	Remarks
●		**Type of station** System/7	**TERM=** SYS7	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		
		 If line set is 1A or 1D:
		    If communication facility is C1, C1M, C2, D1, or D1M:
		     Duplex
		    If communication facility is D2 or D2M: Half-duplex
		 If line set is 1C or 4C: Duplex
		 If line set is 4A or 4B: Half-duplex
			DUPLEX=
			
			 FULL
			 HALF
			 FULL
			 HALF
				Consult communication facility page of this guide for meaning of communications facility codes.

●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 134.5 600	**SPEED=** 134 600	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** Extended BCD	**CODE=** EBCD	
●		**Terminal equipped with record checking (LRC)** Yes	**FEATURE=** LRC	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

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System/7 (start-stop)	IBM System/7 (start-stop)

Applicable		Parameter	Operand	Remarks
Yes	No			
	•	Unit exception option required	UNITXC=	
	•	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	•	Immediate end option required	FEATURE=	
	•	Space on downshift option available (teletypewriters)	FEATURE=	
	•	Multiple display terminals on line	MULTI=	
	•	Check data carrier detect option required	CHECK=	
	•	Tributary address required for controller to which station attached	TADDR=	
	•	New sync option required	NEWSYNC=	

IBM System/32 (BSC)	System/32 (BSC)

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** System/32	**TERM=** 2770	(Note that System/32 is specified as SYS3, not SYS32)
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 1P, 1Q, 6A, 7, or 8B: Half-duplex
		If line set is 1D:
		  If communication facility is C3, C3M, C4, C4M, C5, C5M,
		  C6 or C6M: Half-duplex
		  If communication facility is D3, D3M, D4, D4M, D4SB,
		  X1M, or X2M†:
		    Half-duplex if facility is half-duplex;
		    Duplex if facility is duplex*
		  If communication facility is D5, D5M, D5SB, D6, D6M,
		  or D6SB†: Duplex
		If line set is 1F, 1H, 1Y, 10A or 11B: Duplex
		If line set is 1L, 1M, 5A, 5B, or 8A:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200	**SPEED=** 600 1200 2000 2400 4800 7200	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

Teleprocessing Preinstallation Guide
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System/32 (BSC)	IBM System/32 (BSC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, and the communications controller is the multipoint control ("master") (not tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM System/32 (SDLC)	System/32 (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
		Type of station	**TERM=**	
●		**Type of line (nonswitched or switched)**	**DIAL=**	
		Nonswitched	NO	
		Switched	YES	
●		**Half-duplex or duplex facility**	**DUPLEX=**	
		If line set is 1P, 1Q, 6A, 7 or 8B: Half-duplex	HALF	Consult communication facility page of this guide for meaning of communication facility codes.
		If line set is 1D:		
		If communication facility is C3, C3M, C4, C4M, C5, C5M, C6, or C6M: Half-duplex	HALF	
		If communication facility is D3, D3M, D4, D4M, D4SB, X1M, or X2M†:		*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
		If communication facility is D5, D5M, D5SB, D6, D6M, or D6SB†: Duplex	FULL	†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
		If line set is 1F, 1H, 1Y, 10A or 11B: Duplex	FULL	
		If line set is 1L, 1M, 5A, 5B or 8A:		
		Half-duplex if facility is half-duplex;	HALF	
		Duplex if facility is duplex*	FULL	
●		**Type of line control**	**LNCTL=**	
		SDLC	SDLC	
●		**Transmission speed of station (bps)**	**SPEED=**	
		600	600	If in doubt as to the line speed used, consult your IBM representative.
		1200	1200	
		2000	2000	
		2400	2400	
		4800	4800	
		7200	7200	
	●	**Transmission code used by station**	**CODE=**	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

System/32 (SDLC)	IBM System/32 (SDLC)

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

| IBM System/360 Model 20 | S/360 Model 20 |

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** System/360 Model 20 (2020)	**TERM=** 2020	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	**DIAL=** NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		   If communication facility is C4, C4M, C5, or C5M:
		      Half-duplex
		      If communication facility is D3, D3M, D4, D4M,
		      D4SB, XIM, or X2M†:
		         Half-duplex if facility is half-duplex;
		         Duplex if facility is duplex*
		      If communication facility is D5, D5M, D6, D6M, or
		      D6SB†: Duplex
		If line set is 1F, 1G, or 1S: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		   Half-duplex if facility is half-duplex;
		   Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.
				
				†If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.

●		**Type of line control** BSC	**LNCTL=** BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800 7200 19200 40800 50000	**SPEED=** 1200 2000 2400 4800 7200 19200 40800 50000	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	**CODE=** EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

(continued on reverse)

S/360 Model 20	IBM System/360 Model 20

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC=	
			EOB=	
			EOT=	
			WTTYEOB=	
			WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required	NEWSYNC=	
		Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.)	YES	
		No, if the requirements above for "yes" are not met.	NO	(The IBM 1200 bps integrated modems cannot use the new sync function.)

| IBM System/360 Model 25 | S/360 Model 25 |

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** System/360 Model 25 (2025)	TERM= 2025	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		 If communication facility is C4, C4M, C5, or C5M:
		  Half-duplex
		 If communication facility is D3, D3M, D4, or D4M:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
		 If communication facility is D5 or D5M: Duplex
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		 Half-duplex if facility is half-duplex;
		 Duplex if facility is duplex*
			DUPLEX=
			
			HALF
			
			HALF
			
			HALF
			FULL
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 1200 2000 2400 4800	SPEED= 1200 2000 2400 4800	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

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S/360 Model 25	IBM System/360 Model 25

Applicable				
Yes	No	Parameter	Operand	Remarks
	•	Unit exception option required	UNITXC=	
	•	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	•	Immediate end option required	FEATURE=	
	•	Space on downshift option available (teletypewriters)	FEATURE=	
	•	Multiple display terminals on line	MULTI=	
	•	Check data carrier detect option required	CHECK=	
	•	Tributary address required for controller to which station attached	TADDR=	
•		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM System/370 Model 125	S/370 Model 125

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Type of station** System/370 Model 125 (3125)	TERM= 3125	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	
●		**Half-duplex or duplex facility** If line set is 1P, 1Q, 6A, 7, 8B, 9, or 9A: Half-duplex If line set is 1D: 　If communication facility is C3, C3M, C4, C4M, C5, 　　or C5M: Half-duplex 　If communication facility is D3, D3M, D4, D4M, 　　D4SB, XIM, or X2M†: 　　　Half-duplex if facility is half-duplex; 　　　Duplex if facility is duplex* 　If communication facility is D5, D5M, D6, D6M, or 　　D6SB†: Duplex If line set is 1F, 1G, or 1S: Duplex If line set is 1L, 1M, 5A, or 5B or 8A: 　Half-duplex if facility is half-duplex; 　Duplex if facility is duplex*	DUPLEX= HALF HALF HALF FULL FULL FULL HALF FULL	Consult communication facility page of this guide for meaning of communication facility codes. *If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility. †If the primary (nonswitched) line and the switched backup line are attached to the communications controller through the same modem, DUPLEX=HALF is required, even if the primary line is duplex.
●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200 19200 40800 50000	SPEED= 600 1200 2000 2400 4800 7200 19200 40800 50000	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

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S/370 Model 125	IBM System/370 Model 125

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

Parameter Selection Table
(Station)

IBM System/370 Model 135

S/370 Model 135

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Type of station** System/370 Model 135 (3135)	TERM= 3135	
●		**Type of line (nonswitched or switched)** Nonswitched Switched	DIAL= NO YES	

●		**Half-duplex or duplex facility**
		If line set is 1P, 1Q, 6A, or 7: Half-duplex
		If line set is 1D:
		 If communication facility is C3, C3M, C4M, C5,
		  or C5M: Half-duplex
		 If communication facility is D3M, D4, D4M, X1M,
		  or X2M:
		  Half-duplex if facility is half-duplex;
		  Duplex if facility is duplex*
		 If communication facility is D5, D5M, D6, or D6M:
		  Duplex
		If line set is 1F: Duplex
		If line set is 1L, 1M, 5A, or 5B:
		 Half-duplex if facility is half-duplex;
		 Duplex if facility is duplex*
			DUPLEX=
			HALF
			
			HALF
			
			HALF
			FULL
			
			FULL
			FULL
			
			HALF
			FULL
				Consult communication facility page of this guide for meaning of communication facility codes.
				
