Chapter 4

Multicom 2000©

Administrative Communication System

Operating Instructions

ENGINEERED SYSTEMS
BOGEN®

Compliance

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

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques del la class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

ENGINEERED SYSTEMS
BOGEN®

Contents

ENGINEERED SYSTEMS
BOGEN®

Introduction

The Multicom 2000 is the latest in microprocessor- based communications systems from Bogen Communications, Inc. The system combines the features of an electronic telephone network with the capabilities of a sound and program distribution system. Optional functions further increase the versatility of the sys
tem.

Telephonic Features:

- Two-way communication between stations.
- Normal/Urgent/Emergency calling from staff stations.
- Call transfer/call forward/call conference capabilities.
- Remote answer.
- DTMF pushbutton-dialing telephones. Standard dial and busy tones. Special ring signals on administrative phones annunciate emergency, urgent and normal, outside line calls, and calls waiting.

Sound System Features:

- Emergency All-Call and Emergency alarms capture complete system priority. 4 alarm tones are available.
- Built-in audio program interface. Choose from three program sources and distribute program to any speaker, zones or all speakers.
- **8 Paging zones**. Single zone paging.
- **8 Time signaling zones**.
- **8 separate time signalling schedules**.
- **1024 programmable events**.
- **Manual tone activation. 8 tones available plus external audio**.

Additional Features Available:

- Integration with Bogen Multi-Graphic equipment.
- Emergency announce link.
- Selective outside line access and ability to receive outside calls.
- Direct Inward Station Access (DISA) permits control of system functions from off-site telephone.
- Media control function.
- Relay control function to activate external equipment.
- Program clock control.
- Computer interface for remote diagnostics/programming.
- 4-digit dialing (requires MCDS3 phone)

Important Note: The Emergency Announce Link requires a loudspeaker at the calling location and at the emergency announce station.

ENGINEERED SYSTEMS

BOGEN®

Station Types & Access Levels

Each station port in the Multicom 2000 system is assigned an access level. The access level determines the type of equipment that can be connected to the port, as well as the ability to control different system functions.

Staff Station

A staff station consists of a loudspeaker and call switch, or a loudspeaker and telephone handset. Staff stations can receive calls from enhanced staff, administrative and outside line stations Each staff station is programmed to ring one administrative station during "day" hours and one administrative station during "night" hours. The station's access level determines its call-in ability as follows:

- Level 1 - Can make a normal or emergency call.
- Level 2 - Can make an urgent or emergency call.
- Level 3 - Can make an emergency call.

Enhanced Staff Station

An enhanced staff stations consists of a DTMF pushbutton-dialing telephone and loudspeaker. System functions are initiated by pressing designated keys of the telephone dial pad. The access level of the station determines the ability to initiate system functions as follows:

- **Level 4**
  Dial an administrative station.
  Make an emergency call to a designated administrative station (requires loudspeaker at calling location).
  Turn program material on/off at that location.
  Remote answer.
  Ring for incoming outside line calls. (If the station is in use, an outside line calling in results in a call-waiting tone over the handset of the called party. The outside line will ring in when the station hangs up.)
  Access outside line (must be programmed).
  Call forward (Enhanced to enhanced or enhanced to Administrative).

- **Level 5** - Level 4 capabilities, plus:
  Call any staff or enhanced staff station.
  Conference call. (The third party in a conference call or call transfer can be any staff, enhanced staff, administrative or DISA station programmed for outgoing calls.) Transfer call.

- **Level 6** - Level 5 capabilities, plus:
  All-station page (all-call).
  Single zone page.

ENGINEERED SYSTEMS
BOGEN®

Administrative Station

An administrative station consists of a Model MCDS3 pushbutton-dialing telephone and optional loudspeaker. The administrative telephone is equipped with an alphanumeric display panel. The display panel normally shows the numbers and calling status of the first four stations calling in to that particular station (the display can be scrolled to show the numbers of other calling stations). The display also shows the time, day of the week, the current time-signalling schedule and the call-forward status (if active).

System functions are initiated by pressing designated keys of the telephone dial pad. Operation of system functions is assisted by the use of menus which appear on the display panel. The access level of the station determines the ability to initiate system functions as follows:

- **Level 7**
  Dial any station.
  Turn program material on/off at that location.
  Scroll/Clear/Auto-Dial call-waiting queue.
  Conference call.
  Transfer call.
  Call forward (Administrative to Administrative Only).
  Assign media functions (optional).
  All-station page (all-call).
  Emergency all-call page.
  Remote answer.
  Ring for incoming outside line calls. (If the station is in use, an outside line calling in results in a call-waiting tone over the handset of the called party. The outside line will ring in when the station hangs up.) Access outside line (must be programmed).

