

CALL PRIORITY INDICATOR  
(AUTOMATIC CALL SEQUENCER\*)  
DESCRIPTION, INSTALLATION, CONNECTIONS  
AND ORDERING INFORMATION

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1. GENERAL

- 1.01 This section provides description, installation, connections, and ordering information for the Call Priority Indicator (Call Sequencer) System.
- 1.02 This Section is reissued to include maintenance information and a trouble location chart (Table B).
- 1.03 The basic function of the Call Sequencing System is much the same as that of an Automatic Call Distribution System. The System answers multiple incoming telephone calls, places the calls on hold and then automatically allows the calls to be taken in sequence by the desired personnel. The System works in conjunction with 1A1 or 1A2 key telephone equipment. The System controls the lights in the key telephone as a necessary part of the overall operation.
- 1.04 Automatic Call Sequencer is not compatible with Com Key and other electronic type equipment, it is designed to work with 1A1 or 1A2 key equipment only.

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2. DESCRIPTION

2.01 The Automatic Call Sequencer is built to serve from 1 to 24 incoming lines, answers calls with a prerecorded message, puts the caller on hold, and indicates the priority line by blinking the light on each key telephone at a rate twice the normal hold rate. All other calls that are holding will blink at 1/4 the normal rate. The Automatic Call Sequencer may be activated or dropped off the lines by a flick of a switch without disturbing the normal telephone activities. Standard wiring allows for a maximum of 15 lamps on any line.

2.02 The Automatic Call Sequencer is modular in design for system flexibility. It is housed in an attractive, compact cabinet with easy-to operate front panel controls. The basic unit (8- or 16- line capacity) measures 17" wide X 17" deep X 5 1/2" high. (See Exhibit 1)

2.03 OPTION SWITCH - Located inside of the Automatic Call Sequencer unit are three rocker switches which offer the following operating options. The position of these switches should be noted on the service order and set by the craft person when the unit is installed.

- a. OPTION SWITCH #1 - In the "open" position, Switch #1 causes all lines, other than the priority line, which are being held by the Sequencer to blink at 30 IPM (Interruptions Per Minute). In the "closed" position, those same lines will remain solid rather than blink at 30 IPM.

b. OPTION SWITCH #2 - In the "open" position, Switch #2 activates the Audible Attendant Alert (AAA) feature. This feature causes the Sequencer to ignore an incoming call and allow it to continue ringing if no other line is in use on the key system. Once one line has been answered, all other lines that might have been ringing will be immediately answered by the Sequencer. In the "closed" position, all lines are answered regardless of the condition of the lines in the key system.

c. OPTION SWITCH #3 - In the "open" position, Switch #3 activates the Delayed Answer feature. When no calls are being held in memory and Delayed Answer is activated, the Sequencer delays answering the next incoming call for 15 seconds. If there are any calls being held in memory, the Sequencer answers in the normal manner. In the "closed" position, all calls are answered immediately regardless of the condition of the memory.

2.04 The Automatic Call Sequencer unit is located near the telephone set. Cables extending from the key system common equipment to the Automatic Call Sequencer unit should not extend beyond 100 feet. Any distance beyond 100 feet may cause technical problems to occur.

2.05 The optional Elapsed Time Counter is designed to be connected to the Automatic Call Sequencer. It counts and clocks each call from the time the caller begins listening to the announcement tape until the caller is personally answered. It indicates on the counters the calls which were answered during a selected time frame. If

an excessive hold time is experienced, the Elapsed Time Counter will signal your operators with a pleasant tone, sounding every 8 seconds.

2.06 The Elapsed Time Counter is housed in an attractive cabinet, measuring a compact 11 1/4" wide X 7 1/2" deep x 3" high. It is designed to be used with the Automatic Call Sequencer, and may be ordered with the Sequencer or may be installed at a later date. (See Exhibit 2)

### 3. STANDARD FEATURES

3.01 AUDIBLE ATTENDANT ALERT. If, at any time, all lines in the System are inactive, there is a chance that all attendants are away from the telephone instruments. Since an attendant must see the lights on the telephone, the System is designed to recognize when all lines are inactive. In this condition, Option Switch 2 (see paragraph 2.03) allows the System to be programmed either, (1) to ignore the first incoming call and allow it to continue to ring, or, (2) to answer normally on the first cycle.

3.02 DELAYED ANSWER. When no calls are being held in the System memory, Option Switch 3 (see paragraph 2.03) allows the System to delay answering the next call for 15 seconds so that an available attendant may answer. If there are any calls "on hold" by the System, the next incoming call is answered on the normal first cycle. Conversely, Option Switch 3 allows the next call to be answered immediately, regardless of the System memory condition.

