QuickQ

Automatic Call Distributor

Software Revision 3.1

Technical Manual

COMDIAL®

Radio Frequency Interference

The QuickQ digital voice announcer (DVA) contains incidental radio frequency generating circuitry and, if not installed and used properly, may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules. These limits are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference to radio and television reception; in which case the user is encouraged to take whatever measures may be required to correct the interference. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient the television or radio's receiving antenna, and/or relocate the Digital Communications System, the individual telephone stations, and the radio or TV with respect to each other. If necessary, the user should consult the manufacturer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the Government Printing Office, Washington D.C. 20402. Stock No. 004-000-00345-4.

This equipment has been tested and found to comply with the limits of 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 pre'sent appareil nume'rique n'emet pes de bruits radioe'lectriques de'passant les limites applicables aux appareils nume'riques (de la class A) prescrites dans le Re'glement sur le brouillage radioe'lectrique e'dicte' par le ministe're des Communications du Canada.

CAUTION

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.

Table Of Contents

List Of Illustrations

Section 1
Introducing The QuickQ System

Understanding The Manual Organization

Section 1: Introducing The *QuickQ* System—Provides general information on *QuickQ* and system requirements.

Section 2: Installing The *QuickQ* System—Provides site planning considerations and instructions on the mounting of the Digital Voice Announcer (DVA) and the optional wallboard.

Section 3: Wiring The *QuickQ* System—Provides wiring information for the voice channels on the DVA, PC to DVA, PC to Wallboards, and Digital Communications System to PC.

Section 4: Programming The Digital Communications System—Provides the Comdial programming requirements.

Section 5: Setting Up The Personal Computer—Provides the information on the installation of the *QuickQ* software into the PC and the initial programming of the *QuickQ*.

Section 6: Reviewing The *QuickQ* Components—Provides the description of the *QuickQ* DVA components.

Section 7: Testing and Troubleshooting—Provides the test procedure to setup *QuickQ* and provides information on troubleshooting problems on *QuickQ*.

Section 8: Installing The New Voice Channel Cards—Provides information on how to install additional cards.

Appendix 1: Using *QuickQ* With A Mouse—Describes mouse usage with the *QuickQ* system.

Appendix 2: Reviewing The *QuickQ* Programming Road Map.

Appendix 3: Using The Report/Data File Conversion Utility

Understanding Terms Used In This Manual

Unless otherwise noted, the name Digital Communications System, or DXP, used throughout this manual encompasses all three Comdial digital communications systems—DXP, DXP *Plus*, or FX Series.

Listing The Related Publications

Additional publications that are applicable to the *QuickQ* automatic call distributor and digital communication systems include the following publications.

- GCA70-336 *QuickQ* Automatic Call Distributor Manager's Guide
- GCA70-278 *QuickQ* Agent's User Guide
- GCA70-302 *QuickQ* Supervisor's User Guide
- DXLIT-016 DXP Digital Communications System System Reference Manual
- DXLIT–028 DXP *Plus* Digital Communications System Reference Manual

Defining The QuickQ System

QuickQ is a fully integrated Automatic Call Distribution System for Comdial digital communications systems.

An Automatic Call Distributor (ACD) is the single most important cost-saving communications tool available to the manager of an incoming call center.

QuickQ is designed to handle a large volume of incoming calls as efficiently and economically as possible. *QuickQ* processes incoming calls by distributing the call to available agents on an equitable basis or by playing announcements to the calling party until an agent is available. Having installed *QuickQ* in a call center, the speed, efficiency, and management control usually results in a 20 to 40 percent increase in the productivity of the agent force, and a 10– to 20–second decrease in the average speed of call answering.

The five primary functions of *QuickQ* are as follows:

1. It provides a waiting queue to ensure that callers are answered in the order that they are received and with the appropriate priority. Because of this, the system handles calls in a more timely and efficient manner.
2. The system can provide a number of pre-recorded announcements to play to the calling customers, if no agent is available, to entice the caller to wait in queue.
3. The system provides for callers to escape a queue when they have been placed in one by pressing a queue escape digit. Instructions for doing this are played to the caller from a pre-recorded DVA message. After pressing the queue escape digit, the caller is connected to the escape extension for immediate connection to a live operator.
4. The system distributes the workload evenly among the agents to allow an equitable assignment of duties, which in turn facilitates greater productivity.
5. *QuickQ* provides comprehensive statistical management reports to allow efficient control of agent assignments and lines. Also, it provides rapid feedback of call statistics to agents and supervisors via electronic visual displays called wallboards, when that option is used.

Note: The wallboard is called many different names in related literature. For example, readerboard, display, and sign are names often used when referring to this type of device. To be consistent and avoid confusion, we will refer to this visual display device as the "wallboard" throughout the remainder of this document.

The advent of microprocessor technology has allowed the cost of ACD systems to be more affordable for small to medium call centers. Hence, ACD systems are becoming increasingly popular with call centers using fewer than 40 agents.

Describing The QuickQ Functions

QuickQ is a PC-based system for redirecting incoming calls to a human operator or to a digital voice announcement until a human operator is available. *QuickQ* interfaces to the Comdial digital communications system through the Open Architecture Interface (OAI) to acquire information and control the ACD functions. The message channels of the *QuickQ* Digital Voice Announcer (DVA16) interface to the Digital Communications System through the station port(s). This allows pre-recorded messages to be played out to calling parties. The *QuickQ* PC communicates with the DVA through an RS-232 serial communication link. This communication link allows the PC to control the messages being played on the voice channels.

As an alternative to the DVA16, you can use the Comdial Digital Voice Announcer (DVA01). The DVA01 is controlled by the Digital Communications System.

