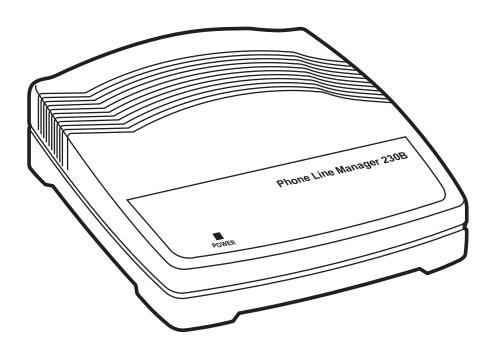


Line Share 230



CUSTOMER SUPPORT INFORMATION Order toll-free in the U.S. 24 hours, 7 A.M. Monday to midnight Friday: 877-877-BBOX FREE technical support, 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746 Mail order: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 Web site: www.blackbox.com • E-mail: info@blackbox.com

FEDERAL COMMUNICATIONS COMMISSION and INDUSTRY CANADA RADIO FREQUENCY INTERFERENCE STATEMENT

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which
 the receiver is connected.
- Consult an experienced radio/TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

NORMAS OFICIALES MEXICANAS (NOM) ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

- 1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
- Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
- Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
- 4. Todas las instrucciones de operación y uso deben ser seguidas.
- El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
- 6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
- 7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
- Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
- 9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
- 10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

- 11. El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
- 12. Precaución debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.
- 13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
- El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
- En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.
- 16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
- Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.
- 18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objectos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS

All applied-for and registered trademarks are the property of their respective owners.

CONTENTS

1. Specifications9	
2. Introduction .10 2.1 Before You Begin .10 2.2 Important Notes .10	
3. Operating Modes .11 3.1 Office Mode (One-Line Operation) .11 3.2 Home Mode (One-Line Operation) .13 3.3 Passive Monitor Mode .15	
4. Notes About Using Two Lines .16 4.1 Connecting the Telephone-Line Cord .16 4.2 Two-Line Options .17	
5. Distinctive Ring Service .18 5.1 Introduction .18 5.2 Office Mode (One-Line Operation) .19 5.3 Home Mode (One-Line Operation) .20	
6. Programming the Line Share 230 .22 6.1 Introduction .22 6.2 Entering and Programming the Line Share 230 .23 6.3 Remote Programming .24	
7. Programmable Features of the Line Share 230 7.1 Automatic No-Answer Transfer 7.2 Automatic TAD Transfer 7.3 Automatic Ring Reduction 7.4 Automatic Ring Reduction Reset 7.5 Extension Detection	.25 .27 .28 .29 .30
 7.6 Outbound Voice Exclusion 7.7 Answer Any Port 7.8 Pulse Dial Transfer 7.9 Pound Key Transfer Required 7.10 Single Tone Detection 7.11 Fax CNG (Calling) Tone Detection 7.12 Modem Calling Tone Detection 	.32 .33 .34 .35
 7.12 Modem Calling Tone Detection 7.13 Reverse Modem Tone Detection 7.14 Distinctive Ring Service Detection (Line 1) 7.15 Distinctive Ring Service Detection (Line 2) 	.38

CONTENTS (continued)

	Caller ID	
7.17	Remote Message Notification	2
7.18	TAD Activation	3
7.19	ComScan® Scanning	4
7.20	Automatic Port Transfer Selection	5
	One-Line Operation4	
	Two-Line Operation4	
7.23	Port Tone Assignment	7
7.24	Rings to Answer Call4	8
7.25	Rings to TAD/PHONE Port4	8
7.26	Rings to FAX Port4	9
7.27	Rings to MODEM Port5	0
7.28	TAD Transfer Timer	0
7.29	Ring Reduction Reset Timer	1
7.30	Single Tone Detection Timer5	2
7.31	Scanning Timer	2
7.32	Remote Security Access Code	3
7.33	TAD/PHONE Port Transfer Code	3
7.34	FAX Port Transfer Code5	4
7.35	MODEM Port Transfer Code	4
	RMN Conditions	
7.37	RMN Phone Number	6
7.38	DRS Assignment Line 1	7
7.39	DRS Assignment Line 2	8
7.40	Phantom Ring Style	9
7.41	Reset to Factory Settings	0

1. Specifications

Data Rate — Transparent

Interface Type — 2-wire (tip & ring)

Line Type — 2-wire dial

Number of Ports — 4

Operation — Full duplex

Programming — From DTMF tones of phone

Ringer Equivalency — 1 B

 $\mathbf{Indicators} - \mathsf{ON}$

Connectors — (5) RJ-11 female

Size — 2.3"H x 6.5"W x 7.3"D (5.8 x 16.5 x 18.5 cm)

Weight — 2.8 lb. (1.3 kg)

2. Introduction

The Line Share 230 is a state-of-the-art telephone-line sharing device that eliminates the extra dedicated telephone lines used to operate a fax, modem, or other telephone devices.

The Line Share 230 quickly directs incoming calls to one of four appropriate destinations, typically a computer modem (or fax/modem), fax, or any other telephone device that responds to a standard phone company ring signal.

A variety of telephone-line devices can be connected to the Line Share 230, including fax/modems, computer modems, facsimile machines, answering machines, telephones, bulletin board systems, credit card authorization terminals, security alarm and monitoring systems, point-of-sale terminals, call diverters, and more.

2.1 Before You Begin

This guide is designed to introduce you to the various operating procedures for using the Line Share 230. Please read through this guide before attempting to connect or operate the Line Share 230.

2.2 Important Notes

According to standard industry practice, surge protection is recommended for use with all electronic devices. A surge suppressor and/or line conditioning should be used on the input power supply, as well as on the connected telephone line.

Call Waiting: Fax machine and modem transmissions could be disrupted by the call waiting beep tone.

Call Forwarding: If Call Forwarding is enabled, the Line Share 120B cannot process calls on that line.

Phone Company Voice Mail: This service is compatible with the Line Share 230 if used in conjunction with the phone company's Distinctive Ring Service (service activation required).

3. Operating Modes

3.1 OFFICE Mode (One-Line Operation)

The Line Share 230 prohibits incoming calls from direct access to any connected device (unless Caller ID is ON). The Line Share 230 will answer the call on the first ring (Rings to Answer Call). Once the call is answered, the Line Share 230 listens (Single Tone Detection) for the following signals:

- an 1100 Hz CNG tone
- an access code for the FAX port: #11
- an access code for the MODEM port: # 2 2
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

If the Line Share 230 detects any of these signals, it transfers the call to the fax or modem port accordingly.

After 4 seconds, the call will be transferred to the TAD and PHONE ports if tones are not detected.

The Line Share 230 will ring the TAD and PHONE ports up to 6 times (rings to TAD/PHONE port), or until you or your answering machine answers the call. If the call remains unanswered after 6 rings (rings to TAD/PHONE port), the Line Share 230 will transfer (Automatic No Answer Transfer) the call to the fax port (Automatic Port Transfer Selection).

NOTE

The factory default setting is the OFFICE mode which enables complete call processing where the Line Share 230 is located.

Extension phones not connected to the Line Share 230 will only ring one time on inbound calls. However, they will have complete access to the phone line (Extension Detection).

If the Line Share 230 transfers an unanswered call to the fax port, it will automatically reduce the number of rings to the telephones connected to the TAD and PHONE ports to 2 rings (Automatic Ring Reduction) to ensure optimum connect time.