3.03 DIGITAL COUNTERS. Two, six digit, counters count the calls. One counter counts the total number of calls answered by the system. The other counter counts the number of calls which dropped off (hung up) before an attendant answered. The counters are resettable by pushing the associated button.

3.04 INDIVIDUAL LINE CONTROL. Each telephone line is controlled by an individual "On-Off" switch at the equipment. The "On" position allows that line to be answered by the System. The "Off" position causes that line to continue ringing at the telephone instruments. Even though a switch is in the "Off" position, the System senses when that line is active or inactive in conjunction with the Audible Attendant Alert feature.

3.05 INSTANTANEOUS RELEASE. Once a call is answered by the System, that call remains on hold until it is taken by a System attendant. When answered by an attendant, the call is immediately released from the control of the System, even during the middle of an announcement message. No tone or noise is experienced when the call is released and answered by an attendant.

3.06 MUSIC ON HOLD ACCESS. All Systems with the Sequencer have an 8 ohm input terminal for "Music on Hold". The music source is not included. No connecting arrangement is required, but source level must be adjustable.

3.07 ANSWER/HOLD. The System has an "Answer/ Hold" switch. In the "Answer" position, calls are answered with the announcement message and are then disconnected. This feature is used when there are no System Attendants available to answer calls personally. The Audible Attendant Alert feature is disabled when the System is in the "Answer" mode.

3.08 PRIORITY ANSWER INDICATION. The system memory, referred to as the Sequencer, is the extremely powerful nerve center of the System. The Sequencer recognizes each incoming call and remembers the sequence in which each call was answered by the System. By controlling the interruption rate (blinking) of the lights in the key telephones, the

Sequencer visually indicates which call is next in priority to be answered. The next call in priority to be taken by a System attendant blinks at 240 IPM (Interruptions Per Minute). Immediately upon selection of the priority call, the next call in priority will begin to blink at 240 IPM. The IPM rate of all other lines on hold under Sequencer control is programmable by Option Switch 1 to either 30 IPM or steady (no IPM). Calls which are returned to a hold condition by a System attendant have the regular hold rate of 120 IPM.

3.09 SIMULTANEOUS CALL ANSWERING. Every call is answered from the beginning of the announcement message. If one or more calls "ring in" while the announcement is being played, those calls continue to ring until that announcement has been completed. The System then plays the announcement simultaneously to all those calls which have been ringing. The system is capable of answering all lines simultaneously so that no caller will ever wait to be answered beyond the length of one announcement. The Sequencer recognizes calls in individual order of receipt regardless of the number of calls answered simultaneously.

3.10 STATION CALL MONITORING. All telephone lines in the System will normally appear at all telephone instruments (stations) in the System. Each station becomes a System monitor and each attendant knows the condition of the System at all times. Therefore, if the attendants see that telephone traffic is particularly heavy at any given moment, they can speed up their calls and, likewise, are discouraged from leaving their station during such a time.

3.11 VARIABLE ANNOUNCEMENT LENGTH. Announcement message tapes are available in 8, 14, 20, and 30 second length. Generally, short messages are used when callers are to be put on hold and longer messages when Off-Hours Answering is desired. Announcement tapes are in cartridge form so that they can easily be changed.

#### 4. ELAPSED TIME COUNTER

4.01 The Elapsed Time Counter provides timely management information to the user of the Automatic Call Sequencer regarding the promptness with which callers are being served. The Elapsed Time Counters clock each call from the time the caller begins listening to the announcement tape until that call is answered personally.

4.02 Three digital counters, designated A, B and C, are housed in a cabinet measuring 11-1/4" wide X 7-1/2" deep X 3" high. This cabinet plugs into the main Sequencer cabinet. The counters are programmed via a five-position rotary dial switch to provide counts for various time frames. The switch is called the Time Group Switch and programs the counters as shown in Exhibit 3.

4.03 The counters count those calls which were answered or dropped during the selected time frame. To calculate the number of calls which were answered or dropped between 0 seconds and the first time increment shown for Counter A, the user adds the three totals from Counters A, B and C and then subtracts that figure from the Total Calls shown on the main Sequencer cabinet.

4.04 Designed into the Elapsed Time Counter cabinet is a Management Alert System (MAS). When activated, MAS causes an alarm tone to go off once every 8 seconds anytime one or more calls are being held in the Counter C time frame.

