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6 Setting the 202T Modem
Overview

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Setting the 202T Modem

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Overview

This chapter describes how to set the options on the 202T modems and how to assemble the modem unit.

> **NOTE:**
> A Centrex switch integration does not require the installation of a 202T modem if the distance between the Avaya™ INTUITY™ system and the switch is less than or equal to 15.3 m (50 ft), the RS232 standard. If the distance is greater than 15.3 m (50 ft), use a 202T modem.
>
> The 202T modem supports *only* a baud rate of 1200. To use the 202T modem, verify that the SMDI link is configured for 1200, as specified in Chapter 3, Centrex Switch Requirements and Administration.

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202T Modem Types

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202T Modem Types

You can install either one of the following 202T modem types with the INTUITY™ AUDIX system:

- Motorola 202T modem

- AT&T Dataphone 202T modem

However, the modem at the service provider switch may be different, though the commonly-supported modems at the service provider switch include the following:

- General DataCom 202T modem

- Rexon 202T modem

- NEC 202T modem

When you install at Motorola 202T modem with the Intuity AUDIX system, the modem at the service provider switch must always be set to the *default* options. If the Intuity AUDIX modem is an AT&T Dataphone 202T, the modem options at the service provider switch may differ. See .

The manufacturer's name appears on the faceplate of the unit.

Setting Options for the 202T Motorola Modem

The Motorola 202T modem contains 14 jumpers that must be correctly set. Use this procedure to set the jumpers.

1. To remove the top cover from the Motorola 202T modem, complete the following Steps a through f:

   ⇒ NOTE:
   Installers in Canada may need to use a screwdriver to remove a screw through the top rear panel or to remove tabs located between the cover latch and the bottom plate.

   a. Turn the modem on its side.

   b. Place your thumbs on the blue tabs and your fingers on the edge of the cover (, View 1).

moin202c KLC 031097
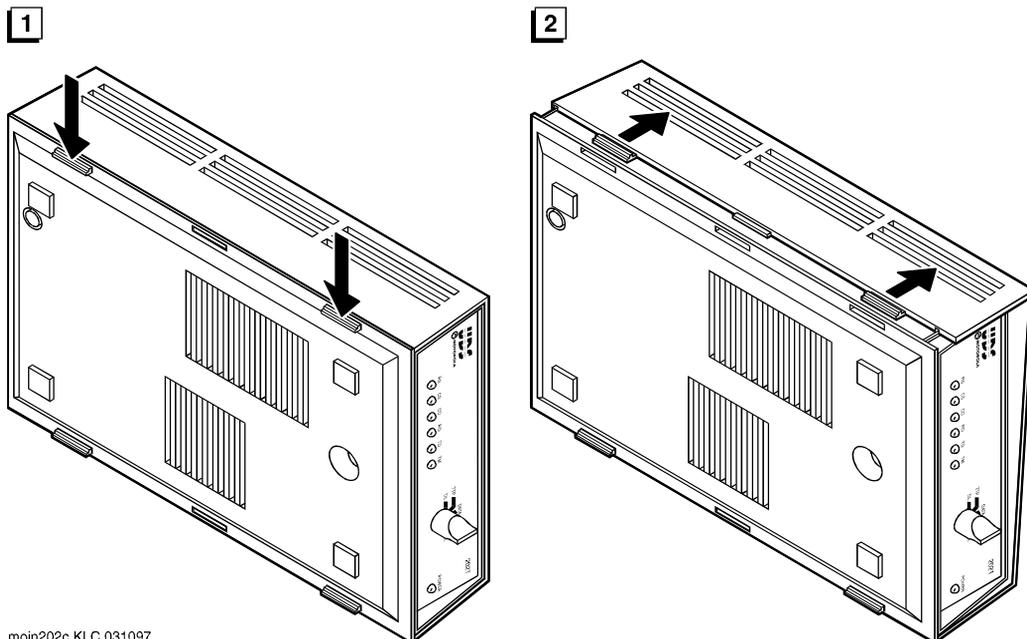
Figure 6-1. **Removing the Top Cover of the Motorola 202T Modem: Releasing the First Set of Latches**

    c. Press the tabs down and toward the modem (Figure 6-1, View 2). Use your fingers to gently push the top cover away from the body. *Do not remove the top cover.*

    d. Turn the modem so that the opposite side faces you.

    e. Gently push above the latches to release the other side of the cover.

    f. Pull the released cover off.

2. Verify the settings. To locate the jumpers in the modem, see Figure 6-2. To verify the jumpers, see Figure 6-3 and Table 6-1. Correct any as necessary.