The Line Share 230 will reset the ring count to 6 rings (Ring Reduction Reset) after 10 minutes (Ring Reduction Reset Timer) of inactivity on the fax port. You can also manually reset the Line Share 230 to 6 rings by performing any of the following steps:

- Lift the receiver of any phone device on the line connected to the Line Share 230 and hang it up.
- Answer a call from any phone before the call is transferred to the fax port.
- Place an outbound call from any phone on the line connected to the Line Share 230.

If a device connected to the TAD or PHONE port answers a call, the Line Share 230 will disable the Single Tone Detection feature (if the attached timer has not expired). Then only tone and pulse transfers are allowed as follows.

• Fax port: #11 tone, 3 pulse

• Modem port: # 2 2 tone, 4 pulse

In the Office mode, pulse transfers are allowed from phones connected directly to the Line Share 230. The device calling into the Line Share 230 cannot pulse transfer to a port on the Line Share 230.

After a call has been transferred to the Fax or Modem port, it can be transferred back to the Tad and Phone ports by tone # 0 or 5 pulse.

Any time a call is transferred to another port, the port that is off-hook with the call is the only port that will be allowed to transfer the call. The originating port will receive a busy tone once the transfer occurs.

To accommodate faxes that do not produce CNG tones, the Automatic TAD Transfer feature can transfer a call to the Fax or Modem port when the answering machine disconnects from a call. This feature is defaulted OFF, and has the TAD Transfer Timer to set parameters for transfer as described in Section 7.28.

The factory setting for the Line Share 230 is the Office mode.

To operate the Line Share 230 in the Home mode, follow these steps:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 2 1 1 * (three beeps) *
- 3. Hang up the phone.

3.2 HOME Mode (One-Line Operation)

The Line Share 230 allows incoming calls to simultaneously ring extension phones and the phone(s)/answering machine connected to the Line Share 230. The Line Share 230 will not answer the call, it simply waits for your answering machine to answer. Once you or your answering machine answer a call, the Line Share 230 listens (Single Tone Detection) for the following signals:

- · an 1100 Hz CNG tone
- an access code for the Fax port: * 1 1
- an access code for the Modem port: * 2 2
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

If the Line Share 230 detects any of these signals (within the 10-second Single Tone Detection Timer), it transfers the call to the Fax or Modem port accordingly.

The Line Share 230 will allow up to 6 rings for you or your answering machine (Rings to TAD/PHONE port) to answer a call. If the call remains unanswered after 6 rings, the Line Share 230 will transfer (Automatic No Answer Transfer) the call to the Fax port (Automatic Port Transfer Selection).

If the Line Share 230 transfers an unanswered call to the Fax port, it will automatically reduce the number of rings to answer a call to 2 rings (Automatic Ring Reduction) to ensure optimum connect time.

The Line Share 230 will reset (Ring Reduction Reset) the ring count to 6 rings after 10 minutes (Ring Reduction Reset Timer) of inactivity on the Fax port. You can also manually reset the Line Share 230 to 6 rings by performing any of the following steps:

- Lift the receiver of any phone device on the line connected to the Line Share 230 and hang it up.
- Answer a call from any phone before the call is transferred to the Fax port.
- Place an outbound call from any phone on the line connected to the Line Share 230.

If a device connected to the Fax or Modem ports answers a call, only tone and pulse transfers are allowed, as follows:

• TAD or PHONE port: # 0 tone, 5 pulse

FAX port: # 1 1 tone, 3 pulse

MODEM port: # 2 2 tone, 4 pulse

In the HOME mode, pulse transfers are allowed from any phone connected to the line using the Line Share 230. The device calling into the Line Share 230 cannot pulse transfer to a port on the Line Share 230.

Any time a call is transferred to another port, the port that is off-hook with the call is the only port that will be allowed to transfer the call. The originating port will receive a busy tone after the transfer occurs.

To accommodate faxes that do not produce CNG tones, the Automatic TAD Transfer feature can transfer a call to the Fax or Modem port when the answering machine disconnects from a call. This feature is defaulted OFF, and has the TAD Transfer Timer to set parameters for transfer as described later in this guide.

The factory setting for the Line Share 230 is the Office mode.

To return the Line Share 230 to the Office mode, perform the following steps:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 2 1 0 * (three beeps) *
- 3. Hang up the phone

3.3 Passive Monitor Mode

The Passive Monitor mode is only used when the Line Share 230 is set to operate on two lines (instructions follow for two-line operation).

Once you set line 1 or line 2 in either the Home mode or the Office mode, that line becomes primary and the other line operates in the Passive Monitor mode.

Operation in the Passive Monitor mode is similar to the Home mode with the following differences:

- 1. Incoming calls only ring the Phone port. (The TAD port will only ring if the TAD activation feature or Caller ID is turned on.)
- 2. Distinctive Ring service should not be used on the line with Passive Monitor mode.
- 3. Answer Any Port, Automatic Ring Reduction, Automatic TAD Transfer, and Automatic No Answer Transfer are deactivated.

All other features operate as previously described. Essentially, when calls come in on the line designated Passive Monitor mode, the Line Share 230 can only transfer calls using either DTMF or single-frequency tones.

If either line is active on the Fax or Modem port when a call comes in on the other line, the new call cannot be transferred to the Fax or Modem port.

4. Notes About Using Two Lines

4.1 Connecting the Telephone-Line Cord

The Line Share 230 is designed to connect directly to either a one-line telephone jack (RJ-11) or a two-line telephone jack (RJ-14).

The modular telephone-line cord provided with the Line Share 230 is a 4-wire line cord that passes two telephone lines. The inner pair of wires pass line 1, and the outer pair pass line 2.

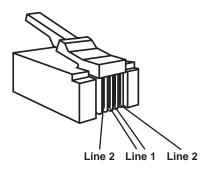


Figure 4-1. RJ Connector.

The Line Share 230 will pass both lines to the PHONE port even if the unit is set for one-line operation. (However, in one-line operation, only one of the two lines will be able to transfer calls. The other line is only provided a direct path.)

4.2 Two-Line Options

The operations previously described (Home mode, Office mode, Passive Monitor mode) can be set in one of the following configurations:

Line 1	Line 2
Passive Monitor	Office Mode
Passive Monitor	Home Mode
Office Mode	Passive Monitor
Home Mode	Passive Monitor

5. Distinctive Ring Service

5.1 Introduction

The phone company's Distinctive Ring Service is offered in most areas across the U.S. Phone companies offer this service under various names. Check with your local phone company for details.

When you add a second or third phone number to a single line, the Line Share 230 works smoothly to process calls without depending on access codes or transfer tones.

Distinctive Ring detection is turned OFF by default. When turned ON, the Line Share 230 will process the additional phone numbers (ring styles) as follows:

- standard ring—Phone and TAD ports
- two-burst ring—Fax port
- three-burst ring—Modem port

(These settings are the default settings for transferring calls, and can be changed to meet your needs.)

When Distinctive Ring is turned ON, the following features will be deactivated:

- Automatic TAD Transfer
- Automatic No Answer Transfer
- Automatic Ring Reduction

If using the Line Share 230 on two lines, Distinctive Ring detection should be used only on the primary phone line (Home mode or Office mode). Do not activate Distinctive Ring on the line designated Passive Monitor, as this will conflict with priority call processing on the primary line.