Detailing The QuickQ Basic Options

QuickQ is available in three packages. The station capacity of these packages differ but the feature content of each package is the same. All packages include real-time status displays of information that the system continuously updates every three seconds. This display allows supervisors to quickly identify conditions such as the call-waiting time. The packages also include a comprehensive management reporting scheme that presents information in both numerical and graphical format.

The three *QuickQ* packages available are detailed as follows:

***QuickQ* Packages**

	A	B	C
Lines	120	120	120
Announcements	16	16	16
Real Time	Yes	Yes	Yes
Groups	16	16	16
Agent Sub Group	4	4	4
C.O. Sub Group	4	4	4
Number of Active Agents	12	48*	72*
Maximum Agents (IDs)	48	250	500
Wallboards (optional)	16	16	16

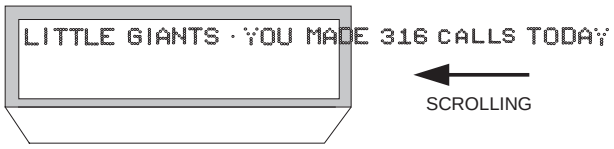
* Can be increased by 24 agents, 12 agents at a time, by using the optional sizing software.

Using System Sizing Options

Software is available for growing system size on the "B" and "C" packages. These packages provide the ability to grow by two increments of 12 agents each. That is, by adding the optional sizing software, you can grow the "B" and "C" packages to a maximum capacity of 72 and 96 agents respectively.

Using The Wallboard Option

Optional wallboards, using colored LEDs, are used to display vital call statistics. They provide rapid feedback to agents and supervisors on system call status. The system manager can compose messages that are stored and displayed later on the wallboards. The system manager can insert parameters in the messages that allow the *QuickQ* system to automatically update certain call statistics on a real time basis. In the example below, the Little Giants team is informed by the scrolling message on their wallboard that they made *316* outgoing calls on that current day.



Understanding The System Components

The Telephone Switching System

QuickQ is an add-on application, designed specifically for Comdial Digital Communications Systems. The Comdial equipment performs the telephone call switching functions. The DXP/DXP *Plus* systems with software revision 10A or later and FX Series systems with software revision 12A or later will fully support the version 3.1 *QuickQ* described in this manual.

The Digital Voice Announcers

The *QuickQ* Digital Voice Announcer (DVA16) is a stand alone voice processing system designed to directly interface with the system's station ports. It is a fully integrated system in that the recording and playback of up to 16 voice announcements is under the control of the Central Call Processing unit. In a busy call center, when all agents are busy, the DVA intercepts incoming calls and plays out pre-recorded voice announcements.

You can also use the Comdial Digital Voice Announcer (DVA01). Like the DVA16, the DVA01 is also a stand alone voice processing system and you interface it directly with a station port. The main difference between the two systems is that the DVA01 is not an integrated device like the DVA16. You program the DVA01 by using class of service programming from a station on the digital communications system.

Another difference is that you can only record four announcements on the DVA01. Therefore, even when you are using the maximum of two DVA01s on a *QuickQ* system, the maximum number of announcements you can record is four.

The Central Call Processor

The Central Call Processor is the brain of the *QuickQ*. It is a DOS-based, personal computer system that controls and monitors call traffic throughout the *QuickQ* system with special-purpose software programs. Refer to Section 2 for a detailed description of the Central Call Processor hardware requirements.

The ACD Telephones

QuickQ is a fully integrated ACD system for Comdial digital telephones. For best results, use LCD speakerphones for the ACD functions and operations. Their two line display shows the call-processing information and operator function prompts and their three interactive buttons allow selections of *QuickQ* options and features.

Optionally, *QuickQ* supervisors can use the Comdial Scout wireless telephone to allow them maximum mobility. A maximum of nine Scout telephones can be configured for supervisor functions. LCD messages are abbreviated to fit the smaller 10–character displays. The function buttons F1 through F4 can be programmed so that F1 corresponds to the *QuickQ* OAI button and F2 through F4 correspond to the Interactive buttons on the LCD speakerphones when *QuickQ* is enabled.

The Optional Wallboard

The optional wallboard is an electronic message display using LEDs. It provides visual call statistics to agents and supervisors on a real time basis. A maximum of 16 wallboards can be used in one *QuickQ* system. The color wallboard has two rows of 20 tri-colored LED characters. Available with *QuickQ* version 3.1, the mono wallboard has one row of red LED characters.