- **Level 8** - Level 7 capabilities, plus:
  Select program source.
  Distribute/cancel program.
  Activate alarm signals.
  Activate/reset external relay drivers.
  Single zone page.

- **Level 9** - Level 8 capabilities, plus:
  Manually activate tone signals.
  Bump/join conversation in progress.
  Access the system's Setup and Initialization menu systems and change system parameters.

Outside Line Stations

An optional feature of the Multicom 2000 system permits connection to outside telephone lines. This feature uses an optional circuit card which provides up to eight outside line station ports. Up to 2 telco cards can be installed in a system for a maximum of 15 outside lines on a fully expanded system.

The ability to access the outside lines for the purpose of placing outside calls can be assigned to any enhanced staff or administrative station in the system. This ability can be restricted to making local calls only or unrestricted, permitting local or long-distance calls.

There are two programmable levels for outside line stations:

- **Level 10** - The station port will ring a designated "day" or "night" staff, enhanced staff or administrative telephone for outside line calls. Administrative telephones annunciate outside line calls with a special ringing tone.

- **Level 11** - The station port will provide Multicom 2000 system dial tone when accessed from an outside telephone (DISA). This feature can be restricted by a password.

  If a password is required, functions available are: Call a station loudspeaker (no preannounce/privacy tone) or station telephone; make all-station & single zone page (no preannounce/privacy tone); access the Setup menu.

  If a password is not required, functions available are: Call a station loudspeaker (preannounce/privacy tone) or station telephone; make all-station & single-zone page (preannounce/privacy tone); remote answer; access the Audio Program menu, Media Assign menu, External Driver menu, and Manual Tone menu.

Notes:

When an outside line is requested, the system will check to see if the station has any private lines. If no private lines exist, or if none are available, the system will check to see if any outside lines are assigned to ring the calling station. If a line is found and not in use, it will be assigned to the calling station. If no line is found, the system will hunt all outside lines (Outside lines and DISA lines can be both incoming and outgoing or restricted to incoming calls).

ENGINEERED SYSTEMS
BOGEN®

Loudspeaker with Call Switch

To make a normal call (or urgent call if the station is programmed for Level 2 access), press the call switch. You will hear a tone over the loudspeaker when the call is answered. Speak into the loudspeaker.

To make an emergency call, quickly press and release the call switch at least four times. You will hear a tone over the loudspeaker when the call is answered or when the call is transferred to the emergency announce link (if not answered in 15 seconds and the option is activated). Speak into the loudspeaker for help.

Loudspeaker with Telephone Handset

To make a normal call (or urgent call if the station is programmed for Level 2 access), lift the handset off the hook switch and replace it. You will hear a tone over the loudspeaker when the call is answered. If you want to have a private conversation, lift the handset. The conversation will automatically switch from loudspeaker to handset.

To make an emergency call, lift the handset off the Hookswitch and flash the switch at least four times. Replace the handset on the Hookswitch. You will hear a tone over the loudspeaker when the call is answered or when the call is transferred to the emergency announce link (if not answered in 15 seconds and the option is enabled). Speak into the loudspeaker for help.

Important Notes:

If your station has been programmed as a Level 3 station, a single press of the call switch (or single flash of hook switch) will initiate an emergency call. You will hear a tone over the loudspeaker when the call is answered or when the call is transferred to the emergency announce link within 15 seconds (if this option is enabled). Speak into the loudspeaker for help.

In some installations, a station may have two (2) call switches or a handset and call switch (such as a dedicated emergency-call switch). Your training instructor will be able to instruct you as to the use of switches in these configurations.

Operation of Enhanced Staff Stations

To make a normal call to a loudspeaker, lift the handset and dial the three digit number of the desired station. Precede this number with the (∗) key if you want to call a station telephone instead of the loudspeaker. You will hear a preannounce tone when you are connected to the loudspeaker and a privacy beep every 16 sec. that you don't speak. If you call a telephone, you will hear the ringing tone.

To make an emergency call, lift the handset and flash the hook switch at least four times, then replace the handset (or press the dedicated emergency-call switch, if so equipped). You will hear a tone over the loudspeaker when the call is answered or when the call is transferred to the emergency announce link if not answered in 15 seconds (and this option is enabled). Speak into the loudspeaker for help.

System Functions For Enhanced Staff Stations

The chart below lists system functions available to enhanced staff stations, access levels, and dial sequences.