When Distinctive Ring is turned ON, the Line Share 230 will process calls in the current operating mode. Calls will be processed differently in the Home mode and Office mode, as follows:

5.2 Office Mode (One-Line Operation)

The Line Share 230 prohibits incoming calls from direct access to any connected device (unless Caller ID is ON). The Line Share 230 will answer the call on the first ring (Rings to Answer Call) unless the DRS Assignment is not set for that line. Once the call is answered, the Line Share 230 will listen for the following signals.

- an 1100 Hz CNG tone
- an access code for the Fax port: #11
- an access code for the Modem port: # 2 2
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

NOTE

The factory-default setting is the Office mode which enables complete call processing where the Line Share 230 is located.

Extension phones not connected to the Line Share 230 will only ring one time on inbound calls. However, they will have complete access to the phone line (Extension Detection).

If the Line Share 230 detects any of these signals, it transfers the call to the Fax or Modem port accordingly.

If the Line Share 230 does not detect any of these signals, it will transfer the call using the Distinctive Ring to the appropriate port (as designated in the DRS Assignment).

If a device connected to the Fax or Modem port on the Line Share 230 answers the call, the Line Share 230 will disable the Single Tone Detection feature (if the associated timer has not expired). Then only tone and pulse transfers are allowed, as follows:

- TAD or PHONE port: # 0 tone, 5 pulse
- FAX port: #11 tone, 3 pulse
- MODEM port: # 2 2 tone, 4 pulse

In the Office mode, pulse transfers are allowed from phones connected directly to the Line Share 230. The device calling into the Line Share 230 cannot pulse-transfer to a port on the Line Share 230.

Any time a call is transferred to another port, the port that is off-hook with the call is the only port that will be allowed to transfer the call. The originating port will receive a busy tone once the transfer occurs.

5.3 HOME Mode (One-Line Operation)

The Line Share 230 allows incoming calls to simultaneously ring extension phones and the phone(s)/answering machine connected to the Line Share 230. The Line Share 230 will suppress the first incoming ring and not pass it through to the TAD and PHONE port. The second ring will be transferred to the appropriate port as designated in the DRS Assignment. The Line Share 230 will not answer the call, it simply waits for you or your answering machine to answer. Once the device connected to the Line Share 230 answers a call, it listens for the following signals.

- · an 1100 Hz CNG tone
- an access code for the Fax port: #11
- an access code for the Modem port: # 2 2
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

If the Line Share 230 detects any of these signals, it transfers the call to the Fax or Modem port accordingly.

If the Line Share 230 does not detect any of these signals, it remains on line until it receives transfer codes, or the call disconnects.

If a device connected to any port on the Line Share 230 answers a call, the Line Share 230 starts the Single Tone Detection feature. When the Single Tone Transfer Timer expires (10 seconds), only tone and pulse transfers are allowed as follows.

- TAD or PHONE port: # 0 tone, 5 pulse
- FAX port: # 1 1 tone, 3 pulse
- MODEM port: # 2 2 tone, 4 pulse

In the Home mode, pulse transfers are allowed from any phone connected to the line using the Line Share 230. The device calling into the Line Share 230 cannot pulse-transfer to a port on the Line Share 230.

Any time a call is transferred to another port, the port that is off-hook with the call is the only port that will be allowed to transfer the call. The originating port will receive a busy tone once the transfer occurs.

6. Programming the Line Share 230

6.1 Introduction

The Line Share 230 has many features that can be used to customize its operation.

Many of these features have either feature settings or timing parameters associated directly with their operation. Therefore, read the following section carefully to obtain the best results when programming the Line Share 230.

The Line Share 230 has many ways in which to program its features. Select the appropriate method from the following list:

- 1. By a tone phone connected to the PHONE port of an operational unit.
- 2. By a tone phone connected to the PHONE port without the telephone line connected during power-on.
- 3. Remotely by a tone phone (must have previously entered a Security Access Code—see Section 7.3.2).
- 4. Remotely after Remote Message Notification is activated.

NOTE

In the Home mode, the Line Share 230 cannot be programmed remotely, unless the Remote Message Notification feature has been activated. The user can enter programming during the call placed from the Line Share 230.

6.2 Entering and Programming the Line Share 230

Connect the Line Share 230 as shown, using a tone phone (rotary/pulse-dialing phones cannot program the Line Share 230).

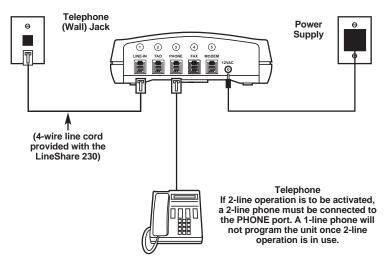


Figure 6-1. Connecting the Line Share 230.

To enter the programming mode, take the phone off-hook, press # *.

Once in programming mode, the Line Share 230 allows eight seconds between tone commands before exiting the programming mode without saving the changes. Therefore, it would be beneficial to write down all programming changes before entering the programming mode.

Once a complete tone command is entered, it must be followed by the * key, which stores it in memory. After you enter the * key, you can set as many features or feature settings as needed for your application. When all programming changes are complete, press * * to make changes permanent and exit programming.

The Line Share 230 will not be able to process calls during programming sessions.

If during a programming session you receive a dial tone, the intercept operator message, or if programming was not successful, perform the following steps.

- 1. Disconnect power from the Line Share 230.
- 2. Disconnect the telephone line from the LINE IN port.
- 3. Reconnect power to the Line Share 230.
- Approximately one second after restoring power to the Line Share 230, take the phone in the PHONE port off-hook.
- 5. The Line Share 230 will produce three beeps indicating entry into the programming mode.
- 6. Continue with programming changes as previously described.
- 7. Reconnect the telephone line to the LINE IN port.

6.3 Remote Programming

To program the Line Share 230 remotely, it must be in the OFFICE mode, and the Security Access Code must be previously stored into memory (see Section 7.3.2).

From the remote location, dial the phone number of the line connected to the Line Share 230. The call must be placed from a tone phone that has the # and * keys. When the Line Share 230 answers the call, and between ring signals, enter the # key and then the Security Access Code. The Line Share 230 will beep 3 times, indicating successful entry into the programming mode.

Continue with programming changes as previously described.

After programming changes are complete and you press * * to exit programming, the Line Share 230 will produce a short ring to the TAD and PHONE ports, then reset for the next call.

7. Programmable Features of the Line Share 230

7.1 Automatic No-Answer Transfer

The Automatic No-Answer Transfer operates in either the Home mode or the Office mode.

This feature is designed to transfer calls that do not produce identifying tones to the appropriate port.

The Line Share 230 will ring the Tad and Phone ports 6 times (Rings to TAD/Phone port). If the call remains unanswered after 6 rings (Rings to TAD/Phone port), the Line Share 230 will transfer the call to the Fax port (Automatic Port Transfer Selection).

If the Line Share 230 transfers an unanswered call to the Fax port, it will automatically reduce the number of rings to the telephones connected to the Tad and Phone ports to 2 rings (Automatic Ring Reduction) to ensure optimum connect time.

The Line Share 230 will reset the ring count to 6 rings (Ring Reduction Reset) after 10 minutes (Ring Reduction Reset Timer) of inactivity on the Fax port. You can also manually reset the Line Share 230 to 6 rings by performing any of the following steps:

- Lift the receiver of any phone device on the line connected to the Line Share 230 and hang it up.
- Answer a call from any phone before the call is transferred to the Fax port.
- Place an outbound call from any phone on the line connected to the Line Share 230.