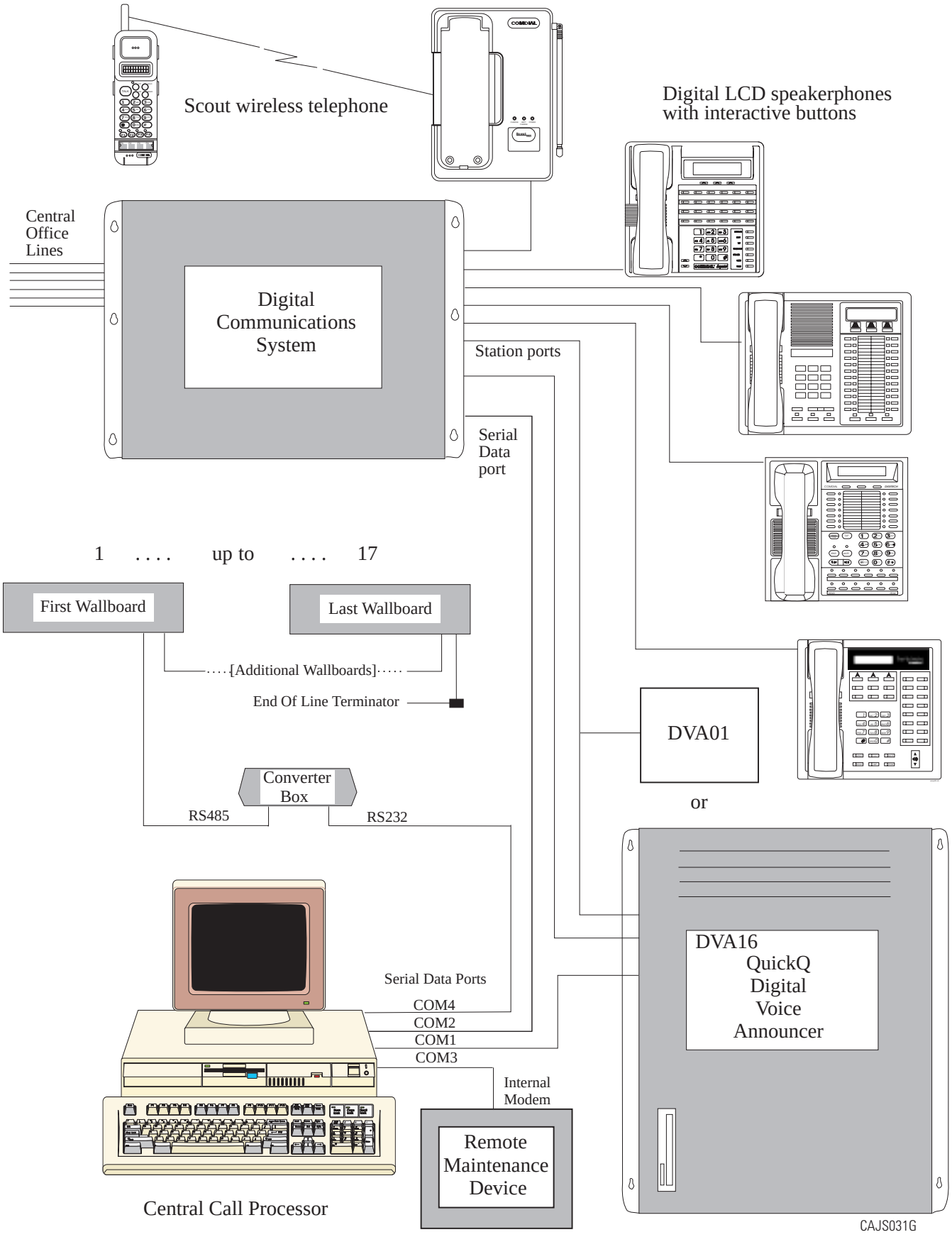


Figure 1-1. Overviewing The QuickQ System

QuickQ 3.1.0 Enhancements

The version of *QuickQ* covered in this manual uses software release 3.1. Several improvements over version 3.0 that were incorporated in this software are outlined below.

Wallboards Expanded And Improved

The mono-color wallboard is now available to work with *QuickQ* version 3.1.

The queue time readout is improved to display in minutes and seconds instead of only seconds. Due to space limitations, the queue time parameter is now *T* instead of *QT*. (*example:* T03:03 versus QT_183 to show that a call has been in the queue for 3 minutes and 3 seconds). This change applies to both wallboard types—color and mono.

Parameters that have reached an alarm status (exceeded a preset threshold) now display in red on the color wallboard, but they no longer flash as they did in *QuickQ* version 3.0. Because only one color (red) is available on the mono wallboard, no color change is possible so parameters showing an alarm condition will flash on these wallboards.

Callers Can Escape When Waiting In A Queue

Now when callers are placed in a queue to wait for the first available agent, they can be instructed to enter a number if they want to escape the queue and go to one of the four overflow extensions designated in *QuickQ*. The number that the caller is instructed to use is selected by the program manager or technician.

(*Example:* The caller might hear the following message when calling—"*please stay on the line for the first available agent, or press 1 to talk to an attendant.*") Callers will only be allowed to escape the queue during the playing of the second, night, and special message. In other words, no caller escape from the queue is allowed during the playing of the first message.

Additional DTMF receiver may be required to insure that the escape feature will work properly. Callers complaining that they remained in a queue after pressing the escape digit would suggest that additional DTMF tone detection is needed.

Programming QuickQ Without A Protection Key

You can now program *QuickQ* without a protection key by entering **/Q3** on the command line. This will allow *QuickQ* version 3 software to operate for approximately one hour without a software key installed.

Programming QuickQ From Another PC Through Networking

Any user on a network connected to a *QuickQ* computer can now do *QuickQ* programming and run reports from his or her personal computer. All that is required is a Comdial networking card and *Reachout® Communications* software installed in the user's personal computer.

Only one user can communicate with *QuickQ* at a time.

Reachout® is a registered trademark of Stac, Inc., San Diego, CA

Converting Version 2 To Version 3 Database And Historical Data

You can now convert any database and historical reports that were created using *QuickQ* version 2.0 software to revision 3.1 software by running a *QuickQ* conversion utility program. See Appendix 3 in this manual for additional details.

Direct DID/DNIS Processing By QuickQ

In previous versions of *QuickQ*, DID/DNIS calls are answered by the Digital Communications System (DCS) before being transferred to the *QuickQ* ACD. This causes extra expense for long distance callers or when the customer is using 1-800 lines. Their long distance charges start even before *QuickQ* answers the call.

In version 3.1 of *QuickQ*, calls are sent to an unused station hunt group according to the DCS's DID/DNIS table. Callers will hear a ringback tone from the central office (toll charge is not yet begun). At this time, calls are being sequenced in the ACD queues. The ACD will pickup the call whenever an agent or a DVA port becomes available.