				*If in doubt whether facility is half-duplex or duplex, consult communications common carrier furnishing the facility.

●		**Type of line control** BSC	LNCTL= BSC	
●		**Transmission speed of station (bps)** 600 1200 2000 2400 4800 7200	SPEED= 600 1200 2000 2400 4800 7200	If in doubt as to the line speed used, consult your IBM representative.
●		**Transmission code used by station** EBCDIC USASCII	CODE= EBCDIC USASCII	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

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S/370 Model 135 | IBM System/370 Model 135

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
		Check data carrier detect option required	CHECK=	
		Tributary address required for controller to which station attached	TADDR=	
●		New sync option required Yes, if the modem at the controller has the "new sync" feature, *and* the communications controller is the multipoint control ("master") (*not* tributary) station for a multipoint line. (The IBM 2400 bps integrated modems and IBM 3872, 3874, and 3875 modems can use the new sync function.) No, if the requirements above for "yes" are not met.	NEWSYNC= YES NO	 (The IBM 1200 bps integrated modems cannot use the new sync function.)

IBM Communicating Magnetic Card Selectric® Typewriter	CMCST

Applicable				
Yes	No	Parameter	Operand	Remarks
●		Type of station 2741	TERM= 2741	
●		Type of line (nonswitched or switched) Switched	DIAL= 2741	
●		Half-duplex or duplex facility Half-duplex	DUPLEX= HALF	
●		Type of line control Start-stop	LNCTL= SS	
●		Transmission speed of station (bps) 134.5	SPEED= 134	
●		Transmission code used by station Correspondence	CODE= COR	
	●	Terminal equipped with record checking (LRC)	FEATURE=	
	●	Type of cluster control unit	CUTYPE=	

(continued on reverse)

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CMCST

IBM Communicating Magnetic Card Selectric® Typewriter

Applicable Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
	●	Teletypewriter ending characters	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
	●	Immediate end option required	FEATURE=	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required	NEWSYNC=	

AT&T 83B2/83B3 Selective Calling System

83B2 83B3

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 83B2 or 83B3	TERM= 83B3	
●		**Type of line (nonswitched or switched)** Nonswitched	DIAL= NO	
●		**Half-duplex or duplex facility** Duplex	DUPLEX= FULL	
●		**Type of line control** Start-stop	LNCTL= SS	
●		**Transmission speed of station (bps)** 45 56 74	SPEED= 45 56 74	If in doubt as to the line speed used, consult your AT&T representative or IBM representative.
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

(continued on reverse)

Teleprocessing Preinstallation Guide
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83B2/83B3	AT&T 83B2/83B3 Selective Calling System

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	**Unit exception option required**	**UNITXC=**	
●		**Teletypewriter ending characters** Specify ending characters (end-of-block, end-of-transmission) in the CHAREC, EOB (or WTTYEOB) and EOT (or WTTYEOT) operands as explained in the program generation and utilities publications listed in the Preface.	**CHAREC=** **EOB=** **EOT=** **WTTYEOB=** **WTTYEOT=**	
●		**Immediate end option required** Yes, if reading from paper tape No, if not reading from paper tape	**FEATURE=** IMEND NOIMEND	
●		**Space on downshift option available (teletypewriters)** Yes, if space characters are to cause automatic downshifting of succeeding characters; No, if no automatic downshifting	**FEATURE=** SPACE NOSPACE	
	●	**Multiple display terminals on line**	**MULTI=**	
	●	**Check data carrier detect option required**	**CHECK=**	
	●	**Tributary address required for controller to which station attached**	**TADDR=**	
	●	**New sync option required**	**NEWSYNC=**	

Western Union Plan 115A Outstations

115A

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** 115A	TERM= 115A	
●		**Type of line (nonswitched or switched)** Nonswitched	DIAL= NO	
●		**Half-duplex or duplex facility** Duplex	DUPLEX= FULL	
●		**Type of line control** Start-stop	LNCTL= SS	
●		**Transmission speed of station (bps)** 45 56 74	SPEED= 45 56 74	If in doubt as to the line speed used, consult your Western Union representative or your IBM representative.
	●	**Transmission code used by station**	CODE=	
	●	**Terminal equipped with record checking (LRC)**	FEATURE=	
	●	**Type of cluster control unit**	CUTYPE=	

	115A	Western Union Plan 115A Outstations

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Unit exception option required	UNITXC=	
●		Teletypewriter ending characters Specify ending characters (end-of-block, end-of-transmission) in the CHAREC, EOB (or WTTYEOB) and EOT (or WTTYEOT) operands as explained in the program generation and utilities publications listed in the Preface.	CHAREC= EOB= EOT= WTTYEOB= WTTYEOT=	
●		Immediate end option required Yes, if reading from paper tape No, if not reading from paper tape	FEATURE= IMEND NOIMEND	
●		Space on downshift option available (teletypewriters) Yes, if space characters are to cause automatic downshifting of succeeding characters; No, if no automatic downshifting	FEATURE= SPACE NOSPACE	
	●	Multiple display terminals on line	MULTI=	
	●	Check data carrier detect option required	CHECK=	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required	NEWSYNC=	

Western Union Teletypewriter Exchange Service (TWX)	TWX

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Type of station** TWX	**TERM=** TWX	
●		**Type of line (nonswitched or switched)** Switched	**DIAL=** YES	
●		**Half-duplex or duplex facility** Duplex	**DUPLEX=** FULL	
●		**Type of line control** Start-stop	**LNCTL=** SS	
●		**Transmission speed of station (bps)** 110	**SPEED=** 110	
	●	**Transmission code used by station**	**CODE=**	
	●	**Terminal equipped with record checking (LRC)**	**FEATURE=**	
	●	**Type of cluster control unit**	**CUTYPE=**	

Teleprocessing Preinstallation Guide
for IBM 3704 and 3705 Communications Controllers

TWX	Western Union Teletypewriter Exchange Service (TWX)

Applicable		Parameter	Operand	Remarks
Yes	No			
	●	Unit exception option required	UNITXC=	
●		Teletypewriter ending characters Specify ending characters in the CHAREC operand as explained in the program generation and utilities publications listed in the Preface	CHAREC=	
●		Immediate end option required Yes, if reading from paper tape No, if not reading from paper tape	FEATURE= IMEND NOIMEND	
	●	Space on downshift option available (teletypewriters)	FEATURE=	
	●	Multiple display terminals on line	MULTI=	
●		Check data carrier detect option required Yes	CHECK= DCD	
	●	Tributary address required for controller to which station attached	TADDR=	
	●	New sync option required	NEWSYNC=	