Automatic No Answer Transfer operates in either the Home mode or the Office mode.

This feature is designed to transfer calls that do not produce identifying tones to the appropriate port.

If the Line Share 230 transfers an unanswered call to the Fax port, it will automatically reduce the number of rings to the telephones connected to the Tad and Phone ports to 2 rings (Automatic Ring Reduction) to ensure optimum connect time.

The Line Share 230 will reset the ring count to 6 rings (Ring Reduction Reset) after 10 minutes (Ring Reduction Reset Timer) of inactivity on the Fax port. You can also manually reset the Line Share 230 to 6 rings by performing any of the following steps.

- Lift the receiver of any phone device on the line connected to the Line Share 230 and hang it up.
- Answer a call from any phone before the call is transferred to the Fax port.
- Place an outbound call from any phone on the line connected to the Line Share 230.

If the Automatic No Answer Transfer feature is turned OFF, the Line Share 230 will operate as follows.

- Home mode: The call will continue to ring as long as the caller stays on line without transferring. The next incoming call will also ring as long as the caller remains on line.
- Office mode: The call will ring 6 times to the TAD and Phone ports
 without transferring, then reset for the next call. The next incoming call
 will be processed with Ring Reduction activated as well as associated
 features and feature settings.

The factory setting for Automatic No Answer Transfer feature is ON. To change this feature, perform the following steps:

To turn this feature OFF:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 0 0 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 1 0 * (three beeps) *
- 3. Hang up the phone.

7.2 Automatic TAD Transfer

Automatic TAD Transfer operates in either the Home mode or the Office mode.

This feature is designed to work in conjunction with your answering machine to transfer calls that do not produce identifying tones to the appropriate port.

If your answering machine answers a call and is on line for less than 30 seconds (TAD Transfer Timer), the Line Share 230 will transfer the call to the FAX port (Automatic Port Transfer Selection). If the call is on line for more than 30 seconds, the Line Share 120H will simply reset for the next call when the answering machine disconnects.

If the Automatic TAD Transfer feature is turned OFF, the Line Share 230 will reset each time the answering machine disconnects from a call.

The factory setting for Automatic TAD Transfer feature is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 * (three beeps) *
- 3. Hang up the phone.

7.3 Automatic Ring Reduction

Automatic Ring Reduction operates in either the Home mode or the Office mode.

This feature is designed to activate when Automatic No Answer Transfer sends an unanswered call to the Fax port. After this transfer occurs, the Automatic Ring Reduction is activated and allows only 2 rings to the TAD and PHONE ports for future calls.

The Line Share 230 will reset the ring count to 6 rings (Ring Reduction Reset) after 10 minutes (Ring Reduction Reset Timer) of inactivity on the Fax port.

If Automatic Ring Reduction is turned OFF, the Line Share 230 will continue to allow 6 rings (Ring Available to the TAD/PHONE ports) to the Tad and Phone ports on every call. (Turning this feature OFF may limit some fax machines' ability to connect to your fax machine because of timing parameters.)

The factory setting for Automatic Ring Reduction is ON. To change this feature, follow these steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 2 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 2 * (three beeps) *
- 3. Hang up the phone.

7.4 Automatic Ring Reduction Reset

Automatic Ring Reduction Reset operates in either the Home mode or the Office mode.

This feature is designed to reset the Line Share 230 to allow 6 rings (Rings to TAD/PHONE port) to the TAD and Phone ports after the Automatic Ring Reduction reduced the ring count to 2 rings.

The Automatic Ring Reduction Reset will reset the the ring count to 6 rings after 10 minutes (Ring Reduction Reset Timer) of inactivity on the Fax port (Automatic Port Transfer Selection).

If Automatic Ring Reduction Reset is turned OFF, the Line Share 230 will continue to allow 2 rings to the TAD and Phone ports on every call until it is manually reset (as previously described).

The factory setting for Automatic Ring Reduction is ON. To change this feature, follow these steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 3 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 3 * (three beeps) *
- 3. Hang up the phone.

7.5 Extension Detection

Extension Detection operates in the Office mode. The Home mode already allows for the use of extension phones as part of its normal operation.

When a call comes in, the Line Share 230 will answer on the first ring (Rings to Answer Call), all extension phones ring one time. If the Line Share 230 does not detect an identifying tone or tone transfer codes, it will ring the TAD and Phone ports up to 6 times (Rings to PHONE/TAD port). During these 6 rings, any extension phone has the ability to answer the call with Extension Detection ON. If the call goes unanswered after 6 rings, the call is transferred to the Fax port, and the phones lose the ability to control the call.

If Extension Detection is turned OFF, the Line Share 230 will only allow phones connected directly to the TAD or Phone ports to answer a call. Extension phones will only be able to listen to the Line Share 230 process the call as previously described.

If an extension has trouble accessing the line, press * to access the line. After the * key is pressed, the Line Share 230 will discontinue its call processing and allow the extension phone to access the line. If the Answer Any Port or DRS Detection feature is turned ON, this procedure will not allow access of the extension phone to the line.

The factory setting for Extension Detection is ON. To change this feature, follow these steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 4 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 4 * (three beeps) *
- 3. Hang up the phone.

7.6 Outbound Voice Exclusion

Outbound Voice Exclusion operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to detect when an extension phone not connected to the TAD or Phone port goes off-hook to place a call. Once the extension phone is on line, any device connected to the Line Share 230 cannot access the phone line. The device simply receives a busy signal until the extension phone has disconnected from the call.

NOTE

Phones or data devices connected directly to the Line Share 230 do not require this feature, since the Line Share 230 maintains exclusion between ports.

If Outbound Voice Exclusion is turned OFF, any call from an extension phone can be interrupted from one device connected to another port of the Line Share 230.

The factory setting for Outbound Voice Exclusion is ON. To change this feature, follow these steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 5 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 5 * (three beeps) *
- 3. Hang up the phone.

7.7 Answer Any Port

The Answer Any Port feature operates in either the Home mode or the Office mode.

When a call comes in, the Answer Any Port feature allows any port that is not ringing to answer the call. Once the call is answered, the Line Share 230 listens for tone access codes to transfer the call to another port.

When the Answer Any Port feature will operate:

- 1. Any time between ring signals to the TAD and PHONE ports.
- 2. After a No Answer Transfer occurs.
- 3. When Distinctive Ring detection is activated.

Conditions that restrict the Answer Any Port feature:

- 1. Automatic TAD Transfer
- 2. Single-frequency tone transfer
- 3. Tone Access code transfer

(In the Home mode, Single Tone Detection will be activated when a device answers a call.)

The factory setting for the Answer Any Port feature is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 6 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 6 * (three beeps) *
- 3. Hang up the phone.

7.8 Pulse Dial Transfer

Pulse Dial Transfer operates in either the Home mode or the Office mode.

This feature allows rotary/pulse dial phone to transfer calls to another port on the Line Share 230. The Pulse Dial Transfer codes are 5 for the TAD and PHONE port, 3 for the FAX port, 4 for the MODEM port.