The DID/DNIS programming is done by the technician. A new parameter, DID/DNIS Table is added to the Technician Window. This parameter appears in the pull down menu under System Set-up.

Select this new parameter, DID/DNIS Table, and another pull down menu appears showing Table 1 through Table 4. Selecting one of these tables displays an individual DID/DNIS Translation Table. Each table allows you to enter 100 sets of CO digits and each set of CO digits contains a minimum of 0 and a maximum of 7 characters. When adding a new set of CO digits or when editing existing CO digits, the Group and Sub-group column will each present a pull down menu displaying Groups 1-16 and Groups 1-4 respectively.

On each table, you can map each set of CO digits to a group and sub-group. As a result, callers dialing these CO digits will route to the designated group and sub-group by *QuickQ*.

DID/DNIS calls will route to a designated extension during night time if an extension is setup in the DCS's DID/DNIS Translation Table for night transfer operations, Night routing will start as soon as the DCS turns into night mode.

In MIS reporting, DID/DNIS calls will be treated the same as *QuickQ* External Transfer calls.

The Digital Communications System must be using common code software, Revision 10A or higher for this feature to work.

QuickQ 3.0.0 Enhancements

Several improvements over earlier versions were incorporated in this software that are outlined below.

Selecting Reports To Be Printed Automatically

This version of *QuickQ*, allows you to program the system so that certain reports, that you select, will automatically print at the times you specify. These reports can be real time or historical. For example, you may want a traffic analysis report to print just before a shift change. As an example, you could program *QuickQ* to print this report at 15:45 every weekday, or any other time you would like.

Scheduling The Night Mode Operations

With this version of *QuickQ*, it is now possible for each group to choose different night modes of operation for different nights of the week instead of having just one night mode for every night.

Transferring External Calls To A Subgroup—Group-To-Group Transfer

Earlier versions of *QuickQ* would not allow the transfer of an external call from one subgroup to another. With this version, you can now transfer these calls to a similar subgroup residing in the target group. (Subgroup use defined by line programming.)

Calls In Queue Button Available

You can program a spare D.S.S. Button (*Calls In Queue*) on your LCD phone to provide the number of calls waiting in the queue. When the agent presses this button, the number of calls waiting in the agent's group is displayed for three seconds on the top line of the phone's LCD. After three seconds, the display returns to its previous state. This feature is not available on the Scout phone.

Group Supervisor's Real Time Screen Enhanced

The group supervisor's screen is now enhanced to provide more information. With this version of *QuickQ*, this screen shows incoming, outgoing, and busy times for each agent.

Call Routing And Reporting Functions Available From Calling Line I.D.

This version of *QuickQ* can take advantage of calling line identification codes. The system can route incoming calls from preferred customers to certain agents for special handling. Additionally, by using the calling line I.D. features, the system will generate a preferred customer call report and/or an abandoned call report on the preferred customer.

Exporting Reports In ASCII Format

The system provides an option that will allow you to export reports in ASCII format. This is a common format used by many computer applications. By selecting the ASCII format, you can export your system statistical and performance data directly into many popular spread sheet programs. Once the data is entered into one of these programs, you can then customize your reports any way you choose.

Setting The All Agent Busy Alarm

An option is available on this version of *QuickQ* to allow a group supervisor to set the *all agent busy* alarm.

Forcing Account Code Entry

The group supervisor can optionally select a feature that will force agents to enter an account code at the completion of every call. While the time to do this is collected as wrap-up time, the agent cannot enter the wrap-up state until he or she enters an account code when this feature is set.

Using The Scout Cordless Phone

This version of *QuickQ* allows the use of up to nine Scout cordless phones by group supervisors or agents. This limitation of nine is based on simulatneous conversations and not equipment configuration. By using cordless phones, call center personnel have a lot more freedom to move about in their areas. The Scout phones should be programmed by the installer so that the F1 button can be used to access the *QuickQ* system while buttons F2, F3, and F4 correspond to the three interactive buttons on the proprietary 12-button and 24-button phones. See the Chapter 4 for button mapping details.

Wallboards Are Optionally Available

Wallboards, now available as a *QuickQ* option, use LEDs for displaying *QuickQ* messages.

There are two different wallboard models—mono* and color. The mono wallboard has one message field consisting of 20 characters and uses red LEDs. The color wallboard contains two message fields of 20 characters each and uses tri-colored (red, green, and yellow) LEDs.

Up to 16 wallboards can be networked together in any combination of mono and color types, and they can all display a different message or the same message.

The wallboards can display static messages created by the group supervisor; for example, HAVE A GOOD DAY!; or, they can display system status messages on a real time basis; for example, INCOMING CALLS RECEIVED THIS HOUR IS nn. In the last example, nn represents a parameter that is updated automatically by the system. The group supervisor can set threshold points that will trigger alarms when parameters reach or exceed the preset thresholds.

Up to 32 messages can be stored in a message library. Each message can have a message length of 70 characters. When messages contain more than 20 characters, they will scroll on the wallboard. Summary messages display each pair of four pairs of parameters for six seconds, and the word SUMMARY will appear centered on the top line of the color wallboard in green letters. On the mono wallboard, summary will appear as SUM followed by a pair of parameters—all in red letters.

Messages are initiated in any one of three ways: manually from the processor's keyboard, by preset time, or on an event basis such as when a preset threshold is reached.

The wallboards interface with a RS-485 serial data network. The RS-232 serial data output from the *QuickQ* processor is translated by a converter box to RS-485. Wireless transmitters and receivers are also available as an option.