4.05 The MAS is a 3-position switch provided on the back panel of the Elapsed Time Counter. The "down" position turns off the Attendant Alarm feature. The "center" position allows the contacts for an external alarm signal to be activated. The "up" position allows both the contact feature and the Attendant Alarm feature to be activated. A terminal block on the rear of the unit provides a connection point for an external signal. A contact closure is furnished to the terminals.

4.06 Four tape cartridges of variable lengths are furnished with the initial installation. Replacement or additional tape cartridges are available to the customer for an additional charge.

#### 5. OPERATION PROCEDURES

5.01 The Automatic Call Sequencer System comes supplied with a microphone and four tape cartridges.

##### To Operate

1. Be certain that the tape cartridge has been fully inserted in the front panel.
2. Place the Hold/Answer switch in the hold position.
3. Depress the "Operate" switch. The "Power On" light will glow. If the light does not go on, check to see that the AC power cord is connected and that the cartridge is inserted correctly.
4. To turn the System "Off", depress and then release the "operate" switch.

#### A. RECORDING ANNOUNCEMENT

Choose a time during the day when there is no background noise present.

1. Firmly insert a tape cartridge into the System.
2. Plug the microphone into the "Mic" socket.
3. Point the microphone so that you are speaking directly at the top and approximately 6 inches away.
4. Depress the "Operate" switch.
5. When you are ready to record, depress the "Record" switch and begin speaking after a 1 second pause.
6. To re-record, you release the "Record" switch by depressing and releasing. Then depress it again.
7. To listen to your announcement, release the "Record" switch and depress the "Play" switch.
8. When you are satisfied with your announcement, release the "Play" and/or "Record" switches and unplug the microphone.

CAUTION: Depressing the "Record" switch may erase your message. Cartridges may be removed and reinserted to play a previously recorded message.

#### B. TELEPHONE LINE SWITCHES

1. Each telephone line is controlled by an individual switch. Each switch has an "on" and an "off" position.
2. The up position is the "on" position and down is "off".

3. When the switch is "on" (up), the System will answer that particular line. When the switch is "off" (down), that line is removed from the system and the System will allow that line to continue ringing.
4. When a line is switched "off", the System still knows when that line is being used, so that the System will answer other calls even though the line in use has been turned to "off".

#### C. ANSWERING THE TELEPHONE

1. The next call to be answered is the one which is blinking the fastest and must always be answered first.
2. Depress the fastest blinking button first and then remove the handset from the instrument. If you are already on a call and have the handset off-hook, simply depress the next fast blinking button.
3. All buttons which are blinking slowly have been answered by the System and are waiting in line.
4. On the front panel of the System there is a red light for each line. When the red light is on, that means a call is being held on that line.

#### 6. INSTALLATION AND CONNECTIONS

6.01 It is essential that the appropriate Business Marketing or Business Services person negotiate commercial power and equipment space requirements. It is the customer's

responsibility to provide floor space, commercial power, commercial power wiring, and outlets.

6.02 All electrical facilities shall be provided in accordance with the National Electrical Code and local requirements.

6.03 Specific electrical requirements for this system are as follows:

- a. 120V AC grounded receptacle power source.
- b. Automatic Call Sequencing should be on a sole AC circuit. It cannot be on a circuit with other equipment which causes heavy transients or voltage spikes.

6.04 The Model 1001 Sequencer is installed between the key telephone switching equipment (KTS) and the individual key telephones. A 50 pin connector is provided for the input (amphenol #157-72500-3 male) and a 50 pin connector (amphenol #157-82500-7) output is also provided. Install cables with KS-16690L-1 and KS-16689L-1 connectors to provide all lines to the Sequencer. Leads T, R, A, A1 and LG are bridged in the connection block and will be in parallel with the Sequencer but the L lead is run through the Sequencer in series. Exhibit 4 and Table A detail this connection. These cables must be installed with sufficient length to terminate within two feet of the Sequencer location.

## 7. TESTING THE INSTALLATION

7.01 After installation is complete the following check out procedures should be used:

- A. Preliminary Test
  1. Press operate button on main switch - power on light should glow dim.
  2. Insert tape cartridge - power on light should glow bright.
  3. Make a recording as per the operation instructions and then play back the message.
- B. Individual Line Test
  1. Turn all individual switches to the on (up) position.
  2. Make sure the Hold/Answer switch is in the hold position.
  3. Using any telephone, call into each line in the Sequencer.

The following actions should be observed for each line:

- A. The call should be answered by the Sequencer.
- B. The panel light should light and burn steadily.
- C. The recording should be heard on the telephone.
- D. Fast flash should be observed on the telephone instrument.
- E. Music on hold should be heard after the message is completed. (If option is used.)
- F. One count should be noted on the Total Call Counter.