Operation in the Home mode and Office mode vary as follows:

 HOME mode: Pulse Dial Transfer is allowed after a call has been answered (and/or transferred) from any extension phone, as well as phones connected to any port of the Line Share 230.

On an outbound call, Pulse Dial Transfers are allowed 20 seconds after dialing the last digit of the phone number.

 OFFICE mode: Pulse Dial Transfer is allowed after a call has been answered (and/or transferred) from any device connected directly to any port of the Line Share 230.

On an outbound call, Pulse Dial Transfers are allowed 20 seconds after dialing the last digit of the phone number.

Pulse Dial Transfers cannot be initiated by the calling party. Calls can only be pulse transferred from phones connected to the Line Share 230 (depending on operating mode).

The factory setting for Pulse Dial Transfer is ON. To change this feature, perform the following steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 7 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 7 * (three beeps) *
- 3. Hang up the phone.

7.9 Pound Key Transfer Required

The Pound Key Transfer Required feature operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to determine whether or not the # key is required on an inbound call to transfer to a port, or for entering the remote programming mode using the Security Access Code.

If this feature is turned OFF, you or the caller will be able to transfer a call to any port on the Line Share 230 by entering the numeric access code required for the port without entering the # key. However, if an incorrect access code is entered, the call cannot be transferred to the port during that call. The caller will need to hang up and redial the phone number.

With this feature turned ON, if an incorrect access code is entered, you or the caller can simply re-enter the access code (with the # key) and transfer the call without re-dialing the phone number.

The factory setting for the Pound Key Transfer Required feature is ON. To change this feature, perform the following steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 8 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 8 * (three beeps) *
- 3. Hang up the phone.

7.10 Single Tone Detection

Single Tone Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to detect single frequency tones (for the duration of the Single Tone Detection Timer) from various data devices. It recognizes the following tones:

- an 1100 Hz Fax CNG tone
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

Operation in the Home mode and Office mode varies as follows:

- HOME mode: Once a call is answered, the Line Share 230 will listen for and transfer calls when a single-frequency tone is detected. The Single Tone Detection Timer begins when the call is answered. After the timer expires, the Line Share 230 will only transfer using the tone and pulse access codes.
- OFFICE mode: Once the Line Share 230 answers a call, it will listen for and transfer calls when a single-frequency tone is detected. The Single Tone Detection Timer begins when the Line Share 230 answers the call. After the timer expires, the Line Share 230 will only transfer using the tone and pulse access codes.

The factory setting for Single Tone Detection is ON. To change this feature, perform the following steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 0 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 0 * (three beeps) *
- 3. Hang up the phone.

NOTE

This feature supersedes the following features: Fax CNG Detection, Modem Calling Tone Detection, Reverse Modem Detection. If Single Tone Detection is turned OFF, these other features will not operate even if they are turned ON in their setting.

7.11 Fax CNG (Calling) Tone Detection

Fax CNG Tone Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to detect an 1100 Hz fax CNG tone.

Operation in the Home mode and Office mode vary as follows:

- HOME mode: Once a call is answered, the Line Share 230 will listen for and transfer calls when a CNG tone is detected.
- OFFICE mode: Once the Line Share 230 answers a call, it will listen for and transfer calls when a CNG tone is detected.

The factory setting for Fax CNG Tone Detection is ON. To change this feature, perform the following steps:

To turn this feature OFF:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 1 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 1 * (three beeps) *
- 3. Hang up the phone.

7.12 Modem Calling Tone Detection

Modem Calling Tone Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to detect a 1300 Hz Modem calling tone.

Operation in the Home mode and Office mode varies as follows:

- HOME mode: Once a call is answered, the Line Share 230 will listen for and transfer calls when a modem calling tone is detected.
- OFFICE mode: Once the Line Share 230 answers a call, it will listen for and transfer calls when a modem calling tone is detected.

The factory setting for Modem Calling Tone Detection is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 2 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 2 * (three beeps) *
- 3. Hang up the phone.

7.13 Reverse Modem Tone Detection

Reverse Modem Tone Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to detect a 2225 Hz Reverse Modem tone.

Operation in the Home mode and Office mode vary as follows:

- HOME mode: Once a call is answered, the Line Share 230 will listen for and transfer calls when a Reverse Modem tone is detected.
- OFFICE mode: Once the Line Share 230 answers a call, it will listen for and transfer calls when a Reverse Modem tone is detected.

The factory setting for Reverse Mode Tone Detection is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 3* (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 3* (three beeps) *
- 3. Hang up the phone.

7.14 Distinctive Ring Service Detection (Line 1)

Distinctive Ring Service (DRS) Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to recognize the various ring signals from the phone company when DRS is activated on line 1. It works with the DRS Assignment Line 1 to automatically transfer calls to any port on the Line Share 230 without identifying tones or transfer codes.

See Distinctive Ring service in **Chapter 5** for a detailed description of operating procedures.

The factory setting for Distinctive Ring Service Detection is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 4 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 4 * (three beeps) *
- 3. Hang up the phone.

7.15 Distinctive Ring Service Detection (Line 2)

Distinctive Ring Service (DRS) Detection operates in either the Home mode or the Office mode.

This feature allows the Line Share 230 to recognize the various ring signals from the phone company when DRS is activated on line 2. It works with the DRS Assignment Line 2 to automatically transfer calls to any port on the Line Share 230 without identifying tones or transfer codes.

The factory setting for Distinctive Ring Service Detection is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 5 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 5 * (three beeps) *
- 3. Hang up the phone.

7.16 Caller ID

The Caller ID feature operates in either the Home mode or the Office mode. (Caller ID requires service activation from the phone company.)

This feature allows Caller ID devices to be connected directly to the TAD or Phone port of the Line Share 230.

Operation in the Home mode and Office mode varies as follows:

- HOME mode: When a call comes in, all rings are passed directly to the TAD and Phone ports. Between the first and second rings, the Caller ID will display its information, and the call continues as described in Section 3.2.
- OFFICE mode: When the Line Share 230 is in the Office mode, the Rings to Answer feature must be set to a 2-ring answer to allow Caller ID information to pass directly to the TAD and Phone ports. When a call comes in, the first 2 rings are passed directly to the TAD and Phone ports. Between the first and second rings, the Caller ID will display its information. The Line Share 230 then answers the call and continues as described in Section 3.1. (NOTE: Single Tone Detection is not activated until the Line Share 230 answers the call after 2 rings.)

The factory setting for Caller ID is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 6 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 6 * (three beeps) *
- 3. Hang up the phone.

7.17 Remote Message Notification

Remote Message Notification operates in either the Home mode or the Office mode.

The RMN feature allows the Line Share 230 to automatically dial a telephone number when it receives a call to the TAD, Fax, Modem, or any combination of these ports. This feature is beneficial to notify users of an important call or data transmission.

After an incoming call is complete (5 seconds), the Line Share 230 calls the user-programmed RMN phone number. Once the Line Share 230 dials the phone number, it produces a series of beeps (RMN Conditions) for 1 minute, which indicates the port or ports that received the call. You can set the RMN phone number and the RMN conditions "on location" or remotely. (See Sections 7.36 and 7.37.)

While the Line Share 230 is on-line transmitting the beeps, it also allows entry of the Security Access Code to enter the remote programming mode.

If the Line Share 230 receives a valid access code to transfer the call to the TAD and Phone ports, the call will be transferred and the caller can retrieve any messages.