PARAMETER SELECTION TABLES:
LINE SETS

Low Speed --- External Modem	1A

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)**	**MODEM=**	
		1, if line is attached to controller via IBM 2711 equipped with feature code 4639, 4641 -- 4644, 4647, 4691 -- 4694	OPTION1	
		2, in all other cases	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		Internal	INT	
●		**Data rate (high or low)**	**DATRATE=**	
		Low	LOW	
●		**Type of line connection**	**DIAL=**	
		Nonswitched	NO	
		Switched	YES	
●		**Channel priority applicable (normal or high)**	**CHNPRI=**	'
		Normal	NORMAL	
●		**Ring indicator mode (yes or no)**	**RING=**	
		No	NO	

| Low Speed --- Local Attachment | 1C |

| Applicable | | Parameter | Operand | Remarks |
Yes	No			
	●	Modem option required (1 or 2)	MODEM=	
●		Clocking required -- internal (business machine) or external (modem) Internal	CLOCKNG= INT	
●		Data rate (high or low) Low	DATRATE= LOW	
●		Type of line connection Local attachment -- 200 ft. max.	DIAL= NO	
●		Channel priority applicable (normal or high) Normal	CHNPRI= NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

Medium Speed --- External Modem

1D

Applicable					
Yes	No	Parameter	Operand		Remarks
●		**Modem option required (1 or 2)**	MODEM=		
		2	OPTION2		
●		**Clocking required -- internal (business machine) or external (modem)**	CLOCKNG=		
		Internal (speeds up to and including 1200bps)	INT		
		External (speeds of 2000 bps and over)	EXT		
●		**Data rate (high or low)**	DATRATE=		
		Low, if attached modem is a single rate modem or a dual-rate modem that is to operate at the lower rate	LOW		
		High, if attached modem is a dual rate modem that is to operate at the higher rate.	HIGH		
●		**Type of line connection**	DIAL=		
		Nonswitched	NO		
		Switched	YES		
●		**Channel priority applicable (normal or high)**	CHNPRI=		
		Normal	NORMAL		
●		**Ring indicator mode (yes or no)** If line is nonswitched, specify RING=NO. If line is switched:	RING=		
		If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO.			If in doubt about which option is appropriate for your application, consult your IBM representative.
		If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.			

External Auto Call Unit Interface

1E

This line set is used in association with line sets 1A, 1D, and 1G when an external auto call unit is required for the line attached to one of these line sets. None of the parameters indicated for line sets is applicable to line set 1E.

Medium Speed --- Local Attachment

1F

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	**Modem option required (1 or 2)**	**MODEM=**	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	**CLOCKNG=** INT	
●		**Data rate (high or low)** High	**DATRATE=** HIGH	
●		**Type of line connection** Local attachment--100 feet maximum.	**DIAL=** NO	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

High Speed --- External Modem

1G

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)**	**MODEM=**	
		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		External	EXT	
●		**Data rate (high or low)**	**DATRATE=**	
		Low, if attached modem is a single rate modem or a dual-rate modem that is to operate at the lower rate.	LOW	
		High, if attached modem is a dual-rate modem that is to operate at the higher rate.	HIGH	
●		**Type of line connection**	**DIAL=**	
		Nonswitched	NO	
		Switched	YES	
●		**Channel priority applicable (normal or high)** Specify CHNPRI=HIGH if the controller also contains line sets to which lines operating at under 19,200 bps are attached. If the controller does not also contain such line sets (that is, all lines operate at 19,200 bps or more), specify CHNPRI=NORMAL.	**CHNPRI=**	
●		**Ring indicator mode (yes or no)** If line is nonswitched, specify RING=NO. If line is switched:	**RING=**	
		If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO.		If in doubt about which option is appropriate for your application, consult your IBM representative.
		If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.		

Medium Speed—Duplex—External Modem

1H

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	MODEM= OPTION 2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal (speeds up to and including 1200 bps) External (speeds of 2000 bps and over)	CLOCKNG= INT EXT	
●		**Data rate (high or low)** Low, if attached modem is a single- rate modem or a dual-rate modem that is to operate at the lower rate. High, if attached modem is a dual-rate modem that is to operate at the higher rate.	DATRATE= LOW HIGH	
●		**Type of line connection** Nonswitched	DIAL= NO	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
	●	**Ring indicator mode (yes or no)**	RING=	

High Speed—External Modem (Mil. Std. 188)

1J

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
		Modem option required (1 or 2)	MODEM=	
●		2	OPTION2	
●		Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
		Internal (speeds up to and including 1200 bps)	INT	
		External (speeds of 2000 bps and over)	EXT	
●		Data rate (high or low)	DATRATE=	
		Low, if attached modem is a single-rate modem or a dual-rate modem that is to operate at the lower rate.	LOW	
		High, if attached modem is a dual-rate modem that is to operate at the higher rate.	HIGH	
●		Type of line connection	DIAL=	
		Nonswitched	NO	
●		Channel priority applicable (normal or high) Specify CHNPRI=HIGH if the controller also contains line sets to which lines operating at under 19,200 bps are attached. If the controller does not also contain such line sets (that is, all lines operate at 19,200 bps or more), specify CHNPRI=NORMAL.	CHNPRI=	
	●	Ring indicator mode (yes or no)	RING=	

IBM 2400/1200 bps Leased Point-to-Point Integrated Modem

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Modem option required (1 or 2)** 2	MODEM= OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** External	CLOCKNG= EXT	
●		**Data rate (high or low)** High (for operation at 2400 bps) Low (for operation at 1200 bps)	DATRATE= HIGH LOW	
●		**Type of line connection** Nonswitched	DIAL= NO	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
	●	**Ring indicator mode (yes or no)**	RING=	

	IBM 2400/1200 bps Leased Multipoint Master Integrated Modem		1M

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	**MODEM=** OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** External	**CLOCKNG=** EXT	
●		**Data rate (high or low)** High (for operation at 2400 bps) Low (for operation at 1200 bps)	**DATRATE=** HIGH LOW	
●		**Type of line connection** Nonswitched	**DIAL=** NO	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

IBM 2400/1200 bps Switched Network Integrated Modem

1P

Applicable Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)**	**MODEM=**	
		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		External	EXT	
●		**Data rate (high or low)**	**DATRATE=**	
		High (for operation at 2400 bps)	HIGH	
		Low (for operation at 1200 bps)	LOW	
●		**Type of line connection**	**DIAL=**	
		Switched	YES	
●		**Channel priority applicable (normal or high)**	**CHNPRI=**	
		Normal	NORMAL	
●		**Ring indicator mode (yes or no)** If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO. If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.	**RING=**	If in doubt about which option is appropriate for your application, consult your IBM representative.

| IBM 2400/1200 bps Switched Network Integrated Modem with Auto Call Originate | 1Q |

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
●		**Modem option required (1 or 2)** 2	MODEM= OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** External	CLOCKNG= EXT	
●		**Data rate (high or low)** High (for operation at 2400 bps) Low (for operation at 1200 bps)	DATRATE= HIGH LOW	
●		**Type of line connection** Switched	DIAL= YES	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
●		**Ring indicator mode (yes or no)** If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO. If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.	RING=	If in doubt about which option is appropriate for your application, consult your IBM representative.