## G. Hang Up Instrument.

1. Sequencer should disconnect.
2. Fast Flash light should go off.
3. Dropped Call Counter should register one call. (See Note)
4. Line light on Sequencer should go off.

## H. Sequence Test

1. Using the last line on the Sequencer call the first line - observe items A through F in test above.
2. Press Hold button on last line of telephone instrument - note standard hold signal (120 IPM).
3. Repeat procedure using next to last line calling line #2-telephone instrument light should flash at a slow flash (30 IPM).
4. Press button on fast flashing line #1 - line #2 should immediately fast flash.
5. Repeat procedure calling Line #3 from the last line and observe the slow flash on lamp #3. Place the last line on hold and answer line #2 - observe fast flash on line #3.
6. Continue to call in order all the lines on the system. To test the last two lines reverse the procedure and call from the first two lines.

## 7.02 TEST ANSWER FUNCTION

1. Place Hold/Answer switch in the answer position and call any line in the system - the Sequencer should answer the call, give out the recorded message and at the end of the message disconnect the line. No fast flash will be observed in this mode.

## 7.03 TEST LINE DISCONNECT

1. Call each line as in the individual line test but first turn off each line - the machine should not answer or fast flash the lights on the instrument.

NOTE: Dropped call counter will not count unless the telephone system has a calling party disconnect pulse (an interruption of the loop current for at least 10 msec duration).

8. ORDERING INFORMATION

8.01 All equipment will be purchased through Western Electric. When the service request is received, installation shall order the call sequencer equipment via a hard copy requisition and instruct Western to place the order to:

Automation Sales Company  
344 40th Street  
Oakland, Cal. 94609

8.02 The following list includes model numbers and associated equipment that may be required for new installations:

| <u>ITEM</u>  | <u>USOC</u> |
|--|-------------|
| Model 1001-8, Automatic Call Sequencer (8 Lines)   | QAM         |
| Model 1001-16, Automatic Call Sequencer (16 Lines) | QAN         |
| Model 1001-24, Automatic Call Sequencer (24 Lines) | QAO         |
| Model 1001-E, Elapsed Time Counter (8 Lines)       | QAR         |
| Additional or Replacement Tape Cartridge           | QAT         |

9. SPECIFICATIONS

9.01

Power Supply: AC 110 to 120V, 60 HZ  
Power Consumption: 35W during standby  
78W during operation  
(16 Line System)

Message Media: Dictaphone Cartridge RPC-002  
Message Length: 10 seconds to 180 seconds  
Tape Speed: 3 3/4 Ips. (9.5 cm/sec.)  
Wow and Flutter: 1% (CSS Message)  
Signal to Noise Ratio: 45 dB (CSS Message)  
Overall Frequency Response: 300 to 3000 Hz,  
± 2 dB (CSS Message)

Cross Talk: -50 dB typ. from 300 - 3000 Hz.  
Dimensions: 17" W x 17" D with Height  
depending on size of System.

Manufacturer: Automation Electronics Corp.  
344 40th St.  
Oakland, CA 94609

Model No: 1001 (suffix number designates the  
number of lines)

10. MAINTENANCE

10.01 Table B contains trouble locating information to aid in isolation of troubles.

10.02 The following procedures will be required for maintenance and/or changes to the Call Priority Indicator System:

a. CAUTION - Always remove the 117 VAC line cord from the wall receptacle before removing the top cover for servicing.

b. Always disconnect the CPI from the key telephone system before removing PC assemblies from the cabinet.

c. Connect the KSU cable to its corresponding key telephone cable. This connection will restore the line lamps to the key telephones.

## 10.03 Top Cover Removal

a. Loosen the two cover crews.

b. Lift the cover and slide it forward, clearing the slot in the rear.

c. Access is provided to Line Units, Main/Auxiliary Boards, and the Tape Cartridge Player/Recorder.

## 10.04 Rear Panel Removal

a. Loosen the two 11/32 nuts located under each side of the top rear cross strut. These nuts secure the strut to the side panels. When loose, they will slide toward the center.

b. Remove the cross strut.

- c. The rear panel can be lifted out for access to the line units. The wiring will limit how far the panel can be moved.

#### 10.05 Front Panel Removal

- a. Remove the four screws from the corners of the panel.
- b. Lean the front panel forward until it clears the tape recorder and the function switches.
- c. The wiring will limit how far the panel can be moved.