If a valid code is not received after 1 minute, the Line Share 230 will disconnect the call.

The factory setting for RMN is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 1 1 7 * (three beeps) *
- Hang up the phone.

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 0 1 7 * (three beeps) *
- 3. Hang up the phone.

7.18 TAD Activation

TAD Activation operates in either the Home mode or the Office mode.

The TAD Activation feature allows a single line answering machine connected to the TAD port to receive calls from 2 phone lines when 2-line operation is activated.

When a voice call comes in, the Line Share 230 will transfer it to the TAD and Phone ports simultaneously. If the answering machine answers the call (on either line), the next call that comes in (while the answering machine is busy) will ring only the Phone port. Or, if the Fax or Modem port is busy when another call comes in, the call will transfer to the Phone port.

The factory setting for TAD activation is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 1 1 8 * (three beeps) *
- 3. Hang up the phone.

To turn this feature OFF:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 0 1 8 * (three beeps) *
- 3. Hang up the phone.

NOTE

Do not connect a two-line answering machine to the TAD port of the Line Share 230.

7.19 ComScan® Scanning

The ComScan Scanning feature operates in either the Home mode or the Office mode.

This feature converts your fax machine into a full-page, multi-document scanning system. It allows automatic port-to-port transfer between the Fax and Modem ports.

To scan a document through the Line Share 230, a fax/modem or fax/modem card must be connected to the Modem port, and a fax machine connected to the Fax port. Once the equipment is connected properly, perform the following steps:

- 1. Set the fax/modem in "receive fax" on a 1 or 2 ring answer.
- Insert the document to be scanned into the fax machine and take the fax machine's phone receiver off-hook and keep it off-hook for 10 seconds (Scanning Timer).
- 3. When the fax/modem answers, press the fax machine's start button and return the phone receiver to its cradle.

After these steps are complete, the fax/modem will receiver the document and store it as any received fax. You can then retrieve the document using the fax/modem's software to manipulate or store electronically. (There are many software packages on the market that allow modification of a fax received by a fax/modem.)

Simply reverse the process to send a print job to your fax machine from your computer.

When the Line Share 230 is activated with this feature, calls will only be allowed to the Phone port on the Passive Monitor mode (if 2-line operation is activated). If the Line Share 230 is set for one-line operation, calls will be restricted until both devices release the line.

The Line Share 230 can manually transfer calls between ports for document scanning by the following tone commands (even if this feature is turned OFF):

- 1. * * 0 to transfer to the TAD and Phone port
- 2. * * 1 1 to transfer to the Fax port
- 3. * * 2 2 to transfer to the Modem port

NOTE

The Line Share 230 does not provide port-to-port exclusion during a scanning transfer.

The factory setting for ComScan Scanning is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 1 1 9 * (three beeps) *
- 3. Hang up the phone.

To turn this feature OFF:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 0 1 9 * (three beeps) *
- 3. Hang up the phone.

7.20 Automatic Port Transfer Selection

Automatic Port Transfer Selection operates in either the Home mode or the Office mode.

This feature designates where the Automatic TAD Transfer and Automatic No-Answer Transfer transfer a call when activated.

When the Automatic Port Transfer Selection is turned OFF, the Line Share 230 will transfer calls to the Fax port (Automatic TAD Transfer and Automatic No-Answer Transfer). If this feature is turned ON, the Line Share 230 will transfer calls to the Modem port.

The factory setting for Automatic Port Transfer Selection is OFF. To change this feature, perform the following steps:

To turn this feature ON:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 1 2 0 * (three beeps) *
- 3. Hang up the phone.

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 0 2 0 * (three beeps) *
- 3. Hang up the phone.

7.21 One-Line Operation

One-line operation can be set in either the Home mode or the Office mode, and to operate individually on line 1 or line 2.

When this feature is activated, calls will only be processed on one telephone line, however, the Line Share 230 will pass the other telephone line through to the Phone port.

The factory setting is for line 1 operation in the Office mode: # * 2 1 0 * *.

Following are options for one-line operation:

Line 1 operation in the Home mode: # * 2 1 1 * *

Line 2 operation in the Office mode: # * 2 1 2 * *

Line 2 operation in the Home mode: # * 2 1 3 * *

7.22 Two-Line Operation

Two-line operation can be set in either the Home mode or the Office mode, and to operate on two telephone lines.

When this feature is activated, calls will only be processed in the Home mode or Office mode on one telephone line (primary); however, the Line Share 230 will pass the other telephone line (secondary) through to the Phone port. When the secondary call is answered on the Phone port, the Line Share 230 will listen for tones to transfer the call (providing there is no current activity on the Fax or Modem ports) if the correct tones are present, the call will be transferred accordingly.

If a call comes in on the primary line when the secondary line is in process of receiving a call, the new call will be transferred to the Phone port as well.

The factory setting is for line 1 operation in the Office mode: # * 2 1 0 * *.

Line 2 Office mode, Line 1 Passive Monitor # * 2 2 0 * *

Line 2 Home mode, Line 1 Passive Monitor # * 2 2 1 * *

Line 1 Office mode, Line 2 Passive Monitor # * 2 2 2 * *

Line 1 Home mode, Line 2 Passive Monitor # * 2 2 3 * *

7.23 Port Tone Assignment

Automatic Port Transfer Selection operates in either the Home mode or the Office mode. This feature designates where the Line Share 230 will transfer a call that produces the following identifying tones:

- · an 1100 Hz CNG tone
- a 2225 Hz Reverse Modem tone (if this option is turned ON)
- a 1300 Hz European Modem tone (if this option is turned ON)

The tones can be set to transfer automatically (depending on operating mode) to any port on the Line Share 230.

After entering the programming mode, and this feature setting, the Line Share 230 looks for a 3-digit entry to set the port designations for receiving tone transfers. The first of the 3 digits represents the TAD and Phone ports, the second digit represents the Fax port, and the third digit represents the Modem port. The Line Share 230 cannot be set to transfer any tone to more than one port.

Following are the digits that represent the tones for setting port designations:

- 0 No tone assigned
- 1 1100 Hz CNG
- 2 2225 Hz Reverse modem & 1100 Hz CNG
- 3 1300 Hz European modem
- 4 2225 Hz Reverse modem
- 5 1300 Hz European modem & 1100 Hz CNG
- 6 1300 Hz European modem & 2225 Hz Reverse modem
- 7 1300 Hz European modem & 2225 Hz Reverse modem & 1100 Hz CNG

The factory setting for Port Tone Assignment is # * 3 0 1 6 * *. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 3 ([three digits]) * (three beeps) *
- 3. Hang up the phone.

7.24 Rings to Answer Call

Rings to Answer Call operates in the Office mode only.

This feature determines the number of rings received for an incoming phone call before the Line Share 230 answers. The factory setting is 1 ring, to permit the Line Share 230 to answer and transfer calls as quickly as possible. Under normal circumstances, it is not necessary to change this setting.

However, if you have the phone company's Caller ID service, you must set this feature to answer the call on 2 rings.

This feature has a range of 1 to 99 rings to answer a call. If this ring count is set higher and a call is answered from an extension phone before the Line Share 230 answers, the single-tone and rotary/pulse transfer is deactivated. The tone-transfer access codes still function only if preceded by the # key.

The factory setting for the Rings to Answer Call is 1 ring. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 4 0 ([number of rings]) * (three beeps) *
- 3. Hang up the phone.