Function	Level	Dial Sequence
Alarm Distribution	4,5,6	(#)(9 WXY)xxxx(9 WXY)(1 QZ) (1/2/3/4/5)
Audio Program On/Off	4,5,6	(∗)(9 WXY) (Toggles)
Call Forward' : All Calls	4,5,6	(9 WXY)(7 PRS)(1 QZ) plus Arch. No.
When Busy	4,5,6	(9 WXY)(7 PRS)(2 ABC) plus Arch. No.
When No Answer	4,5,6	(9 WXY)(7 PRS)(3 DEF) plus Arch. No.
When Busy or No Answer	4,5,6	(9 WXY)(7 PRS)(4 GHI) plus Arch. No.
Cancel Call Forward	4,5,6	(9 WXY)(7 PRS)(5 JKL)
Conference/Transfer Call	5,6	Flash Hook, Dial No.,
		When second party answers, Rash Hook to Conference or Hang up to Transfer
Dial Administrative Station	4,5.6	nnn (Dial Speaker)
		(∗) nnn (Dial Phone)
Dial Staff Station	5,6	nnn (Dial Speaker)
		(∗) nnn (Dial Phone)
Emergency All-Call	4,5,6	(#)(9 WXY)xxxx(9 WXY)(1 QZ)(1 QZ)
Place Outside Line Call"	4,5,6	(9 WXY)(8 TUV) (Wait for Dial Tone)
Remote Answer	4,5,6	(7 PRS)(∗) nnn
Single-Zone/All Station Page	6	(#)(1 QZ) - (#)(8 TUV)/(#)(0 OPER)

xxxx = 4-Digit System Password Backwards

nnn = 3-Digit Architectural Number

*Call forward to other enhanced staff or administrative stations. No call forward to/from emergency announce station.

**Outside Line Calls can be restricted to local calls only. Must be programmed for outside line access.

ENGINEERED SYSTEMS
BOGEN®

Operation of Administrative Stations

To call any station loudspeaker, lift the handset and dial the 3-digit architectural number of the desired station. Precede this number with the ✳ key if you want to call a station telephone instead of the loudspeaker. The number you are calling will appear on the top line of the display panel as you dial. You will hear a preannounce tone when you are connected to the loudspeaker and a privacy. beep every 16 seconds that you don't speak. If you call a telephone, you will hear the ringing tone. (To switch the use of the asterisk so that the preceding the number called with an asterisk connects to the loudspeaker and the number alone rings the station, dial ⑥ᴹᴺᴼ ✳ # # ✳ ✳ # ①ᴼᶻ. To restore the original functionality of the asterisk key, dial ⑥ᴹᴺᴼ ✳ # # ✳ ✳ # ⓪ᴼᴾᴱᴿ.

Queue Operation For Incoming Calls

Each administrative telephone is equipped with a display panel which normally shows the time, day of week and current time signalling schedule:

Time

```
          12:00
          MON
          2
```

Day-of-Week
 Schedule

If a normal or urgent call from a staff station is placed, the architectural number of the calling station appears on the top line of the display and the phone rings for 45 seconds. If the call remains unanswered, the number remains on the top line for an additional 60 seconds (during which time, the call can be auto-dialed) and is then placed in the queue according to priority and time Urgent/Normal, older calls first (see illustration below).

If an emergency call from a staff or enhanced staff station is placed, the architectural number appears on the top line of the display along with the word HELP The phone will sound a special ring signal and will continue to ring until the call is answered. If the emergency announce option is activated, the call will be routed to the emergency announce loudspeaker after 15 seconds, however, the administrative phone will continue to ring until the call is answered.

Emergency Call
Urgent Call
Normal Call
Normal Call. Arrow indicates
additional calls in the queue

```
110E    HELP    12:00
120 U           MON
100             2
105      ↓
```

An emergency call will interrupt a non-emergency call in progress at the designated administrative telephone.

ENGINEERED SYSTEMS
BOGEN®

Using Auto-Dial & Scroll to Return Calls

You can use the Auto-Dial function to call the station number appearing on the top line of the display panel.

Lift the handset and press ✳︎✳︎. The call-waiting queue shifts down one line and the word ADIAL appears on the top line. A small arrow points to the number on the second line and the call is placed.

```
┌─────────────────────────┐
│ ADIAL          12:00    │
│ 120 U ⬅          MON     │
│ 100            2        │
│ 105                     │
└─────────────────────────┘
```

ADIAL replaces station 120 U on the top line an arrow points to the station being Auto-Dialed.