#### 10.06 Line Unit PC Assembly Removal

- a. Remove the top cover (Para. 10.03).
- b. Remove the back panel, if necessary (Para. 10.04).
- c. (Models 1001-16 & 1001-24) If the defective unit is in the first eight lines, the back panel and the Line Unit above the defective Line Unit must be removed.

NOTE: Order replacement Line Units as follows: (Quantity) Sequencer Line Card (2 lines per card).

10.07 Tape Head Cleaning: Oxide build-up will occur on the record-playback heads and the tape capstan. Excessive build-up will cause the quality of the announcement message to deteriorate. The heads and capstan should be cleaned with cotton-tipped swabs and alcohol.

Disconnect the AC power cord from the wall receptacle and remove the top cover, if necessary, to gain access to the heads and capstan. Frequency of cleaning depends on the individual installation.

EXHIBIT 1

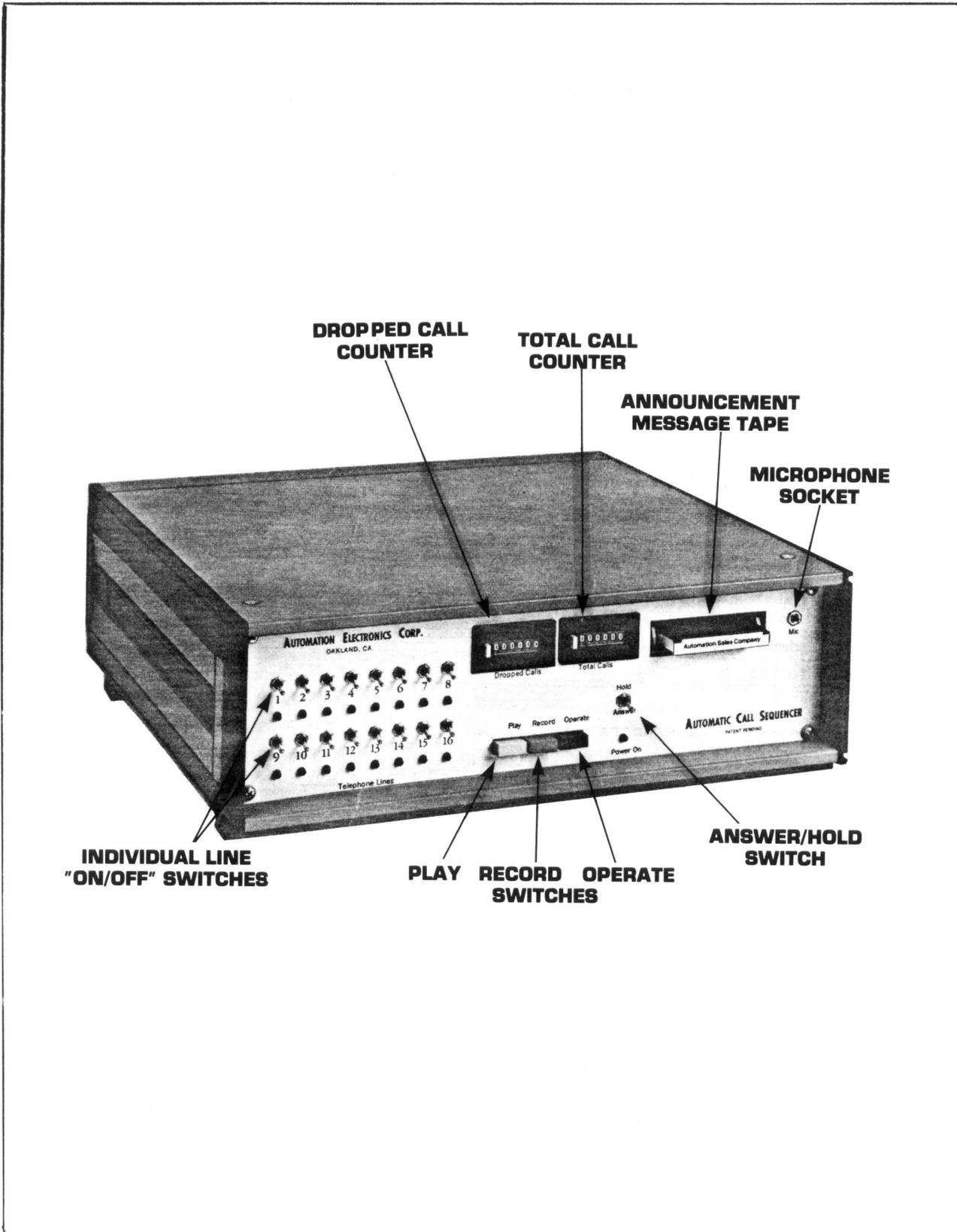