Common Carrier 56,000 bps Attachment

1S

Applicable				
Yes	No	Parameter	Operand	Remarks
•		**Modem option required (1 or 2)** 2	**MODEM=** OPTION2	
•		**Clocking required -- internal (business machine) or external (modem)** External	**CLOCKNG=** EXT	
•		**Data rate (high or low)** Low, if attached modem is a single rate modem or a dual-rate modem that is to operate at the lower rate. High, if attached modem is a dual-rate modem that is to operate at the higher rate.	**DATRATE=** LOW HIGH	
•		**Type of line connection** Nonswitched	**DIAL=** NO	
•		**Channel priority applicable (normal or high)** Specify CHNPRI=HIGH if the controller also contains line sets to which lines operating at under 19,200 bps are attached. If the controller does not also contain such line sets (that is, all lines operate at 19,200 bps or more), specify CHNPRI=NORMAL.	**CHNPRI=**	
•		**Ring indicator mode**	**RING=** NO	

| IBM 2400/1200 bps Leased Point-to-Point Duplex Data Integrated Modem | 1X |

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Modem option required (1 or 2)	MODEM=	
●		Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
		External	EXT	
●		Data rate (high or low)	DATRATE=	
		High (for operation at 2400 bps)	HIGH	
		Low (for operation at 1200 bps)	LOW	
●		Type of line connection	DIAL=	
		Nonswitched	NO	
●		Channel priority applicable (normal or high)	CHNPRI=	
		Normal	NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

IBM 2400/1200 bps Multipoint Master Duplex Data Integrated Modem	1Y

Applicable			Parameter	Operand	Remarks
Yes	No				
	●		Modem option required (1 or 2)	MODEM=	
●			Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
			External	EXT	
●			Data rate (high or low)	DATRATE=	
			High (for operation at 2400 bps)	HIGH	
			Low (for operation at 1200 bps)	LOW	
●			Type of line connection	DIAL=	
			Nonswitched	NO	
●			Channel priority applicable (normal or high)	CHNPRI=	
			Normal	NORMAL	
	●		Ring indicator mode (yes or no)	RING=	

Telegraph Single Current

2A

Applicable				
Yes	No	Parameter	Operand	Remarks
	•	Modem option required (1 or 2)	MODEM=	
•		Clocking required -- internal (business machine) or external (modem) Internal	CLOCKNG= INT	
•		Data rate (high or low) Low	DATRATE= LOW	
•		Type of line connection Nonswitched	DIAL= NO	
•		Channel priority applicable (normal or high) Normal	CHNPRI= NORMAL	
	•	Ring indicator mode (yes or no)	RING=	

| IBM Limited Distance Type 1 Modem, 2-wire | 3A |

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	**MODEM=** OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	**CLOCKNG=** INT	
●		**Data rate (high or low)** Low	**DATRATE=** LOW	
●		**Type of line connection** Nonswitched	**DIAL=** NO	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

IBM Limited Distance Type 1 Modem, 4-wire	3B

Applicable		Parameter	Operand	Remarks
Yes	No			
●		**Modem option required (1 or 2)** 2	**MODEM=** OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	**CLOCKNG=** INT	
●		**Data rate (high or low)** Low	**DATRATE=** LOW	
●		**Type of line connection** Nonswitched	**DIAL=** NO	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

| IBM Limited Distance Type 2 Modem | 4A |

Applicable				
Yes	No	Parameter	Operand	Remarks
●		Modem option required (1 or 2) 1	MODEM= OPTION1	
●		Clocking required -- internal (business machine) or external (modem) Internal	CLOCKNG= INT	
●		Data rate (high or low) Low	DATRATE= LOW	
●		Type of line connection Nonswitched	DIAL= NO	
●		Channel priority applicable (normal or high) Normal	CHNPRI= NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

IBM Leased Line Modem, 2-wire	4B

Applicable

Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)**	**MODEM=**	
		1	OPTION1	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		Internal	INT	
●		**Data rate (high or low)**	**DATRATE=**	
		Low	LOW	
●		**Type of line connection**	**DIAL=**	
		Nonswitched	NO	
●		**Channel priority applicable (normal or high)**	**CHNPRI=**	
		Normal	NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

| IBM Leased Line Modem, 4-wire | 4C |

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 1	MODEM= OPTION1	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	CLOCKNG= INT	
●		**Data rate (high or low)** Low	DATRATE= LOW	
●		**Type of line connection** Nonswitched	DIAL= NO	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
	●	**Ring indicator mode (yes or no)**	RING=	

IBM 2400/1200 bps Leased Point-to-Point Integrated Modem	5A

Applicable Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	**MODEM=** OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** External	**CLOCKNG=** EXT	
●		**Data rate (high or low)** High (for operation at 2400 bps) Low (for operation at 1200 bps)	**DATRATE=** HIGH LOW	
●		**Type of line connection** Nonswitched	**DIAL=** NO	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

| IBM 2400/1200 bps Leased Multipoint Master Integrated Modem | 5B |

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	MODEM= OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** External	CLOCKNG= EXT	
●		**Data rate (high or low)** High (for operation at 2400 bps) Low (for operation at 1200 bps)	DATRATE= HIGH LOW	
●		**Type of line connection** Nonswitched	DIAL= NO	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
	●	**Ring indicator mode (yes or no)** If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO. If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.	RING=	If in doubt about which option is appropriate for your application, consult your IBM representative.

IBM 2400/1200 bps Switched Network Integrated Modem

6A

Applicable			Parameter	Operand	Remarks
Yes	No				
●			Modem option required (1 or 2)	MODEM=	
			2	OPTION2	
●			Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
			External	EXT	
●			Data rate (high or low)	DATRATE=	
			High (for operation at 2400 bps)	HIGH	
			Low (for operation at 1200 bps)	LOW	
●			Type of line connection	DIAL=	
			Switched	YES	
●			Channel priority applicable (normal or high)	CHNPRI=	
			Normal	NORMAL	
●			Ring indicator mode (yes or no)	RING=	
			If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO.		If in doubt about which option is appropriate for your application, consult your IBM representative.
			If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.		

IBM 2400/1200 bps Switched Network Integrated Modem with Auto Call Originate

7

Applicable				
Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
●		2	OPTION2	
		Clocking required -- internal (business machine) or external (modem)	**CLOCKNG=**	
●		External	EXT	
		Data rate (high or low)	**DATRATE=**	
●		High (for operation at 2400 bps)	HIGH	
		Low (for operation at 1200 bps)	LOW	
		Type of line connection	**DIAL=**	
●		Switched	YES	
		Channel priority applicable (normal or high)	**CHNPRI=**	
●		Normal	NORMAL	
		Ring indicator mode (yes or no)	**RING=**	
●		If program in controller is to send 'data terminal ready' signal continuously to modem at controller, specify RING=NO.		If in doubt about which option is appropriate for your application, consult your IBM representative.
		If program is to send 'data terminal ready' signal only upon receiving 'ring indicator' signal from modem, specify RING=YES.		