You can scroll the queue to place any station number on the top line of the display, and then use the auto-dial function to return the call.
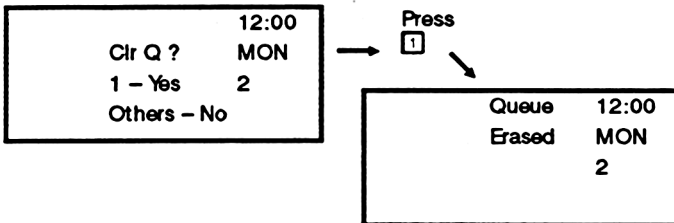
Lift the handset and press #. The display appears as shown below. Press # to scroll the queue. (Note: You will be prompted to WAIT for the action of each key press to be completed.) When the desired number appears on the top line of the display, press ✳︎ twice. The word ADIAL and the arrow will appear as above and the call is placed.

```
┌─────────────────────────┐
│ Zone?          12:00    │
│ 120 U          MON      │
│ 100      # ScrQ   2     │
│ 105      • Clr Q        │
└─────────────────────────┘
```

Press # to Scroll queue
Press ✳︎ to Clear queue (see below)

Clearing the Call-Waiting Queue

To clear all calls from the call-waiting queue, lift the handset and press #. The display shown above will appear. Press ✳︎ to select the Clear Queue function. The display will then prompt you to press 1 ᵠᶻ to proceed or any other key to abort. If you proceed, the display will confirm the function and the queue (at that phone only) will be cleared.

```
┌─────────────────────────┐          Press
│                12:00    │           ┌─┐
│ Clr Q ?        MON      │  ──▶      │1│
│ 1 – Yes        2        │           └─┘ ↘
│ Others – No             │              ┌─────────────────────────┐
└─────────────────────────┘              │                         │
                                         │     Queue     12:00      │
                                         │     Erased    MON        │
                                         │               2          │
                                         │                         │
                                         └─────────────────────────┘
```

ENGINEERED SYSTEMS
BOGEN®

Single-Zone & All-Station Paging

To make a single-zone or all-station page, lift the handset and press ⓐ#. The display shown below will appear. Press the number keypad corresponding to the zone you want to page (1 through 8). To make an all-station page, press ⓞᴏᴘᴇʀ (the local speaker will be muted). Speak into the handset to make the page. Hang up the handset to end the page.

```
┌─────────────────────────┐
│ Zone?            12:00   │
│ 120 U            MON     │
│ 100      # ScrQ   2      │
│ 105      • Clr Q         │
└─────────────────────────┘
```

Enter number of the zone you want to page or ⓞᴏᴘᴇʀ to page all stations. Hang up the handset to exit. this function.

Using the Main Menu System

System functions can be accessed using the dial sequences shown in **Keypad Access to System Functions** on page 16. Administrative telephones also have a "Main Menu" display system to assist the user in initiating system functions. To view the menu, lift the handset and press ⓖ wxy. The menu appears showing the first three selections. To scroll the menu to see the other selections, press the ⓓ▷ ◁↕ keys.

```
┌─────────────────────────┐
│    - Main Menu –         │
│  1 - Emergency           │
│  2 - Audio Program       │
│  3 - Media Assign        │
└─────────────────────────┘
```

The Main Menu appears when you press ⓖ wxy.
To scroll the menu, press the ⓓ▷ ◁↕.