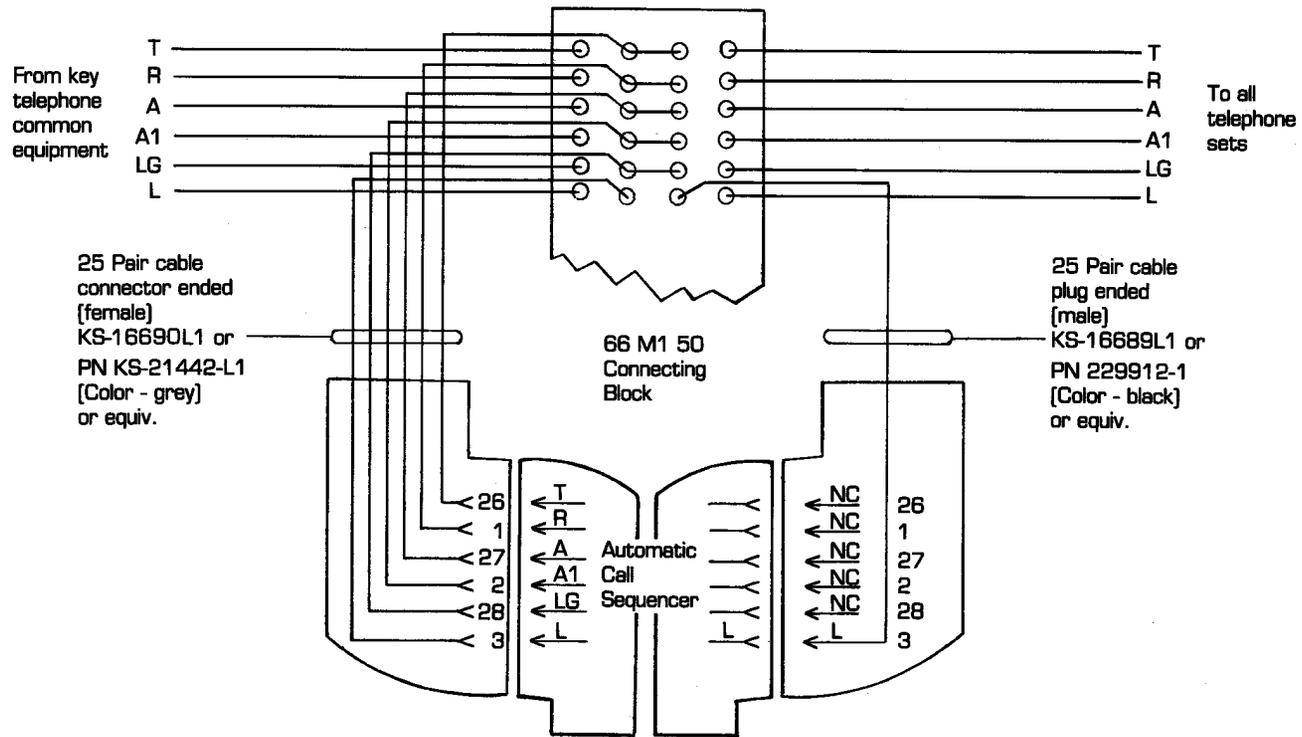
EXHIBIT 2



## EXHIBIT 3

| <u>Time Group<br/>Switch</u> | <u>Counter A<br/>No. of calls<br/>held by the<br/>Sequencer<br/>between:</u> | <u>Counter B<br/>No. of calls<br/>held by the<br/>Sequencer<br/>between:</u> | <u>Counter C<br/>No. of calls<br/>held by the<br/>Sequencer<br/>beyond:</u> |
|------------------------------|--|--|---|
| Position 1                   | 20 & 40 sec  | 40 & 60 sec  | 60 sec  |
| Position 2                   | 30 & 60 sec  | 60 & 90 sec  | 90 sec  |
| Position 3                   | 1 & 2 min  | 1 & 2 min  | 3 min   |
| Position 4                   | 2 & 4 min  | 4 & 6 min  | 6 min   |
| Position 5                   | 3 & 6 min  | 6 & 9 min  | 9 min   |

### WIRING DIAGRAM



**IMPORTANT:**

Place bridging clips on T, R, A, A1, LG terminals for each line.  
Do not place bridging clip on the L terminals.  
Run cables to the exact equipment location.