IBM 1200 bps Leased Line Integrated Modem

8A

Applicable Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
•		2	OPTION2	
•		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		Internal	INT	
•		**Data rate (high or low)**	**DATRATE=**	
		Low	LOW	
•		**Type of line connection**	**DIAL=**	
		Nonswitched	NO	
•		**Channel priority applicable (normal or high)**	**CHNPRI=**	
		Normal	NORMAL	
	•	**Ring indicator mode (yes or no)**	**RING=**	

| IBM 1200 bps Switched Network Integrated Modem | 8B |

Applicable				
Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
●		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	**CLOCKNG=** INT	
●		**Data rate (high or low)** Low	**DATRATE=** LOW	
●		**Type of line connection** Switched	**DIAL=** YES	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

IBM 1200 bps Leased Line Integrated Modem with Break	8C

Applicable				
Yes	**No**	**Parameter**	**Operand**	**Remarks**
		Modem option required (1 or 2)	MODEM=	
●		2	OPTION2	
●		Clocking required -- internal (business machine) or external (modem) Internal	CLOCKNG= INT	
●		Data rate (high or low) Low	DATRATE= LOW	
●		Type of line connection Nonswitched	DIAL= NO	
●		Channel priority applicable (normal or high) Normal	CHNPRI= NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

IBM 1200 bps Switched Network Integrated Modem with Break

8D

Applicable Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
●		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		Internal	INT	
●		**Data rate (high or low)**	**DATRATE=**	
		Low	LOW	
●		**Type of line connection**	**DIAL=**	
		Switched	YES	
●		**Channel priority applicable (normal or high)**	**CHNPRI=**	
		Normal	NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

| IBM 1200 bps Switched Network Integrated Modem with Auto Call Originate | 9 |

Applicable				
Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
●		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)**	**CLOCKNG=**	
		Internal	INT	
●		**Data rate (high or low)**	**DATRATE=**	
		Low	LOW	
●		**Type of line connection**	**DIAL=**	
		Switched	YES	
●		**Channel priority applicable (normal or high)**	**CHNPRI=**	
		Normal	NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

IBM 1200 bps Switched Network Integrated Modem with Auto Call Originate	9A

Applicable Yes	No	Parameter	Operand	Remarks
		Modem option required (1 or 2)	**MODEM=**	
●		2	OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	**CLOCKNG=** INT	
●		**Data rate (high or low)** Low	**DATRATE=** LOW	
●		**Type of line connection** Switched	**DIAL=** YES	
●		**Channel priority applicable (normal or high)** Normal	**CHNPRI=** NORMAL	
	●	**Ring indicator mode (yes or no)**	**RING=**	

| IBM 1200 bps Leased Duplex Data Integrated Modem | 10A |

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	**Modem option required (1 or 2)**	MODEM=	
●		**Clocking required -- internal (business machine) or external (modem)**	CLOCKNG=	
		Internal	INT	
●		**Data rate (high or low)**	DATRATE=	
		Low	LOW	
●		**Type of line connection**	DIAL=	
		Nonswitched	NO	
●		**Channel priority applicable (normal or high)**	CHNPRI=	
		Normal	NORMAL	
	●	**Ring indicator mode (yes or no)**	RING=	

| IBM 2400/1200 bps Leased Point-to-Point Duplex Data Integrated Modem | 11A |

Applicable				
Yes	No	Parameter	Operand	Remarks
	●	Modem option required (1 or 2)	MODEM=	
●		Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
		External	EXT	
●		Data rate (high or low)	DATRATE=	
		High (for operation at 2400 bps)	HIGH	
		Low (for operation at 1200 bps)	LOW	
●		Type of line connection	DIAL=	
		Nonswitched	NO	
●		Channel priority applicable (normal or high)	CHNPRI=	
		Normal	NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

| IBM 2400/1200 bps Leased Multipoint Master Duplex Data Integrated Modem | 11B |

Applicable					
Yes	No	Parameter	Operand		Remarks
	●	Modem option required (1 or 2)	MODEM=		
●		Clocking required -- internal (business machine) or external (modem)	CLOCKNG=		
		External	EXT		
●		Data rate (high or low)	DATRATE=		
		High (for operation at 2400 bps)	HIGH		
		Low (for operation at 1200 bps)	LOW		
●		Type of line connection	DIAL=		
		Nonswitched	NO		
●		Channel priority applicable (normal or high)	CHNPRI=		
		Normal	NORMAL		
	●	Ring indicator mode (yes or no)	RING=		

IBM 1200 bps Leased Line Integrated Modem with Break

12A

Applicable				
Yes	No	Parameter	Operand	Remarks
●		**Modem option required (1 or 2)** 2	MODEM= OPTION2	
●		**Clocking required -- internal (business machine) or external (modem)** Internal	CLOCKNG= INT	
●		**Data rate (high or low)** Low	DATRATE= LOW	
●		**Type of line connection** Nonswitched	DIAL= NO	
●		**Channel priority applicable (normal or high)** Normal	CHNPRI= NORMAL	
	●	**Ring indicator mode (yes or no)**	RING=	

IBM 1200 bps Switched Network Integrated Modem with Break

12B

Applicable		Parameter	Operand	Remarks
Yes	No			
●		Modem option required (1 or 2)	MODEM=	
		2	OPTION2	
●		Clocking required -- internal (business machine) or external (modem)	CLOCKNG=	
		Internal	INT	
●		Data rate (high or low)	DATRATE=	
		Low	LOW	
●		Type of line connection	DIAL=	
		Switched	YES	
●		Channel priority applicable (normal or high)	CHNPRI=	
		Normal	NORMAL	
	●	Ring indicator mode (yes or no)	RING=	

The network control program, in conjunction with VTAM or VTAM/TCAM, and appropriate equipment at the communications controller and remote stations, provides a facility called *switched network backup*. This facility permits the communications controller and one or more remote BSC or SDLC stations to communicate over a temporary switched path established as an alternate, or "backup", path to the principal nonswitched line linking the controller and stations. Provision of a backup path allows communication between controller and stations to continue despite failure or serious degradation of the principal line. A backup path may be provided for either nonswitched point-to-point or nonswitched multipoint lines.

The availability of a backup line requires the installation of appropriate equipment and features at both the controller and the stations for which a backup path is to be provided.

Two forms of switched network backup are available: "same-port" backup and "alternate-port" backup. The same-port backup technique can be used for either SDLC or BSC stations in a VTAM or TCAM/VTAM network. Alternate-port backup is available only for BSC stations (except 3270s) in a TCAM/VTAM network.

This Appendix explains the same-port and alternate-port configurations, capabilities, and equipment and program options required for switched network backup operation. Figure A-8 at the end of this Appendix summarizes the differences between the same-port and alternate-port techniques.

In both techniques, establishing a backup path requires coordinated manual intervention at both the host processor site and the remote station site. Voice communication between the sites is therefore necessary. The changeover from the principal line to the switched backup line (and vice versa) is always initiated by the operator at the host processor.

The two switched network backup techniques are as follows.