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Setting Options for the 202T Motorola Modem

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Table 6-1. Motorola 202T Modem Jumper Identities and Settings

Location on Figure 6-2 and Figure 6-3	Jumper Identity	Setting for the Avaya INTUITY System
1	Carrier Detect Level	–45 dBm Level (0 and –45 strapped)
2	Carrier Detect Delay	6 ms (6 and P strapped)
3	Anti-Streaming Option	Out (6 strapped)
4	Local Copy Squelch	Out – No local copy (Out and P strapped)
5	Call Turnaround Squelch	Call Turnaround Squelch set to out (P and O strapped)
6	Turnaround Squelch Time	8.3 ms squelch (P and 8.3 strapped)
7	Soft Carrier Turnoff	0 – Do Not Send Soft Carrier (0 strapped)
8	Test Generator Baud Rate Select	18 bps (Option 4 strapped)
9	Chassis/System Ground Option	Out (Out and P strapped)
10	RTS/CTS Delay	RTS/CTS Delay 33 ms (33 strapped)
11	Transmit Carrier	Strapped for terminal control of carrier by exercising RTS Input Line (TC and P strapped)
12	2-Wire/4-Wire Option	4-Wire Option (4W and P strapped)
13	Transmit Level Option	0 (-0 strapped)
14	2-Wire/4-Wire Option	4-Wire Option (4W and P strapped)

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Setting Options for the 202T Motorola Modem

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moincir LJK 030497
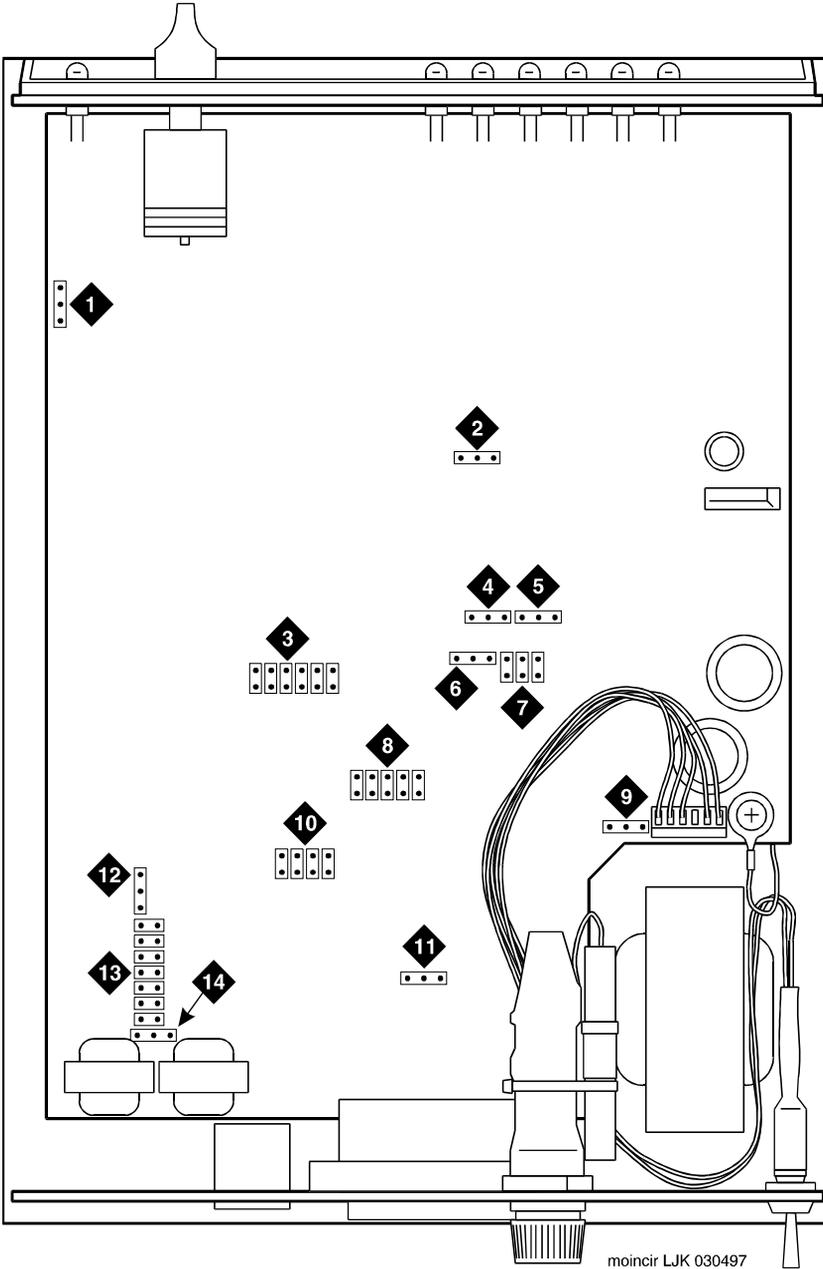
Figure 6-**2.** **Motorola 202T Modem Circuit Board and Jumper Locations**