To select a function, press the corresponding number key. The display will then prompt the user to enter additional information, confirm the initiation of the function, or provide a new menu to permit the selection of choices available for that function.
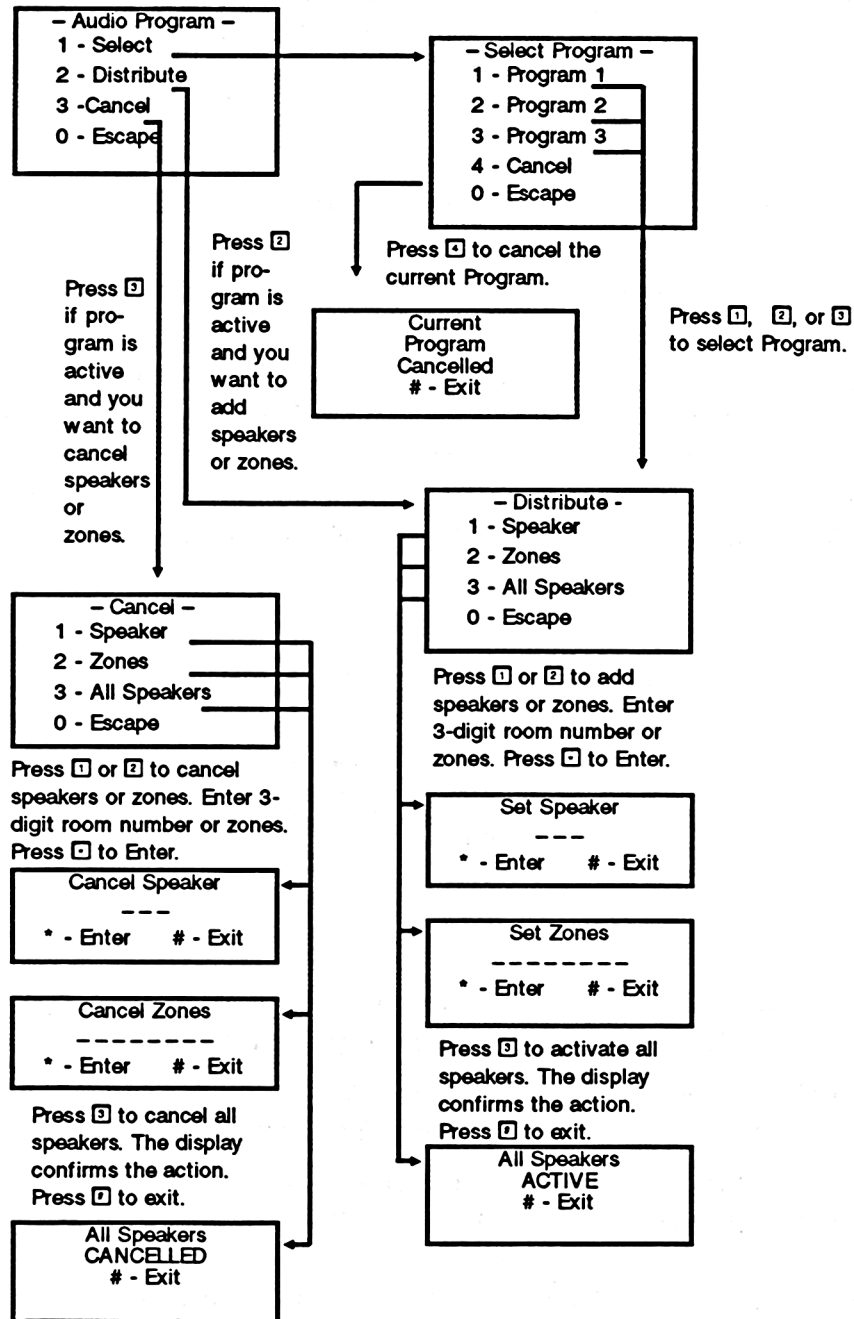
1 - Emergency

The Emergency menu lets you make an emergency all call or initiate one of four alarm tones. Hanging up the phone stops the page/alarm. Press ⓓ▷ ◁↕ key to scroll the menu. Press ⓞᴏᴘᴇʀ to escape and return to the main menu.

```
┌─────────────────────────┐
│    – Emergency –         │
│  1 - All Call            │
│  2 - Alarm 1             │
│  3 - Alarm 2             │
└─────────────────────────┘
```

The Emergency menu lets you make an Emergency All-Call or sound one of four alarms. Press ⓓ▷ ◁↕ key to scroll the menu.

ENGINEERED SYSTEMS
**BOGEN**®

2 - Audio Program

The Audio Program menu controls the selection and distribution of program material. Not all choices shown appear on the display - press ⏷▷ ◁⏶ key to scroll menu to see these selections. If a program source is connected, the administrative telephone's speaker will be connected regardless of whether or not program has been distributed. This allows monitoring of program source prior to distribution.

```
┌──────────────────────┐                        ┌──────────────────────┐
│  – Audio Program –    │                        │  – Select Program –   │
│  1 - Select           │───────────────────────▶│  1 - Program 1        │
│  2 - Distribute       │                        │  2 - Program 2        │
│  3 -Cancel            │                        │  3 - Program 3        │
│  0 - Escape           │                        │  4 - Cancel           │
└──────────────────────┘                        │  0 - Escape           │
                                                 └──────────────────────┘
```

Press 2
if pro-
gram is
active
and you
want to
add
speakers
or zones.

Press 3
if pro-
gram is
active
and you
want to
cancel
speakers
or
zones.

Press 4 to cancel the
current Program.

Press 1, 2, or 3
to select Program.

```
┌──────────────────────┐
│       Current         │
│       Program         │
│      Cancelled        │
│      # - Exit         │
└──────────────────────┘
```

```
┌──────────────────────┐
│   – Distribute -      │
│  1 - Speaker          │
│  2 - Zones            │
│  3 - All Speakers     │
│  0 - Escape           │
└──────────────────────┘
```

```
┌──────────────────────┐
│     – Cancel –        │
│  1 - Speaker          │
│  2 - Zones            │
│  3 - All Speakers     │
│  0 - Escape           │
└──────────────────────┘
```

Press 1 or 2 to add
speakers or zones. Enter
3-digit room number or
zones. Press * to Enter.