SAME-PORT BACKUP

The same-port backup technique requires the use of an IBM 3872, 3874, or 3875 modem equipped with the switched network backup and automatic answering features to attach the communications controller to both the principal, nonswitched line and the switched telephone network. The configuration at the host processor site is thus (Figure 1):
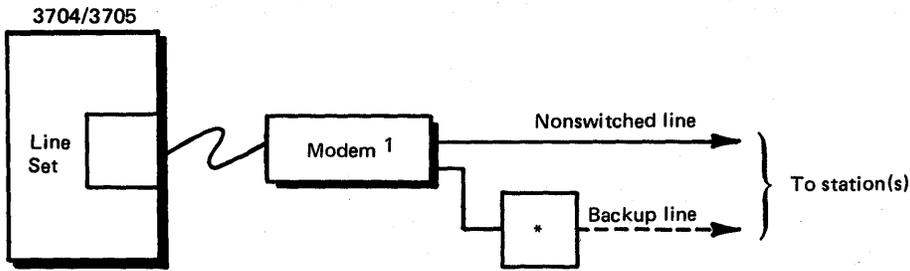
3704/3705

1 IBM 3872, 3874, or 3875 leased-line modem
with switched network backup and automatic
answering features

*Data coupler (type CBS)

Figure A-1. Same-Port Configuration at Controller

The configuration at the remote station site may be any of three options, as follows.
- A single modem (IBM 3872, 3874, or 3875 or integrated equivalent) equipped with
  the switched network backup feature attaches the station to both the principal SDLC
  or BSC line and the switched telephone network. (This configuration corresponds to
  that shown above for the host processor site.) The modem may or may not be
  equipped with the automatic answering feature. The configuration is as follows
  (Figure A-2):
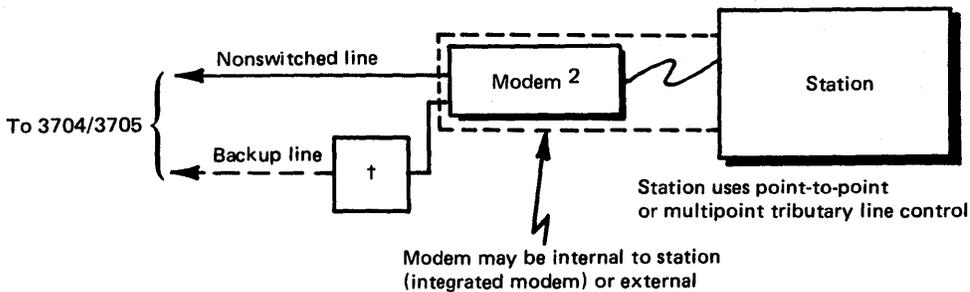
2 IBM 3872, 3874, or 3875 (or integrated equivalent) with switched
network backup feature, with or without AA feature (AA feature
available only in external modem) (AA=automatic answering)

†Data coupler (type CBS) if modem is equipped with AA feature;
data access arrangement (type CDT) if modem is not equipped
with AA feature

Figure A-2. Configuration at Station (Single Modem, Switched
        Network Backup Feature)

- A single modem (IBM 3872, 3874, or 3875 or integrated equivalent) equipped as described above and in addition equipped with the fan-out feature attaches up to three stations at the same remote site to the principal line and the switched telephone network. The configuration is as follows (Figure A-3).
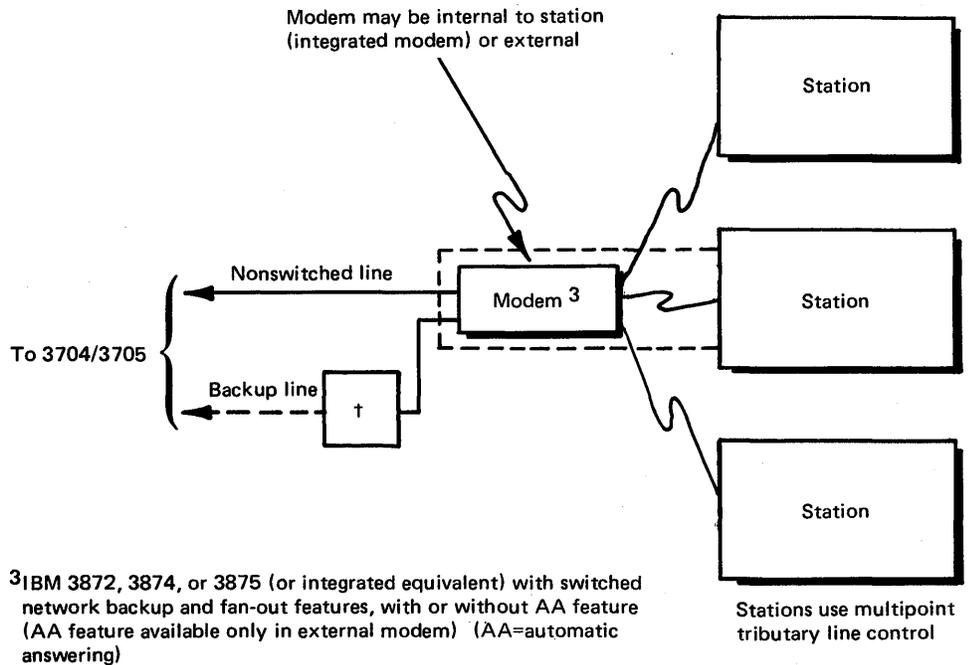
Modem may be internal to station (integrated modem) or external

Nonswitched line

To 3704/3705

Backup line

Modem 3

Station

Station

Station

Stations use multipoint tributary line control

[3] IBM 3872, 3874, or 3875 (or integrated equivalent) with switched network backup and fan-out features, with or without AA feature (AA feature available only in external modem) (AA=automatic answering)

[†] Data coupler (type CBS) if modem is equipped with AA feature; data access arrangement (type CDT) if modem is not equipped with AA feature

Figure A-3. Configuration at Station (Single Modem, Switched Network Backup and Fan-out Features)

If more than one station is attached to the modem (via the fan-out feature), all attached stations can operate concurrently over the backup connection.

- Two modems at the remote site attach the station to the principal line (nonswitched modem) and to the switched network (switched modem.) The switched modem may or may not be equipped with the automatic answering feature. The configuration is as follows (Figure A-4).

Dual communications
interface switch 6

Nonswitched line

Modem 4

To 3704/3705

Backup line

†

Modem 5

Station

Station uses point-to-point or
multipoint tributary line control
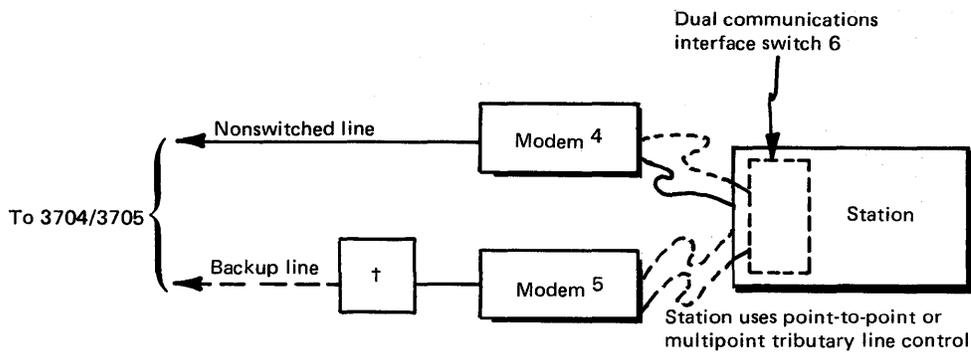
4 Leased-line modem

5 Switched-network modem (with or without automatic answering
[AA] feature)

6 If dual communication interface feature is present, station is
permanently attached to modems by separate cables (dashed lines);
otherwise, single cable is used and is manually plugged into
desired modem.

† Data coupler (type CBS) if modem is equipped with AA feature;
data access arrangement (type CDT) if modem is not equipped
with AA feature

Figure A-4. Configuration at Station (Two Modems)

Use of two modems requires that the operator at the remote site connect the station to
the appropriate modem: the nonswitched modem for normal operation over the princi-
pal line, and the switched modem for backup operation over the switched telephone
network. Changeover from one modem to the other is accomplished by manually unplug-
ging the station-to-modem cable from one modem and plugging it into the other modem,
or by changing the position of a switch on a station that is equipped with the dual com-
munications interface feature.