Expanding The System

This *QuickQ* version is initially available in three different packages (A, B, and C) that differ by their amount of agent capacity. Two of these packages (B and C) can be expanded in increments of 12 agents up to a total of 24 additional agents. The method used for expanding the system is by the technician entering a unique and volatile password in the technician's *upgrade* screen. The password is provided verbally by Comdial upon proof of payment for the desired upgrade.

Calls Returned From An Overflow Extension

Calls that the system sends to an overflow extension, after a specified period of time, now return to their original queue if they are not answered by the overflow extension after a system time-out occurs. Once the overflowed call returns to the queue, the regular overflow threshold counter starts counting again and the process is repeated until the call is answered. Answered overflow calls lose their place in the queue.

Programming The Abandon Call Timer

Earlier versions of *QuickQ* counted any call that lasted less than nine seconds as an abandoned call. This version has a feature that allows the technician to program the abandon call timer for any value from 0 to 99 seconds. This is done by programming an external switch in the ACD command line in the DOS batch file.

* Mono wallboard support is available in *QuickQ* version 3.1

This page remains blank intentionally.

Section 2
Installing The QuickQ System

This section provides the basic hardware installation requirements for the *QuickQ* system. **When installing a Comdial DVA01 in place of a *QuickQ* DVA16**, refer to the installation instructions (IMI89-082) packaged with the equipment.

Reviewing The Installation Check List

Review this list of *QuickQ* system components, suggested additional supplies, and required tools and hardware.

QuickQ Packages

There are three *QuickQ* packages available for upgrading an existing system to a version 3 system:

Product Code	*Application*
ACDXPKA3	12 Agents
ACDXPKB3	48 Agents
ACDXPKC3	72 Agents

There are six *QuickQ* packages available for newly installed Digital Communications Systems . In addition to the items listed below in the *QuickQ* Package Contents, these packages contain the system software and card:

Product Code	*Application*
ACDXPKA3-swd	12 Agents (DXP)
ACDXPKB3-swd	48 Agents (DXP)
ACDXPKC3-swd	72 Agents (DXP)
ACDXPKA3-swp	12 Agents (DXP *Plus*)
ACDXPKB3-swp	48 Agents (DXP *Plus*)
ACDXPKC3-swp	72 Agents (DXP *Plus*)

Any DXP/DXP *Plus* system using software 10A or later and any FX Series system using software 12A or later is fully compatible with version 3.1 *QuickQ* described in this manual.

QuickQ Package Contents

All base line *QuickQ* packages contain the following items:

- Central Call Processor equipped as follows:
  —Personal computer with 486 DX2/80 or Pentium® processor, MS–DOS® operating system, and 4 megabytes of RAM,
  —VGA color monitor,
  —540 or 850–megabyte hard drive and floppy disk drives with appropriate controller boards,
  —bus mouse,
  —101-key extended keyboard,
- *QuickQ* software disks,
- *QuickQ* literature package
  —GCA70-278 Agent's User Guide
  —GCA70-302 Supervisor's User Guide
  —GCA70-336 System Manager's Guide
  —IMI66-130 Technical Manual
  —GCA40-110 Warranty/Registration Card

Installation Cable Kit Contents

The installation cable kit (product PK030-000) includes three packaged assemblies. Each package contains a standard three-pair line cord, and a six-position modular jack. In addition, one package contains a 9DBS to modular adapter while another package contains a 25DBS to modular adapter. See the table on page 3-1 for complete descriptions of these packages.

Pentium is a registered trademark of Intel Corporation, and MS–DOS is a registered trademark of Microsoft Corporation.

DVA Package Contents

The DVA package (purchase part number ACDXP-DVA16) is separately available and includes the *QuickQ* Digital Voice Announcer (DVA). The DVA accessory kit (ACDXP-KIT) includes a 66-type connector block that is factory-connected to a 25-pair cable, a software disk, and a power cord). The cable is terminated with a 50-pin D connector that mates with a connector on the DVA.

Either one or two Comdial DVAs (DVA01) can be used on the *QuickQ* system as an alternative to the DVA16. These DVA01 units connect directly to station ports on Digital Communications System.

Voice Card Package Contents

The four-port DVA voice cards (ACDXP-VCC-4) that you install in the DVA16 are also separately available. You can install up to four of these cards in a DVA16 unit.

Optional Wallboard Equipment Required

When installing the optional wallboard for electronic message displays, you must have a RS232 serial port available on the central call processor (PC). This serial port is needed for connecting the PC to the RS232 to RS485 converter box. You can obtain an additional serial card (product code ACDOPT-COM) for this purpose and install it in any available card slot in the PC. Configure the added serial port as COM4 and IRQ10.

Software Packages

The following software packages are available for software replacement or upgrade:

ACDXP-SWA3	12–Agent operation
ACDXP-SWB3	48–Agent operation
ACDXP-SWC3	72–Agent operation
Wallboard Operation	
ACDXP-WALLSW	For optional wallboard operation.
Sizing Options	
ACDXP-SIZE1	First 12-port sizing disk
ACDXP-SIZE2	Second 12-port sizing disk

NOTE: A MAXIMUM OF TWO SIZING OPTIONS CAN BE INSTALLED IN THE B OR C ACD PACKAGES. YOU CANNOT EXPAND A SIZING OPTION PACKAGE.

Online File Maintenance Kit

There is an online file maintenance kit available. It includes the ACD *Reachout* software plus a modem.

COMDIAL strongly recommends the use of this option on all applications. The part number is:

ACDXPRM-PKM2

Additional Materials Required

You will need to supply the following items: 25-pair cable and 6-wire cable for house wiring, 66-type station connector block, four or eight foot section of 3/4-inch thick plywood backboard, four #8 x 3/4-inch wood screws, AC power surge protector (recommended).