Press 1 or 2 to cancel
speakers or zones. Enter 3-
digit room number or zones.
Press * to Enter.

```
┌──────────────────────┐
│     Set Speaker       │
│      – – –            │
│  * - Enter   # - Exit │
└──────────────────────┘
```

```
┌──────────────────────┐
│    Cancel Speaker     │
│      – – –            │
│  * - Enter   # - Exit │
└──────────────────────┘
```

```
┌──────────────────────┐
│      Set Zones        │
│   – – – – – – – –     │
│  * - Enter   # - Exit │
└──────────────────────┘
```

```
┌──────────────────────┐
│     Cancel Zones      │
│   – – – – – – – –     │
│  * - Enter   # - Exit │
└──────────────────────┘
```

Press 3 to activate all
speakers. The display
confirms the action.
Press * to exit.

Press 3 to cancel all
speakers. The display
confirms the action.
Press * to exit.

```
┌──────────────────────┐
│     All Speakers      │
│       ACTIVE          │
│      # - Exit         │
└──────────────────────┘
```

```
┌──────────────────────┐
│     All Speakers      │
│      CANCELLED        │
│      # - Exit         │
└──────────────────────┘
```

ENGINEERED SYSTEMS
BOGEN®

3 - Media Assign

The Media Assign menu controls the assignment of remotely located video equipment to a station. The menu is used with the telemedia control option. The operator enters the architectural number of the media station number and the assigned architectural room number is returned (the cursor is positioned under room).

To enter a station assignment, with the cursor positioned under room, enter a valid station architectural number then press (#) to change the function of the (*) key to "Enter", and press (*).

```
- Media-to-Room -
  ──        ──

*-Review          #-Funct.
```
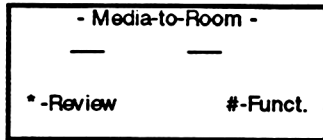
Enter the media architectural station number and the architectural room number as signed Is returned

To exit this menu, press (#) to change the function of the (*) key to "Exit", and then press (*).

To review the media to room assignments, press (#) to change the function of the (*) key to "Review". Pressing (*) will then scroll through the current assignments (the cursor is positioned under room).

To delete any information displayed, press (#) to change the function of the * key to "Delete". Pressing (*) will then delete the currently displayed information.

4 - External

The "External" menu lets you review, select or cancel external relay driver control circuits.

```
      - External -
1 - Review
2 - Select
3 - Cancel
4 - Program
5 - Twice a Day
6 - External Tone
7 - Once an Hour
```
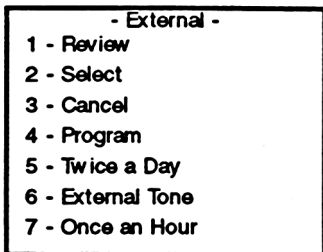
The External menu lets you review, select or cancel Relay Driver Control circuits (P5 pins 9-6)

To Review the status of the external relay drivers, press (1 QZ). A display will appear showing the current status of the four (4) external relays.

To Select an external relay driver, press (2 ABC). Select the desired relay driver and press the appropriate key. The display will confirm the action. Press (#) to exit.

To Cancel an external relay driver, press (3 DEF). Select the desired relay driver and , press the appropriate key. To cancel all relay drivers, press (*). The display will confirm the action. Press (#) to exit.

To Program a relay driver, press (4 GHI). Enter relay number, on time and off time.

To set 2-per-day closure, press (4 GHI). You can set hour and number of seconds of closure (press (1 QZ)), and days of week (press (2 ABC)).

ENGINEERED SYSTEMS
BOGEN®

To set External Tone, press 6 MNO Enter external tone number. Press # to exit.

To set Once-per-hour relay, press 7 PRS. Enter minutes and duration. Press # to exit.

5 - Setup

The Setup menu is protected by a password and is available only from administrative stations assigned to Level 9.

The Setup menu permits setting the following parameters:
- Day/Time
- Time Signaling Events
- Time Zones
- Page Zones

The Setup menu also provides access to the Initialization/Diagnostic menu displays. These menus are protected by password and permit setting the following:

- **System Parameters**
  Bell Duration
  Queue Timeout
  Day Start Time
  Night Start Time
  Emergency Link
  Password
  Architectural Dialing On/Off
  Preannounce Tone On/Off
  Privacy Beep On/Off

- **Station Parameters**
  Station Access Level
  Station Architectural Number
  "Day" Administrator
  "Night " Administrator
  Outside Line Access/DISA Password

- **Software Revision Level**

- **Architectural/Station Number Cross Reference**

- **4-digit dialing on/off (requires MCDS3 phone)**

- **Diagnostic Tests**
  System Tests
  Card Tests

ENGINEERED SYSTEMS
BOGEN®

6 - Manual Tone

Selecting Manual Tone (No. 6 from Main Menu) displays the Initiate Tone menu and lets you initiate any of 8 tone signals over all system loudspeakers assigned to any of the 8 time zones. If no speakers have been assigned to any time zones, no tone will be heard.

```
- Initiate Tone -
1 - Tone 1
2 - Tone 2
3 - Tone 3
```
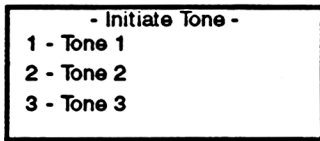
The Initiate Tone menu lets you initiate any of 8 tone signals.
Press (⬇▷)(◁⬆) key to scroll the menu. Press (0 OPER) to escape to the Main menu.