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Setting Options for the 202T Motorola Modem

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jpin2md LJK 030497
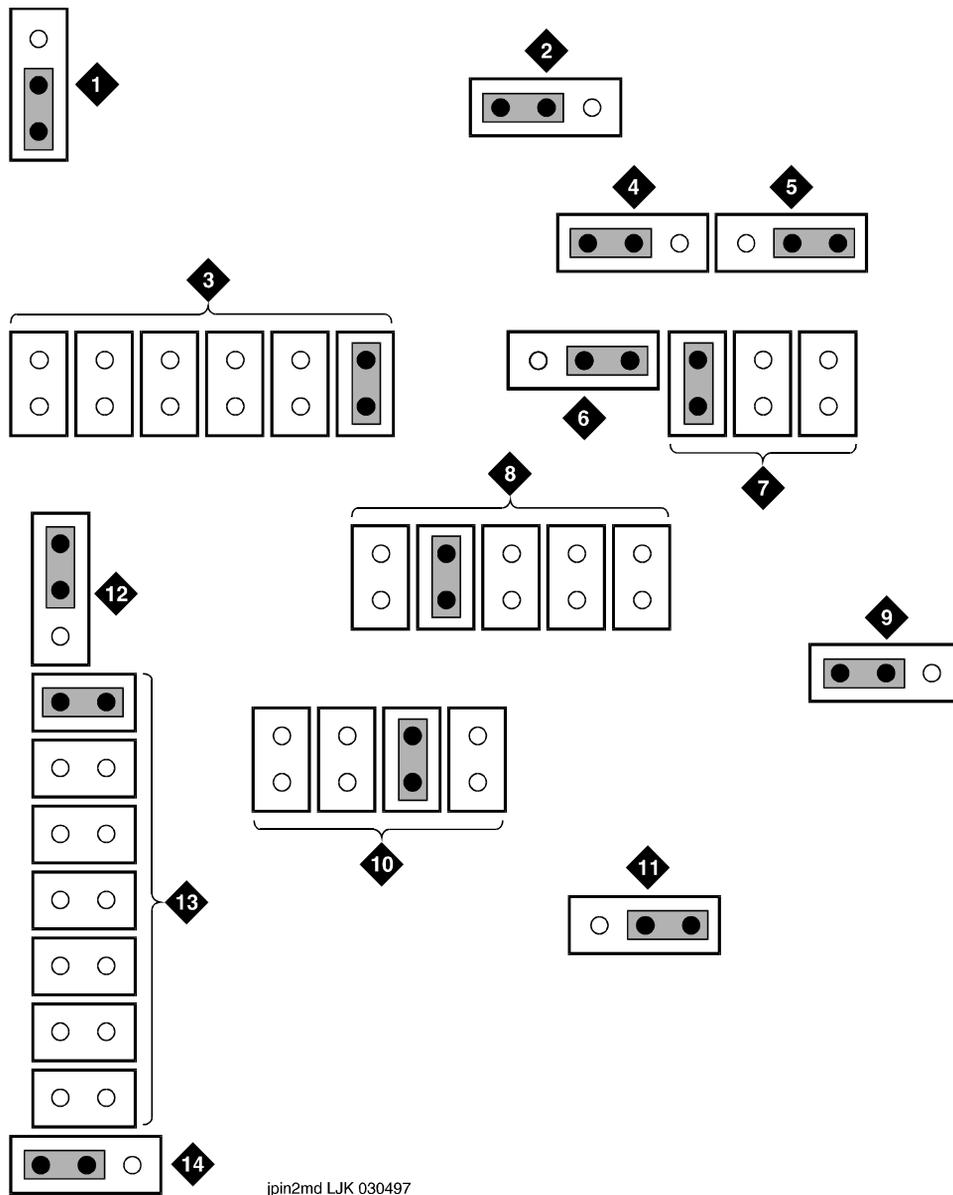
Figure 6-3.   Motorola 202T Modem Default Jumper Settings

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Setting Options for the AT&T Dataphone 202T Modem Page 6-7

3. To replace the top cover, complete the following Steps a and b:

    a. Line up the guides with the front and back panels.