7.25 Rings to TAD/PHONE Port

Rings to TAD/PHONE Port operates in either the Home mode or the Office mode.

This feature determines the number of rings that the Line Share 230 provides to the TAD and Phone ports. Operation in the Home mode and the Office mode is only slightly different.

- HOME mode: When a call comes in, all 6 rings (default setting) are passed directly to the TAD and Phone ports while the Line Share 230 waits for you or your answering machine to answer the call. After this ring count expires, the Line Share 230 transfers the call to the Fax port (Automatic No Answer Transfer).
- OFFICE mode: When a call comes in, the Line Share 230 answers the
 call. If transfer tones are not present, the Line Share 230 transfers the call
 to the TAD and Phone ports. Then the Line Share 230 rings 6 times
 (default setting) to the TAD and Phone ports while waiting for you or
 your answering machine to answer the call. After this ring count expires,
 the Line Share 230 transfers the call to the Fax port (Automatic No
 Answer Transfer).

This feature has a range of 1-99 rings available to the TAD and Phone ports.

The factory setting for the Rings to TAD/Phone port is 6 rings. To change this feature, perform the following steps:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 4 1 ([number of rings]) * (three beeps) *
- 3. Hang up the phone.

7.26 Rings to Fax Port

Rings to Fax Port operates in either the Home mode or the Office mode.

This feature determines the number of rings that the Line Share 230 provides to the Fax port. Operation in the Home mode and the Office mode is only slightly different.

 HOME mode: When a call comes in, the Line Share 230 will ring to the TAD and Phone ports 6 times while waiting for you or your answering machine to answer the call. If the call remains unanswered, the Line Share 230 transfers the call to the Fax port (Automatic No Answer Transfer). The call will ring until the fax machine answers or the caller hangs up.

If the call is answered on the TAD or Phone port and then transferred to the Fax port, this feature allows 3 rings for the fax machine to answer, then disconnects from the call.

• OFFICE mode: Any time a call is transferred to the Fax port, this feature allows 3 rings for the fax machine to answer, then disconnects from the call.

This feature has a range of 1-99 rings available to the Fax port.

The factory setting for the Rings to Fax port is 3 rings. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 4 2 (two spaces) * (three beeps) *
- 3. Hang up the phone.

7.27 Rings to Modem Port

Rings to Modem port operates in either the Home mode or the Office mode.

This feature determines the number of rings that the Line Share 230 provides to the Modem port. Operation in the Home mode and the Office mode is only slightly different.

• HOME mode: When a call comes in, the Line Share 230 will ring the TAD and Phone ports 6 times while waiting for you or your answering machine to answer the call. If the call remains unanswered, the Line Share 230 transfers the call to the Modem port (Automatic No-Answer Transfer, if the Modem port is selected for this transfer). The call will ring until the computer modem answers or the caller hangs up.

If the call is answered on the TAD or Phone port and then transferred to the Modem port, this feature allows 3 rings for the computer modem to answer, then disconnects from the call.

OFFICE mode: Any time a call is transferred to the Modem port, this
feature allows 3 rings for the computer modem to answer, then
disconnects from the call.

This feature has a range of 1-99 rings available to the Modem port.

The factory setting for the Rings to Modem port is 3 rings. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 4 3 ([number of rings]) * (three beeps) * (the number of rings is always two digits)
- 3. Hang up the phone.

7.28 TAD Transfer Timer

The TAD Transfer Timer operates in either the Home mode or the Office mode.

This feature designates the timing parameters for operation of the Automatic TAD Transfer. It is designed to facilitate the timing parameters of fax machines that do not produce CNG tones.

When using the Automatic TAD Transfer feature, set this feature to 10 seconds longer than the outgoing announcement message. If the outgoing announcement message is 10 seconds, set this timer to 20 seconds. This will allow adequate time for non-CNG faxes to reach the fax machine, yet allow callers to leave messages on the answering machine without transferring to

the Fax port when the call is complete (if their message is longer than 10 seconds).

This feature has a range of 0-99 seconds. If 0 or 00 is entered, the Automatic TAD Transfer will always transfer calls to the Fax port regardless of time on the line.

The factory setting for the TAD Transfer Timer is 30 seconds. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 5 0 ([number of seconds]) * (three beeps) *
- 3. Hang up the phone.

7.29 Ring Reduction Reset Timer

The Ring Reduction Reset Timer operates in either the Home mode or the Office mode.

This feature designates the timing parameters for operation of Automatic Ring Reduction and Automatic Ring Reduction Reset. It is activated when the Automatic No Answer Transfer transfers a call to the Fax port, and the Automatic Ring Reduction reduces the Rings Available to TAD/Phone port from 6 rings to 2 rings.

When this feature is activated, the Line Share 230 monitors the Fax and Modem ports for activity. If there is no activity for 10 minutes, the Automatic Ring Reduction Reset will return the previous Rings Available to TAD/Phone port count.

This feature has a range of 1-60 minutes. The Rings to TAD/PHONE port can be reset manually as previously described.

The factory setting for the Ring Reduction Reset Timer is 10 minutes. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 5 1 (two blanks) * (three beeps) *
- 3. Hang up the phone.

7.30 Single Tone Detection Timer

The Single Tone Detection Timer operates in either the Home mode or the Office mode.

This feature designates the timing parameters for operation of the Single Tone Detection feature.

When Single Tone Detection is activated, but this timer expires on a call, the Line Share 230 will not transfer calls producing identifying tones.

This feature has a range of 4-30 seconds.

The factory setting for the Single Tone Detection Timer is 10 seconds. To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 5 3 ([number of seconds]) * (three beeps) * (the number of seconds is always two digits)
- 3. Hang up the phone.

7.31 Scanning Timer

The Scanning Timer operates in either the Home mode or the Office mode.

This feature designates the timing parameters for operation of the ComScan Scanning feature.

When a device in the Fax or Modem port goes off-hook, this timer is activated. If the Line Share 230 does not detect dialing during the next 10 seconds (Scanning Timer), it transfers the call to the other port (Fax or Modem port).

This feature has a range of 5-20 seconds.

The factory setting for the Scanning Timer is 10 seconds. To change this feature, perform the following steps:

- 1. Take the phone in the Phone port off-hook.
- 2. Press # * 5 4 ([number of seconds]) * (three beeps) *
- 3. Hang up the phone.

7.32 Remote Security Access Code

The Remote Security Access Code operates in the Office mode (or if RMN is activated in the Home mode).

This feature designates the tone access code that will be required to program the Line Share 230 from a remote location.

Once the code is entered, the Line Share 230 stores it in non-volatile RAM, so it will remain there until you remove it through programming.

The Remote Security Access Code can be any 1-4 digits not including the # key. See Section 7.9, Pound Key Transfer Required, for use with the Remote Security Access Code. Do not enter a code into this feature that is a transfer code for a port on the Line Share 230.

The factory setting for the Remote Security Access Code is defaulted OFF for your protection. A code must be entered before you can access the remote programming mode. To enter an access code, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 6 0 ([four-digit access code]) * (three beeps) *
- 3. Hang up the phone.

7.33 TAD/PHONE Port Transfer Code

The TAD/Phone Port Transfer Code operates in either the Home mode or the Office mode.

This feature designates the tone access code that will be required to transfer a call from either the Fax or Modem port, extension phones, or to the TAD and Phone ports.