Also, if you are using the wallboard option, you will need a 25- to 9-pin adapter if you plan to use a 25-pin connector on the ACD for connection to the RS232 to RS485 converter box.

Tools And Hardware Required

- Fasteners—wood screws, toggle bolts, or wall anchors
- Screwdriver—to match fasteners
- Electric drill—if prepared holes are required
- Connecting tool—for fastening wires to a 66-type connector block
- Crimping tool—for 623-type modular plugs

For Optional Wallboard Mounting—

- Allen Wrench (9/16 in.)
- Pivot brackets (2)
- Hanging brackets (2)
- Star washers (4)
- Screws (1/4–20 x 0.50 in.)(2)
- 9–32 x 0.25 in. Allen screws (4)

Mounting Considerations

Attach the DVA16 cabinet vertically to any sturdy, flat surface or vertically rack-mount if desired. Vertical mounting promotes proper convection air flow for cooling purposes.

Because of the current listing requirements of UL 1459, the length of the AC line cord on the equipment cabinet is a maximum length of five feet; therefore, the cabinet must be located within four feet of a proper electrical outlet. The equipment requires a dedicated 115 VAC 15–AMP circuit, with a third-wire ground, supplied to a standard electrical outlet (NEMA 5-15R).

Be sure that the mounting location is secure, dry, provides adequate ventilation, and is not exposed to direct sunlight or a strong magnetic field. Be sure that the temperature range of the location is within 32-122 degrees F (0-35 degrees C), and the relative humidity is less than 90 percent non-condensing.

If the mounting surface is damp or if it is of a concrete or masonry material, you must attach a backboard to the mounting surface to be used for equipment mounting. Suitable mounting backboards are available commercially or you can construct one using 3/4-inch plywood cut to size.

When installing an optional wallboard, select a location where the wallboard will not be in the direct sunlight and will be clearly visible by the maximum number of agents for whom the wallboard's messages are intended. Make sure the ceiling or wall surface to which you will be mounting the wallboard is solid enough to support an object four times the wallboard's weight. Locate the wallboard close to a standard 115 VAC wall outlet. Finally, make sure you select an area for the wallboard that is well ventilated and where the ambient temperature does not exceed 120°F/49°C.

Do not exceed the maximum RS232 cable distances specified in the section below.

Mounting The Equipment

Typically, you should mount the *QuickQ* DVA cabinet near the system installation; however, you can locate the DVA cabinet at a maximum distance of 1000 feet from the system if you use #24 twisted-pair wiring. Because of RS232 wiring considerations, you must locate the Central Call Processor (personal computer) within 500 feet of the system and DVA cabinets. If you exceed this distance, you must install limited distance modems, available at most electrical supply houses, at either end of your cable run.

When running *QuickQ* at 19200 baud, locate the PC within 50 feet of the system because of RS232 transmission limitations at that baud rate.

Mounting The DVA16 Cabinet

1. Unpack and carefully inspect all equipment for shipping damage. Notify the shipper immediately of any damage found. Verify that the packages contain all parts and accessories needed for proper installation and operation.
2. If a backboard is required at the mounting location, attach it securely to provide a stable mounting surface for the equipment.
3. Hold the DVA cabinet against the mounting surface, level it, and mark the location of the two upper mounting holes.
4. Drill holes in the mounting surface of a proper size to accommodate the hardware being used. If necessary, prepare these holes with inserts, anchors or other attachment devices as dictated by the type of mounting surface.
5. Insert the two top screws into the mounting surface and tighten them to within approximately 3/16-inch of the surface.
6. Hang the cabinet on the top screws using the mounting holes located on the rear of the cabinet. Note that these holes are elongated with an enlargement at one end. This feature allows the cabinet to snap down on the screws to secure the mounting when the cabinet is hung on them.
7. Install the remaining two mounting screws through the lower mounting holes in the DVA cabinet and into the mounting surface.
8. Tighten all four screws into place.
9. Mount the *QuickQ*-supplied and wired 66-type connector block near the DVA cabinet (typically within 5 feet or less).

Mounting The Optional Wallboards

The installation procedure stated here is intended as a guide to supplement the installation instructions included with the wallboards.

1. Unpack and carefully inspect all equipment for shipping damage. Notify the shipper immediately of any damage you find. Verify that the packages contain all parts and accessories needed for proper installation and operation.
2. After deciding on the location for the wallboard, you will have to decide on whether to use a wall-mount, ceiling mounting, or ceiling suspension.
3. When suspending the wallboard from the ceiling, you will need to supply the mounting hardware. When selecting this hardware (swivel hooks, wall anchors, S hooks, chains), make sure it is adequate to support an object weighing at least four times the weight of the wallboard.
4. To mount the wallboard directly to a wall or ceiling, mark the locations for the fasteners and attach the large ends of the two supplied pivot brackets using suitable fasteners (no. 8 or no. 10 screws for solid wood surfaces or wall anchors for drywall).

   CAUTION

   Do not plug the wallboard into the wall outlet until it is completely mounted.

5. For wall mounting, when you have the two pivot brackets securely attached to the wall, position the two hanging brackets by loosening the two # 8 Allen screws in each bracket and sliding the brackets in the channel on the rear of the case. When you properly position the hanging brackets, tighten them in place by tightening the # 8 Allen screws.