EXHIBIT 4

SECTION 518-215-903SW

TABLE A

TABLE A

Connections for KS-16690L1 and KS-16689L1  
Connectors

## WIRE LIST FOR KS-16690L1 CONNECTOR

| LINE | LEAD | PIN | LINE | LEAD | PIN |
|------|------|-----|------|------|-----|
| 1    | T    | 26  | 5    | T    | 38  |
|      | R    | 1   |      | R    | 13  |
|      | A    | 27  |      | A    | 39  |
|      | A1   | 2   |      | A1   | 14  |
|      | LG   | 28  |      | LG   | 40  |
|      | L    | 3   |      | L    | 15  |
| 2    | T    | 29  | 6    | T    | 41  |
|      | R    | 4   |      | R    | 16  |
|      | A    | 30  |      | A    | 42  |
|      | A1   | 5   |      | A1   | 17  |
|      | LG   | 31  |      | LG   | 43  |
|      | L    | 6   |      | L    | 18  |
| 3    | T    | 32  | 7    | T    | 44  |
|      | R    | 7   |      | R    | 19  |
|      | A    | 33  |      | A    | 45  |
|      | A1   | 8   |      | A1   | 20  |
|      | LG   | 34  |      | LG   | 46  |
|      | L    | 9   |      | L    | 21  |
| 4    | T    | 35  | 8    | T    | 47  |
|      | R    | 10  |      | R    | 22  |
|      | A    | 36  |      | A    | 48  |
|      | A1   | 11  |      | A1   | 23  |
|      | LG   | 37  |      | LG   | 49  |
|      | L    | 12  |      | L    | 24  |

WIRE LIST FOR KS-16689L1  
CONNECTOR

| LINE | LEAD | PIN |
|------|------|-----|
| 1    | L    | 3   |
| 2    | L    | 6   |
| 3    | L    | 9   |
| 4    | L    | 12  |
| 5    | L    | 15  |
| 6    | L    | 18  |
| 7    | L    | 21  |
| 8    | L    | 24  |

TABLE B

## TROUBLE LOCATION CHART

| TROUBLE   | PROBABLE CAUSE  | REMEDY  |
|---|---|---|
| CPI does not answer calls.<br>POWER ON lamp is blinking.  | <ol style="list-style-type: none"> <li>1. The tape cartridge is not inserted correctly.</li> <li>2. The tape is broken or defective.</li> <li>3. The tape player recorder is defective.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Insert the tape cartridge correctly.</li> <li>2. Replace tape.</li> <li>3. Replace CPI unit.</li> </ol>   |
| CPI does not answer calls.<br>POWER ON lamp is off.       | <ol style="list-style-type: none"> <li>1. The OPERATE pushbutton is not depressed.</li> <li>2. The AC power cord is loose or not plugged in.</li> <li>3. There is no power on the AC power receptacle.</li> <li>4. The cartridge fuse on the rear panel is blown.</li> <li>5. The trouble is in the CPI.</li> </ol> | <ol style="list-style-type: none"> <li>1. Press the OPERATE pushbutton.</li> <li>2. Insert the power cord.</li> <li>3. Check power at the receptacle.</li> <li>4. Replace the fuse.</li> <li>5. Replace CPI unit.</li> </ol>  |
| CPI does not answer calls.<br>POWER ON lamp is on steady. | <ol style="list-style-type: none"> <li>1. The tape repeats in the play mode.</li> <li>2. The RECORD pushbutton is depressed.</li> <li>3. The Line Selector switches are turned off.</li> <li>4. The audible Attendant Option is selected and no CO/PBX is in use.</li> <li>5. The trouble is in the CPI.</li> </ol> | <ol style="list-style-type: none"> <li>1. Clean the tape heads and/or replace the tape cartridge.</li> <li>2. Release the RECORD pushbutton.</li> <li>3. Turn the selector switches on for the lines to be served.</li> <li>4. See par. 2.03, Options.</li> <li>5. Replace CPI unit.</li> </ol> |
| CPI drops all calls.                                      | <ol style="list-style-type: none"> <li>1. The HOLD/ANSWER switch.</li> <li>2. Brief AC power outage, loose AC power cord or heavy load on AC CKT.</li> <li>3. The trouble is in the CPI.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Set to the HOLD position.</li> <li>2. Use another AC line receptacle. Unit should not be on same Ckt. with heavy AC loads.</li> <li>3. Replace CPI unit.</li> </ol>   |