The TAD/Phone Port Transfer Code can be any 1-4 digits not including the # key. See Pound Key Transfer Required for use with the TAD/Phone Port Transfer Code. Do not enter a code into this feature that is a transfer code for a port on the Line Share 230.

The factory setting for the TAD/Phone Port Transfer Code is 0. To enter a new access code, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 6 1 ([1- to 4-digit transfer code]) * (three beeps) *
- 3. Hang up the phone.

7.34 FAX Port Transfer Code

The Fax Port Transfer Code operates in either the Home mode or the Office mode.

This feature designates the tone access code that will be required to transfer a call from either the TAD and Phone ports, extension phone, or Modem port to the Fax port.

The Fax Port Transfer Code can be any 1-4 digits not including the # key. See Pound Key Transfer Required for use with the Fax Port Transfer Code. Do not enter a code into this feature that is a transfer code for a port on the Line Share 230.

The factory setting for the Fax Port Transfer Code is 1 1. To enter a new access code, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 6 2 ([1- to 4-digit transfer code]) * (three beeps) *
- 3. Hang up the phone.

7.35 MODEM Port Transfer Code

The Modem Port Transfer Code operates in either the Home mode or the Office mode.

This feature designates the tone access code that will be required to transfer a call from either the TAD and Phone ports, extension phones, or Fax port to the Modem port.

The Modem Port Transfer Code can be any 1-4 digits not including the # key. See Pound Key Transfer Required for use with the Modem Port Transfer Code. Do not enter a code into this feature that is a transfer code for a port on the Line Share 230.

The factory setting for the Modem Port Transfer Code is 2 2. To enter a new access code, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 6 3 ([1-to 4-digit transfer code]) * (three beeps) *
- Hang up the phone.

7.36 RMN Conditions

The RMN Conditions operate in either the Home mode or the Office mode.

This feature allows you to define which port or ports being accessed will invoke RMN. The Line Share 230 will invoke RMN under the following conditions:

TAD message FAX message TAD and FAX message MODEM message TAD and MODEM message FAX and MODEM message TAD, FAX, and MODEM message

For the Line Share 230 to invoke RMN after a TAD message is received, the TAD port must be on-line longer than the value of the Automatic TAD Transfer Timer. If the TAD port is not on-line longer than the Automatic TAD Transfer Timer, the Line Share 230 will not invoke RMN, or will preclude the TAD as part of the RMN information (depending on the setting of RMN Conditions).

If the Fax or Modem ports are accessed for any amount of time, and the Line Share 230 is set up to invoke RMN when the Fax or Modem port receives a call, the Line Share 230 will dial the RMN phone number.

After the Line Share 230 dials the RMN phone number, it begins transmitting a series of beeps indicating the RMN condition that was met. The following list indicates the RMN condition and the series of indicating tones produced by the Line Share 230:

TAD message=1 beep FAX message=2 beeps TAD & FAX message=3 beeps MODEM message=4 beeps TAD & MODEM message=5 beeps FAX & MODEM message=6 beeps TAD, FAX, & MODEM message=7 beeps

LINE SHARE 230

The factory setting for the RMN Conditions is # * 7 0 1 *, which allows the Line Share 230 to activate RMN if the TAD port is accessed under the previously stated conditions. 1 represents the TAD port, 2 represents the Fax port, 3 represents the Modem port. When programming the Line Share 230, any digit can be entered, or all three digits. Program the Line Share 230 as follows:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 7 0 ([up to three digits for new RMN conditions]) * (three beeps) *
- 3. Hang up the phone.

7.37 RMN Phone Number

The RMN Phone Number operates in either the Home mode or the Office mode.

This feature designates the phone number that is dialed by the Line Share 230 when RMN is activated and all RMN Conditions have been met. The phone number can be up to 16 digits long, and must be programmed into the Line Share 230. It will remain in memory until you remove it.

There is no factory setting for this feature. To enter an RMN Phone Number, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 7 1 ([up to 16 digits]) * (three beeps) * (entry following the 7 1 represent new RMN Phone Number)
- 3. Hang up the phone.

7.38 DRS Assignment Line 1

The DRS Assignment Line 1 operates in either the Home mode or the Office mode.

This feature designated where the Line Share 230 will transfer a call using the Distinctive Ring service. It has the ability to recognize three different ring signals:

0 no ring assigned

- 1 standard ring
- 2 two-burst ring
- 3 three-burst ring

After entering the programming mode, and this feature setting, the Line Share 230 looks for a 3-digit entry to set the port designations for the individual rings. The first of the 3 digits represents the TAD and Phone ports, the second digit represents the Fax port, and the third digit represents the Modem port. The Line Share 230 cannot be set to transfer any ring signal to more than one port.

The factory setting is # * 8 0 1 2 3 *, which transfers a one-burst ring to the Tad and Phone ports, a two burst ring to the Fax port, and a three burst ring to the Modem port.

To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 8 0 ([three digits]) * (three beeps) *
- 3. Hang up the phone.

NOTE

If a ring burst is not assigned, the Line Share 230 will not respond to the incoming call designated to that phone number.

7.39 DRS Assignment Line 2

The DRS Assignment Line 2 operates in either the Home mode or the Office mode. This feature designated where the Line Share 230 will transfer a call using the Distinctive Ring service. It has the ability to recognize three different ring signals:

0 no ring assigned

1 standard ring

2 two-burst ring

3 three-burst ring

After entering the programming mode, and this feature setting, the Line Share 230 looks for a 3-digit entry to set the port designations for the individual rings. The first digit represents the TAD and Phone ports, the second digit represents the Fax port, and the third digit represents the Modem port. The Line Share 230 cannot be set to transfer any ring signal to more than one port.

The factory setting is # * 8 1 1 2 3 *, which transfers a one-burst ring to the Tad and Phone ports, a two-burst ring to the Fax port, and a three-burst ring to the Modem port.

To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 8 1 ([three digits]) * (three beeps) *
- 3. Hang up the phone.

NOTE

If a ring burst is not assigned, the Line Share 230 will not respond to the incoming call designated to that phone number.

7.40 Phantom Ring Style

The Phantom Ring Style operates in either the Home mode or the Office mode. When the Line Share 230 answers a call (Office mode), it produces a "phantom" ring signal, making the switching process transparent to the caller.

In the Home mode, it will produce this ring signal any time a call is transferred to a port from an identifying tone, an access code, or from the Automatic TAD Transfer feature.

The Line Share 230 has four different ring signals to choose from, allowing you to select a style similar to your local phone company's ring signal.

The following ring types are available:

	Ringback selection	Break time	Ring time	Single tone/ Dual tones
0	None	N/A	N/A	N/A
1	USA	4 sec	2 sec	Dual
2	Special #1	4 sec	2 sec	Single
3	Special #2	5 sec	1 sec	Dual
4	Special #3	5 sec	1 sec	Single

The factory setting is # * 8 2 1 *, which is the standard US ring signal.

To change this feature, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 8 2 ([ring type]) * (three beeps) *
- 3. Hang up the phone.

7.41 Reset to Factory Settings

To reset all features and feature settings to their original factory settings, perform the following steps:

- 1. Take the phone in the PHONE port off-hook.
- 2. Press # * 9 9 9 * (three beeps) *
- 3. Hang up the phone.



© Copyright 1997. Black Box Corporation. All rights reserved.