   For ceiling mounting, use the same procedure only you must first remove the two end caps from the wallboard by removing two screws from each end cap. Take care not to touch any of the exposed electronics while the end caps are removed. With the end caps removed, you can then slide out the hanging brackets from the rear channel and insert them into the top channel. Replace the end caps. The hanging brackets will now slide back and forth in the top channel of the case. When you have them correctly positioned, tighten the two # 8 Allen screws in each bracket.
6. Align the hanging brackets on the wallboard with the pivot brackets attached to the wall (or ceiling) and attach the hanging brackets to the attached pivot brackets with two 1/4-20-inch screws (one in each end) and two star washers on each end—one star washer on either side of the pivot bracket.
7. When using a suspended ceiling mount, do not use the pivot brackets. Instead, securely attach two appropriate fasteners such as swivel hooks to the ceiling in the proper location to match the hanging brackets on top of the wallboard. Attach the wallboard to the ceiling fasteners with two sturdy chains and S hooks.

Section 3
Wiring The QuickQ System

The *QuickQ* Digital Voice Announcer (DVA) includes one to four voice channel cards with each card providing four voice ports. Before wiring, insure that there are sufficient digital station ports available at a station connector block to interface with the available DVA voice ports (maximum of 16 required). When using the master channel setup, you need two additional station ports.

CAUTION

You must connect all four voice ports from each voice channel card to station ports from the same station board or the QuickQ system will not function properly.

Wire the installed equipment using the PK030-000 installation cable kit. The cable kit includes the separately-packaged, factory-wired items described in the following list:

Package Item	Contents
PK030-001 ACD, Mod. Jack Connects system to ACD OAI via *QuickQ* connector.	(1) Standard six-position modular jack (1) Standard three-pair line cord—six wires with the standard roll in the pin out from one end to the other
PK030-002 ACD, DB25S Connects ACD OAI to system via *QuickQ* connector.	(1) Standard six-position modular jack (1) Modular to 25-pin EIA adapter with female DB25 connector (1) Standard three-pair line cord—six wires with the standard roll in the pin out from one end to the other
PK030-003 ACD, DB9S Connects ACD DVA via *QuickQ* connector.	(1) Standard six-position modular jack (1) Modular to 9-pin EIA adapter with female DB9 connector (1) Standard three-pair line cord—six wires with the standard roll in the pin out from one end to the other

In addition to the cable kit components, you need the *QuickQ* PROTECKEY that is supplied in the *QuickQ* package. This key unlocks the software and allows the *QuickQ* system to operate through the Digital Communications System's open architecture interface.

The *QuickQ* package also supplies a 66-type connector block that is pre-wired to a 25-pair cable and a 50-pin connector. The cable connector mates with the connector located on the DVA cabinet.

You must supply the following components:

- 25-pair cable and a 66-type station connector block to interconnect the DCS and the DVA,
- 6-wire cable to interconnect the DCS and the personal computer.
- (optional) DB25 to DB9 adapter.
- (used with optional wallboards): 9-wire, shielded, type A cable to interconnect the RS232 to RS485 converter box and the personal computer.
- (used with optional wallboards): 2-pair, RS485 cable for interconnecting the wallboards and the RS232 to RS485 converter box.

Connecting The Personal Computer To The DVA

1. Locate the kit-supplied modular jack that is labeled LINK ASSEMBLY FROM PC TO 66-BLOCK, and mount it within seven feet of the computer location.
2. Select the kit-supplied modular to 9-pin EIA adapter, connect it to the computer's COM1 serial data port, and secure the adapter with the screws provided.
3. Use 6-wire cable to connect the modular jack that you installed in step 1 with the *QuickQ*-supplied 66-type connector block.
4. Use a kit-supplied line cord to connect the kit-supplied modular to 9-pin EIA adapter to the jack you installed in step 1 per the following house wiring table.

House Wiring Table		
QuickQ 66-Type Connector Block		Kit-Supplied Type 625A-6 Modular Jack
Clip Terminal	Terminal Name	Pins
45	RXD	4
46	TXD	3
47	no connection	2
48	GND	5
49	DTR	1
50	DSR	6

RXD - Receive Data
TXD - Transmit Data
GND - Ground
DTR - Data Terminal Ready
DSR - Data Set Ready