TABLE B

## TROUBLE LOCATION CHART

| TROUBLE   | PROBABLE CAUSE  | REMEDY  |
|---|---|---|
| CPI drops some calls.<br>The dropped calls are counted on the DROPPED CALLS REGISTER.     | <ol style="list-style-type: none"> <li>1. There is an open T or R lead in the connecting cable.</li> <li>2. CO or PBX lines not modified for open switch interval protection.</li> <li>3. The CPI received a disconnect signal from the transferring station. (PBX or Centrex only).</li> <li>4. A line unit is defective in the CPI.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Locate and repair the open leads.</li> <li>2. Modify CO or PBX lines for O.S.I.P.</li> <li>3. Advise the party at the transferring station not to stay on the line after the CPI answers.</li> <li>4. Replace the line unit.</li> </ol> |
| CPI drops some calls.<br>The dropped calls are not counted on the DROPPED CALLS REGISTER. | <ol style="list-style-type: none"> <li>1. There is an open connecting cable.</li> <li>2. A line unit is defective in the CPI.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Locate and repair.</li> <li>2. Replace line unit.</li> </ol>  |
| CPI will not release when the attendant answers.  | <ol style="list-style-type: none"> <li>1. A poor connection in the cabling.</li> <li>2. A line unit is defective in the CPI.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Locate and repair.</li> <li>2. Replace line unit.</li> </ol>  |
| CPI will not release the line when the calling party disconnects.                         | <ol style="list-style-type: none"> <li>1. The disconnect signal did not appear on the CO line (in WATS). The DROPPED CALL REGISTER did not advance.</li> <li>2. A line unit is defective in the CPI.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Contact the equipment engineers. The CPI requires a disconnect signal to operate properly. Inwats Ckt. Should be ground start.</li> <li>2. Replace line unit.</li> </ol>  |
| No Priority Flash.  | <ol style="list-style-type: none"> <li>1. HOLD/ANSWER switch is in the answer position.</li> <li>2. The L lead is open in the key telephone cable. The line lamp will remain off in all key telephones.</li> <li>3. A bridging clip has been placed in the L lead on the connecting block.</li> <li>4. The equipment line lamp fuse which supplies power to the key telephone line lamp has blown. All line lamps associated with this line will not light when the telephone is off-hook. The lamps will light on key system hold.</li> <li>5. A line unit is defective in the CPI.</li> </ol> | <ol style="list-style-type: none"> <li>1. Place HOLD/ANSWER switch to the hold position.</li> <li>2. Locate and repair.</li> <li>3. Remove bridging clip.</li> <li>4. Replace fuse.</li> <li>5. Replace line unit.</li> </ol>   |

TABLE B

## TROUBLE LOCATION CHART

| TROUBLE  | PROBABLE CAUSE  | REMEDY  |
|--|---|---|
| Calling party reports the announcement message is noisy or buzzing is heard. | <ol style="list-style-type: none"> <li>1. Background noise was present while the recording was made.</li> <li>2. The CO/PBX line is noisy.</li> <li>3. The CP music source is too loud.</li> </ol>        | <ol style="list-style-type: none"> <li>1. Rerecord the announcement message.</li> <li>2. Repair the CO/PBX line.</li> <li>3. Lower the level of the CP music source.</li> </ol> |
| Calling party reports the announcement message has poor quality.             | <ol style="list-style-type: none"> <li>1. Tape cartridge player recorder tape heads are dirty.</li> <li>2. Tape cartridge is defective.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Clean the tape heads - refer to Paragraph 10.07.</li> <li>2. Replace tape.</li> </ol>   |
| Calling party reports there is no announcement.                              | <ol style="list-style-type: none"> <li>1. The message has been accidentally erased.</li> <li>2. The tape cartridge is defective.</li> <li>3. The fault is in the CPI unit.</li> </ol>                     | <ol style="list-style-type: none"> <li>1. Rerecord message.</li> <li>2. Replace tape.</li> <li>3. Replace CPI unit.</li> </ol>  |
| Calling party reports music-on-hold is noisy or buzzing is heard.            | <ol style="list-style-type: none"> <li>1. CP music source is defective.</li> <li>2. There is noise on the CO/PBX line.</li> <li>3. The announcement message is too loud.</li> </ol>                       | <ol style="list-style-type: none"> <li>1. Check music source.</li> <li>2. Repair the CO/PBX line.</li> <li>3. Rerecord message.</li> </ol>                                      |
| Calling party reports there is no music-on-hold.                             | <ol style="list-style-type: none"> <li>1. CP music source is not operating.</li> <li>2. CP music source connections on the CPI rear panel are loose.</li> <li>3. The fault is in the CPI unit.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check music source.</li> <li>2. Tighten screws on the terminal block.</li> <li>3. Replace CPI unit.</li> </ol>                        |
|  |   |   |