        The guide for the front panel is slightly farther from the edge of the cover.

    b. Slide the cover into place.

        The cover clicks when the latches are secure.

> **NOTE:**
> Installers in Canada should replace the screw or the locking tabs.

4. Set the front dial to DATA (see Figure 6-4).

moin202f KLC 022897
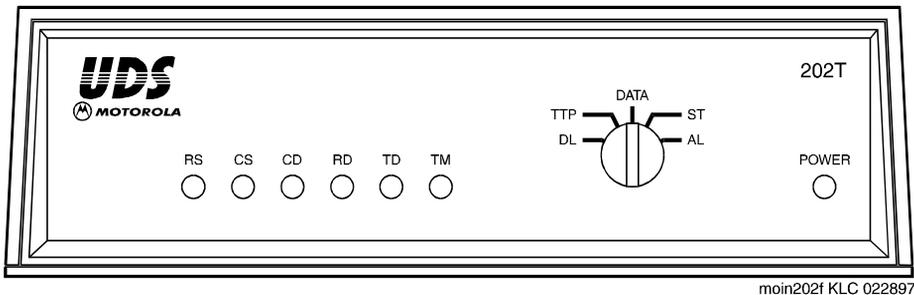
Figure 6-4.   Front Panel of the Motorola 202T Modem Showing the Dial Setting for DATA

5. Continue with Chapter 7, Hardware Installation for Centrex Switch Integration with the 202T Modem.

Setting Options for the AT&T Dataphone 202T Modem

The AT&T Dataphone 202T modem has three switches — S2, S3, and S4 — that you must set before installing the integration hardware.

Location of Switches

Figure 6-5 shows the location of the switches.

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Setting Options for the AT&T Dataphone 202T Modem

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1. 202T modem (modulator-demodulator
2. Option switch S4

3. Option switch S2
4. Option switch S3
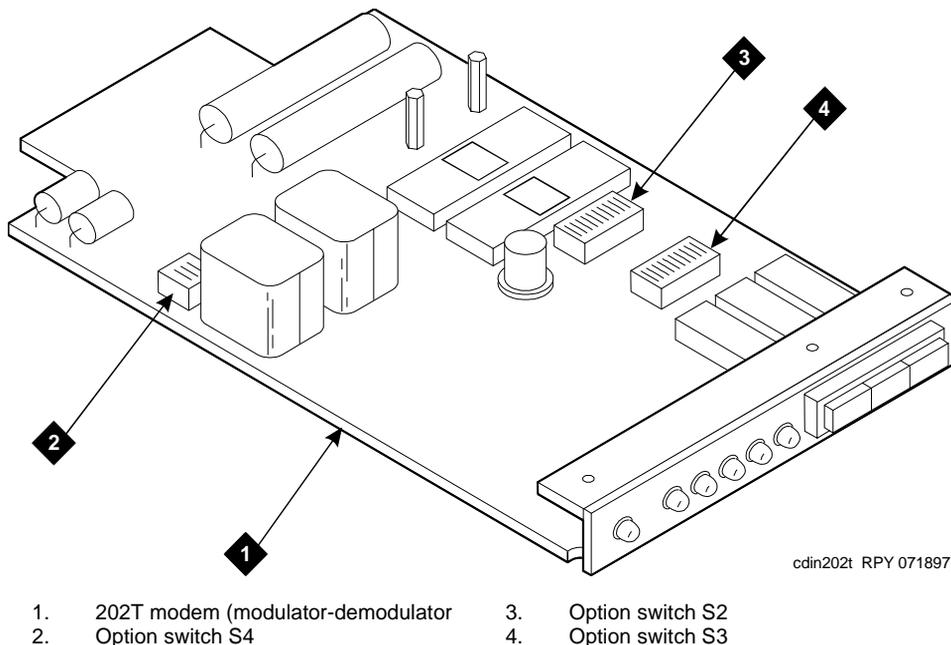
Figure 6-**5. Location of Option Switches on the AT&T Dataphone 202T Modem**

Operating the Rockers

The options are set by moving rockers on the numbered side of the switches up (open) or down (closed). Figure 6-6 shows an example of a switch on the 202T modem. In this example, options 1 through 5 are closed, indicated by rockers down on the numbered side of the switch. Options 6 through 10 are open, indicated by rockers up on the numbered side of the switch.