In the event the nonswitched line fails, the operator at the host processor can (1) deacti-
vate the line by VTAM operator command, (2) switch the operation of the modem at
the controller to backup mode (and, by voice communication, cause the operator at the
remote site to take corresponding action as described above), (3) reactivate the line (that
is, the line "port" as represented to the network control program and VTAM, not the
actual failed line) with a VTAM operator command, and (4) establish the dialed backup
connection to the station.

In the same-port technique, the network control program is not "aware" of, and does not
participate in establishing, the switched backup connection. The program simply oper-
ates the line in the same way as it does the principal, nonswitched line once the backup
connection is established.

Figure A-5 is a composite of the preceding illustrations. It shows a nonswitched multi-
point configuration that includes each of the three modem-station arrangements shown
above. Because the configuration is multipoint, all stations require multipoint tributary
line control.

A-4

3704/3705

Line Sets

Modem 1

Modem 2

Modem 3

Modem 4

Modem 5

Station

Station

Station

Station

Station

Modem may be internal to station (integrated modem) or external

Only one backup connection at a time can be established

Dual communications interface switch 6

Stations use multipoint tributary line control

(to other modems and stations)

[1]IBM 3872, 3874, or 3875 leased-line modem with switched network backup and automatic answering features

*Data coupler (type CBS)

AA=automatic answering

[2]IBM 3872, 3874, or 3875 (or integrated equivalent) with switched network backup feature, with or without AA feature (AA feature available only in external modem)

[3]IBM 3872, 3874, or 3875 (or integrated equivalent) with switched network backup and fan-out features, with or without AA feature (AA feature available only in external modem)

[4]Leased-line modem

[5]Switched-network modem (with or without AA feature)

[6]If dual communication interface feature is present, station is permanently attached to modems by separate cables (dashed lines); otherwise, single cable is used and is manually plugged into desired modem.

†Data coupler (type CBS) if modem is equipped with AA feature; data access arrangement (type CDT) if modem is not equipped with AA feature

Figure A-5. Example of Same-Port Switched Network Backup Multipoint Connection

Note: The physical operation of the switched backup path and (for SDLC stations) the data mode used over that path must be half-duplex (not duplex). Since the network control program operates the principal and the backup line is exactly the same manner, the principal line also must be half-duplex and (for SDLC stations) operate in half-duplex data mode. Both of these modes are specified in the LINE macro instruction that represents the lines to the network control program. (BSC stations always operate in half-duplex data mode.)

Line turnaround delay can be minimized by internally connecting the modem at the communications controller for continuous-carrier operation.

See the publication *Operator's Guide: VTAM Network Operating Procedures* (GC27-6997) for information on the operator commands used in establishing switched network backup operation.

ALTERNATE-PORT BACKUP

The alternate-port backup technique employs a switched-network connection (port), equipped with its own modem that attaches the communications controller to the switched telephone network. This modem is separate from the leased-line modem that attaches the controller to the principal line. The configuration at the host processor site is thus (Figure A-6):
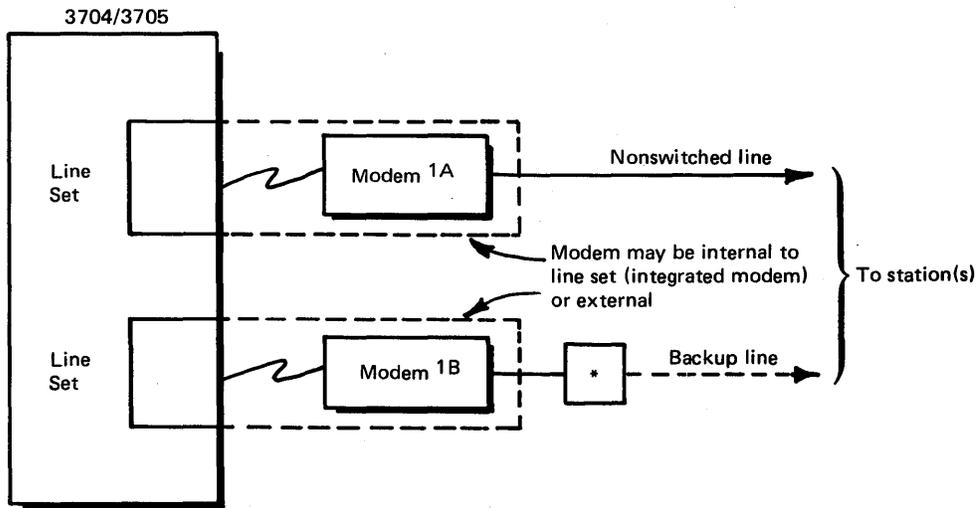
1A Leased-line modem

1B Switched-network modem with AA feature and
    with or without automatic calling unit (ACU)

*Data coupler (type CBS)

Figure A-6. Alternate-Port Configuration at Controller

The configuration at the remote station site may be any of the three arrangements explained and illustrated above (Figures A-2, A-3, and A-4) under *Same-Port Backup.*

In the case of a multipoint principal line, the network control program may continue to communicate normally (via the leased-line modem) with any stations on that line not affected by the line failure while concurrently communicating in backup mode with another station (or stations) over the backup path. Further, the program can communicate in backup mode with several stations affected by the failure of the principal line, provided that sufficient backup ports (each with its own switched-network modem) are available.

Establishing the switched backup connection using the alternate-port technique requires that the operator at the host processor site enter the appropriate TCAM commands. Either the operator or the network control program can select the particular switched port to be used. Upon instructions from the operator at the host processor site, the operator at the remote station must switch the station's modem to switched network operation or establish the switched backup connection using the separate switched-network modem. Similarly, the operator must make the corresponding change when the principal line has been restored to service. Thus, voice contact is required between the host processor and the remote station when the backup connection is made or terminated.

Figure A-7 illustrates the same nonswitched multipoint configuration given in Figure A-5 but shows the alternate-port arrangement at the communications controller. Two switched-network modems, representing two alternate ports, are shown; more could be used if the appropriate line sets and modems were available. The number of concurrent backup connections is limited to the number of switched backup ports available (that is, operable and not presently in use for communicating with another station) and identified as alternate ports in the network control program.

Two alternatives are available for dialing the backup connection to a station when the alternate-port technique is used: automatic calling, and program-assisted manual dialing. (A backup connection can be made only from the host processor, not from a remote station.)

Automatic Calling — that is, automatic dialing of the telephone number—is possible if (1) the backup port is equipped with an automatic calling unit (ACU), and (2) the line address of the ACU and the dial digits of the telephone number are identified to the network control program (via the NCP source statements).

Manual dialing is required if the backup port is not equipped with an ACU. The operator at the host processor must manually dial the telephone number of the station to be reached. If the number is specified in the network control program, TCAM will inform the operator of the telephone number and the specific line on which to make the call when he enters the command to switch to the backup line. If the number is not specified in the network control program, TCAM tells him only which line is to be used for the call; he must consult a list of stations and their backup telephone numbers to determine which number to dial.

When communication with the remote station(s) is to be restored to the principal line, the operator at the host processor enters commands to switch the station(s) to the principal line. The network control program breaks the backup connection when all stations (if more than one are attached to the line via a fanout modem) have been switched back to the principal line.

An example of the network control program coding used to establish switched network backup operation using the alternate-port technique appears in an appendix of *IBM 3704 and 3705 Control Program Generation and Utilities* (GC30-3008).