Press the keypad corresponding to the tone number you want to initiate. The display will confirm the action. Press (#) to stop the tone and exit the display (or hang up).

7 - Call Forward.

The Call Forward menu lets you forward calls to another administrative telephone. When call forwarding is activated a CF will appear on the lower right corner of the display. Upon entering the menu, an arrow will appear next to the active selection. No arrow appears if no selection is active.

```
- Call Forward -
1 - All
2 - Busy
3 - No Answer
```
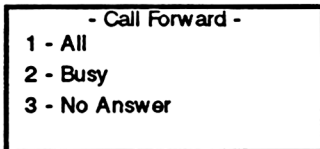
Press the keypad corresponding to the type of call forwarding desired. Press (5 JKL) to Cancel Press (⬇▷)(◁⬆) key to scroll the menus. Press (0 OPER) to escape to the Main menu.

To forward all calls to another number, press (1 QZ). Enter the architectural number of the station you want to receive the call. Press (✳) to enter. Press (#) to exit the menu.

To forward calls when your line is busy, press (2 ABC). Enter the architectural number of the station you want to receive the call. Press (✳) to enter. Press (#) to exit the menu.

To forward calls when there is no answer (15 seconds), press (3 DEF). Enter the architectural number of the station you want to receive the call. Press (✳) to enter. Press (#) to exit the menu.

To forward calls when the line is busy or when there is no answer, press (4 GHI). Enter the architectural number of the station you want to receive the call. Press (✳) to enter. Press (#) to exit the menu.

To cancel call forwarding, press (5 JKL). The display will prompt you to press (1 QZ) to cancel or any other key to abort. If you press (1 QZ) the display will confirm the action. Press (#) to exit.

Note: **The emergency link station cannot call forward stations. No station can call forward to an emergency link station.**

ENGINEERED SYSTEMS
BOGEN®

8 - Outside Line

The outside line menu will prompt you to wait until you hear dial tone before entering the number. The display will echo the number as you dial.

If you have a restricted line, you will be unable to dial more than 10 digits. For the first 30 seconds, the call cannot be transferred nor conferenced. Two outside lines may be joined in a conference call with any station programmed for outside line use. If the station phone hangs up, the outside lines are dropped.

```
- Outside Line -
    Wait For
   Dial Tone
  Then Dial #
```

The outside line menu prompts you to wait for dial tone before dialing the number.

9 - Media Control

Connection to a media station is via 1 of 2 ways. Assignment is made either through the (9 wxy)(3 def) menu or by the station calling the media station architectural number directly. If a connection is made via the (9 wxy)(3 def) menu, only a logical connection is made. The assigned phone must dial (9 wxy)(9 wxy) or the media station architectural number to connect physically to the media station. A tone will be heard periodically as long as the assigned station is physically connected.

The station remains logically connected to the media controller even if the phone is hung up. No other station can connect to a media station that is logically connected to any other station. Once a station is logically connected, dialing (9 wxy)(9 wxy) or the media station architectural number reconnects to the media station. No commands will be accepted by the media controller from the phone until a physical connection is established. The assigned station can logically disconnect from the media station by dialing (9 wxy)(9 wxy) (if the confirmation tone is not heard through the handset) and then dialing (✳)(0 oper). Alternately, the logical connection can be cancelled by dialing the (9 wxy)(3 def) menu on the administrative phone, and pressing the delete key while the assignment is displayed. The Media Control menu operates the following media functions:

(1 qz) Play	(2 abc) Pause
(3 def) Stop	(4 ghi) Rewind
(5 jkl) Fast Forward	(6 mno) Channel UP
(7 prs) TV/VCR	(8 tuv) Display
(9 wxy) Channel Down	(0 oper) Power
(#) Second Function	(✳)(0 oper) Disconnect

Many more can be added but not displayed.

Do not leave the phone physically connected to the media station for long periods of time since this can prevent calls from being placed by other phones.

Note: If a station is already connected to one media station, a busy will be heard if an attempt is made to call another media station. If a media station is reserved, the station dialing the media station will hear a busy signal.