NOTE:
Figure 6-6 is an example only. Use the switch settings in Table 6-2.
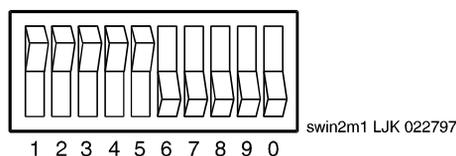
Figure 6-**6. Example of 202T Modem Switch Option Settings**

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Setting Options for the AT&T Dataphone 202T Modem

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Procedure

Use this procedure to set the switches.

1. Remove the front of the data mounting.

2. Pull out the circuit card.

3. Use Table 6-2 to verify the option switch settings for S2, S3, and S4.

> ➡ **NOTE:**
> The information in Table 6-2 may also be printed on the bottom of the modem housing.

Table 6-2.   AT&T Dataphone 202T Modem Option Settings

Switch	Segment	Position	Feature	Option (* = factory setting)	Description
S1	1	Closed	4-wire operation	ZK*	
	2	Closed	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	3	Closed	Fast carrier detection	N	Out (normal mode)
	4	Open	Clear-to-send interval	M*	8ms
	5	Open	—	—	—
	6	Open	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	7	Closed	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	8	Open	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	9	Closed	—	—	—
	0	Open	Clear-to-send interval	M*	8ms

Table 6-2.   AT&T Dataphone 202T Modem Option Settings — *Continued*

Switch	Segment	Position	Feature	Option (* = factory setting)	Description
S2	1	Closed	4-wire operation	ZK*	
	2	Closed	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	3	Closed	Fast carrier detection	N	Out (normal mode)
	4	Open	Clear-to-send interval	M*	8ms
	5	Open	—	—	—
	6	Open	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	7	Closed	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	8	Open	Soft turnoff and squelch intervals	Z	0 (soft turnoff) 0 (squelch)
	9	Closed	—	—	—
	0	Open	Clear-to-send interval	M*	8 msec
S3	1	Open	4-wire operation	ZK*	
	2	Open	Compromise delay equalization	ZU*	Maximum
	3	Open	Channel condition	ZY*	Basic
	4	Open	4-wire operation	ZK*	
	5	Open	Compromise amplitude equalization	ZW*	Maximum
	6	Closed	4-wire operation	ZK*	
	7	Closed	4-wire operation	ZK*	
	8	Closed	4-wire operation	ZK*	
	9	Closed	4-wire operation	ZK*	
	0	Closed	4-wire operation	ZK*	

Table 6-2.   AT&T Dataphone 202T Modem Option Settings — *Continued*

Switch	Segment	Position	Feature	Option (* = factory setting)	Description
S4	1	Closed	Continuous carrier	ZN	In
	2	Open	Carrier detector reset	ZM*	Out
	3	Closed	State of CC (data set ready) during analog loopback	YB	On

4. Insert the circuit card in the modem data mounting.

5. Replace the front of the data mounting.

Modem Settings for the Service Provider Switch

When the Intuity AUDIX uses an AT&T Dataphone 202T modem, the modem option settings at the service provider switch may vary, depending on the type of modem. The following tables show the modem options for the commonly-supported modems.

Modem Options for the AT&T Dataphone 202T Modem

Use the same options as are defined in this document for the modem options the Intuity AUDIX system uses.

Modem Options for the General Data Communications 202T Modem

Pin x4 = 4w
Pin x5 = chout
Pin x2 = eqin

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Modem Settings for the Service Provider Switch

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Table 6-3.   Modem Options for the General Data Communications 202T Modem

	Switch 4	Switch 6	Switch 7	Switch 8
1	OFF	OFF	ON	OFF
2	OFF	OFF	ON	OFF
3	OFF	OFF	ON	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	OFF	X
6	OFF	OFF	X	X
7	OFF	OFF	X	X
8	OFF	ON	X	X

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Modem Settings for the Service Provider Switch

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Modem Options for the Rexon 202T Modem

Table 6-4.   Modem Options for the Rexon 202T Modem

Switch S2		Switch S3	
Segment	**Position**	**Segment**	**Position**
1	ON	1	OFF
2	OFF	2	OFF
3	OFF	3	ON
4	ON	4	ON
5	OFF	5	OFF
6	OFF	6	OFF
7	OFF	7	OFF
8	ON	8	ON
9	OFF	9	ON
10	OFF	10	ON

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Modem Settings for the Service Provider Switch

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Modem Options for the NEC 202T Modem

Table 6-5.   Modem Option for the NEC 202T Modem

NEC (soft options)

Line detect 4-wire	On
Fast carrier detect	On
Continuous carrier	On
Anti-stream	Off
RD (Recv data) squelch	0 ms
Clear to send delay	8.2 ms
Soft turnoff	0
Local copy	Off
Transmit level	0