See the *OS/VS1 TCAM Programmer's Guide* (GC30-2054) or the *OS/VS2 TCAM Programmer's Guide* (GC30-2041 for information on the operator commands used in establishing switched network backup operation.
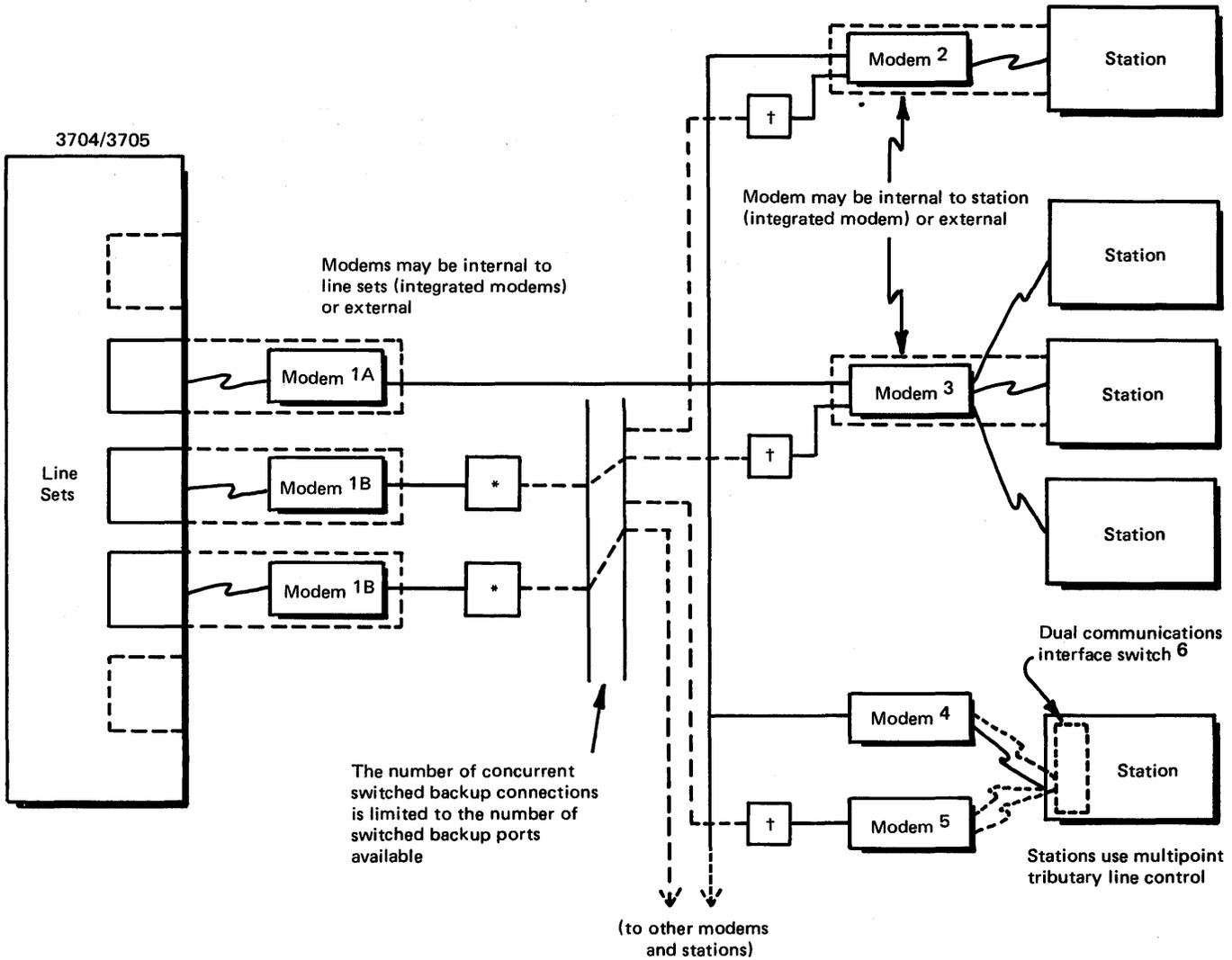
1ALeased-line modem

1BSwitched-network modem with AA feature and with or without automatic calling unit (ACU)

*Data coupler (type CBS)

2IBM 3872, 3874, or 3875 (or integrated equivalent) with switched network backup feature, with or without AA feature (AA feature available only in external modem)

3IBM 3872, 3874, or 3875 (or integrated equivalent) with switched network backup and fan-out features, with or without AA feature (AA feature available only in external modem)

4Leased-line modem

5Switched-network modem (with or without AA feature)

6If dual communication interface feature is present, station is permanently attached to modems by separate cables (dashed lines); otherwise, single cable is used and is manually plugged into desired modem.

†Data coupler (type CBS) if modem is equipped with AA feature; data access arrangement (type CDT) if modem is not equipped with AA feature

Figure A-7. Example of Alternate-Port Switched Network Backup Multipoint Configuration

	Same-Port Backup	Alternate-Port Backup
Type of stations supported	BSC, SDLC	BSC (except 3270)
Point-to-point line control supported	Yes	Yes
Multipoint line control supported	Yes	Yes
Access method required in host processor	VTAM or TCAM/VTAM	TCAM/VTAM
Manual intervention required at host processor to establish switched backup connection	Yes	Yes
Manual intervention required at station to establish switched backup connection	Yes	Yes
Automatic calling of station over backup connection possible	No	Yes (Note 2)
Stations on principal line that are not affected by line failure can continue to operate over that line	No	Yes
Extra communications controller storage needed for switched network backup function	No	Yes
Network control program is "aware" of and participates in establishing switched backup connection	No	Yes
Number of stations on principal line that can communicate with network control program over a single backup connection	1, 2, or 3 (Note 2)	1, 2, or 3 (Note 2)
Number of stations on principal line that can communicate with network control program over multiple backup connections	N/A	Note 3
Backup connection is broken automatically by VTAM when all stations on backup line have been returned to operation on principal line	No	Yes
Program-assisted manual dialing from host processor available	No	Yes (Note 4)
Both principal line and backup line must be physically half-duplex	Yes	Yes
Both principal line and backup line must operate in half-duplex data mode	Yes	N/A
Equipment required at communications controller:		
Separate line set for backup connection	No	Yes
Automatic answering capability required for backup connection	Yes	Yes
Type of data coupler/data access arrangement required	CBS (Note 5)	CBS (Note 5)
Equipment required at station:		
Automatic answering capability required for backup connection	No	No
Type of data coupler/data access arrangement required	CBS or CDT (Note 5)	CBS or CDT (Note 5)

N/A — Not applicable

Notes:

1. Automatic calling function requires that (1) controller be equipped with automatic calling unit (ACU); (2) telephone number be specified in TERMINAL macro representing the station to be contacted over the switched backup connection.

2. Concurrent backup connection with more than one station at the same remote site requires that both or all three stations be attached to the same modem via the modem fan-out feature; all stations must be logically active and must be represented by entries in the service order table of the network control program.

3. The number of stations is limited only by the number of backup connections currently available, which depends upon (1) the number of switched lines designated in the network control program for backup use and (2) the quantity of such lines not otherwise in use

4. Program-assisted refers to the facility whereby the network control program selects a switched backup line from a set of such lines (dial set), notifies the operator at the host processor of the line selected, and (optionally) provides, by console message, the telephone number required to reach the station over the backup connection. The operator must then dial the number manually.

5. CDT and CBS are telephone company designations for types of data access arrangement and data coupler, respectively.

Figure A-8. Comparative Summary of Same-Port and Alternate-Port Switched Network Backup
            Techniques

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