ENGINEERED SYSTEMS
BOGEN®

System Functions For Administrative Stations

The chart below lists available functions for administrative stations, the access level required, and the dial sequence required to access the specific function:

Function	Level	Dial Sequence
Alarm Distribution	8,9	912 – 915
All-Call	7,8,9	#0
Audio Program On/Off	7,8,9	*9 (Toggle)
Auto-Dial	7,8,9	* *
Bump Conversation	9	Wait 10 seconds during busy
Call Forward All Calls	7,8,9	971 plus Arch. No.
Call Fwd When Busy	7,8,9	972 plus Arch. No.
Call Fwd When No Answer	7,8,9	973 plus Arch. No.
Call Fwd When Busy or No Answer	7,8,9	974 plus Arch. No.
Cancel Call Forward	7,8,9	975
Conference/Transfer Call	7,8,9	Flash hook, Dial No., Flash hook

When second party answers, flash hook to conference or hang up to transfer.

Function	Level	Dial Sequence
Dial Admin. Station	7.8,9	nnn (Dial Speaker), * nnn (Dial Phone)
Dial Staff Station	7,8,9	nnn (Dial Speaker) 1* nnn (Dial Phone)
Distribute/Cancel Program	8,9	922/923
Emergency All Call	7,8,9	911
External Functions Review/Select/Cancel	8,9	94 (1 /2/3)
Join Conversation	9	* #nnn
Manually Initiate Tone	9	96(1-8)
Media Assign	7,8,9	93
Place Outside Line Call	7,8,9	98 (programmable)
Remote Answer	7,8,9	7* nnn
Scroll/Erase Queue	7,8,9	##/#'
Select Program Source	8,9	921(1-3), 9214 (Cancels)
Special Functions Menu	9	95pppp
Single Zone Page	8,9	#1 - #8

Notes:
nnn = 3-Digit Architectural Number
pppp = 4-Digit Password

Other Sequences

[1 QZ][∗] then hang up - sends a time update to the administrative telephone

[2 ABC][∗][∗] **Baud rate change**

[7 PRS][∗] [NNN] allows any ringing phone to be answered (NNN = architectural station no.)
An enhanced staff or administrative station can answer the first displayed station on the queue of another administrative station (after it ceases to ring) by dialing [7 PRS][∗] [NNN] where [NNN] is the architectural number of the administrative telephone.

ENGINEERED SYSTEMS
BOGEN®

Summary of Main Menu System

9 1	**Emergency Menu**
9 1 1	Emergency All Call
9 1 2	Emergency Alarm #1
9 1 3	Emergency Alarm #2
9 1 4	Emergency Alarm #3
9 1 5	Emergency Alarm #4
9 1 0	Escape to Main Menu
9 2	**Audio Program Menu**
9 2 0	Escape To Main Menu
9 2 1	**Select Program Menu**
9 2 1 1	Select Program #1
9 2 1 2	Select Program #2
9 2 1 3	Select Program #3
9 2 1 4	Cancel Current Program
9 2 1 0	Escape to Audio Program menu
9 2 2	**Distribute Menu**
9 2 2 1	Select Speaker
9 2 2 2	Select Zones
9 2 2 3	Select All Speakers
9 2 2 0	Escape to Audio Program Menu
9 2 3	**Cancel Menu**
9 2 3 1	Cancel Speaker
9 2 3 2	Cancel Zones
9 2 3 3	Cancel All Speakers
9 2 3 0	Escape to Audio Program Menu
9 3	**Media Assign Menu**
9 4	**External Menu**
9 4 0	Escape to Main Menu
9 4 1	Review Menu
9 4 2	Select Menu
9 4 2 1	Select External #1
9 4 2 2	Select External #2
9 4 2 3	Select External #3
9 4 2 4	Select External #4
9 4 2 0	Escape to External Menu
9 4 3	**Cancel Menu**
9 4 3 1	Cancel External #1
9 4 3 2	Cancel External #2
9 4 3 3	Cancel External #3
9 4 3 4	Cancel External #4
9 4 3 *	Cancel All External
9 4 3 0	Escape to External Menu
9 5	**Setup Menu** - Password Required to Proceed
	See Installation & Setup Instructions
9 6	**Initiate Tone Menu**
9 6 1	Initiate Tone #1
9 6 2	Initiate Tone #2
9 6 3	Initiate Tone #3
9 6 4	Initiate Tone #4
9 6 5	Initiate Tone #5
9 6 6	Initiate Tone #6
9 6 7	Initiate Tone #7
9 6 8	Initiate Tone #8
9 6 9	External Audio Source
9 6 0	Escape to Main Menu
9 7	**Call Forward Menu**
9 7 1	Call Forward All Calls
9 7 2	Call Forward When Busy
9 7 3	Call Forward When No Answer
9 7 4	Call Forward When Busy or No Answer
9 7 5	Cancel Call Forward
9 7 0	Escape to Main Menu
9 8	**Outside Line**
9 9	**Media Control**

ENGINEERED SYSTEMS
BOGEN®