QuickQ Modular To 9-Pin EIA Adapter

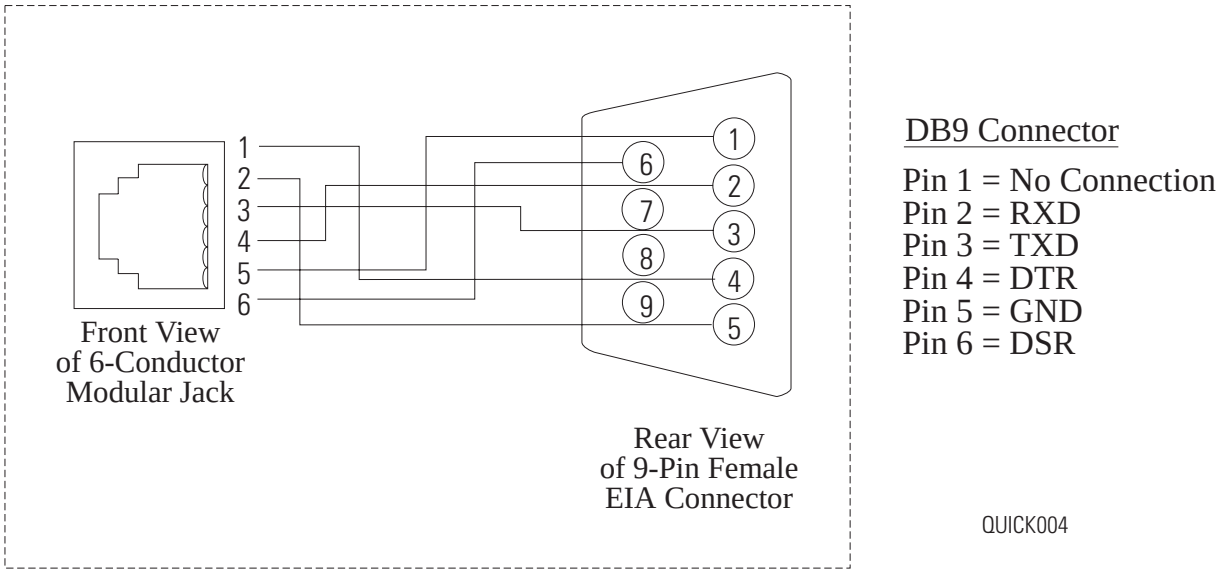
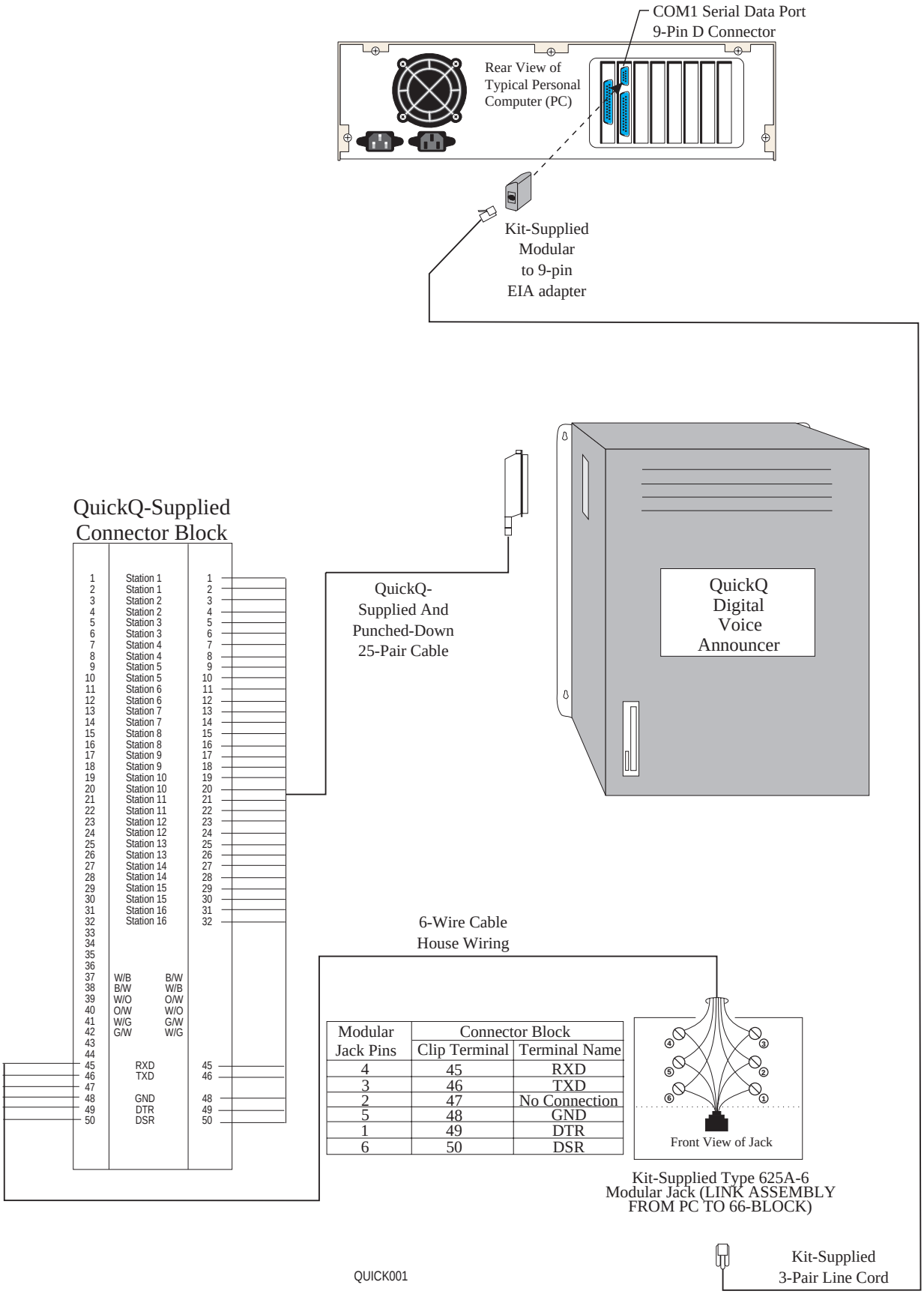


Figure 3-1. Detailing The Kit-Supplied Modular To 9-Pin EIA Adapter



Modular Jack Pins	Connector Block	
	Clip Terminal	Terminal Name
4	45	RXD
3	46	TXD
2	47	No Connection
5	48	GND
1	49	DTR
6	50	DSR

Figure 3-2. Connecting The Personal Computer To The DVA

Connecting The Personal Computer To The Digital Communications System (DXP, DXP Plus, or FX Series)

1. Locate a kit-supplied modular jack labeled LINK ASSEMBLY FROM DXP TO 66-BLOCK FOR PC, and mount it within seven feet of the equipment's cabinet.
2. Locate a kit-supplied modular jack labeled LINK ASSEMBLY FROM PC TO 66-BLOCK FOR OAI, and mount it within seven feet of the personal computer.
3. Use 6-wire cable to connect the modular jacks that you installed in steps 1 and 2 to the *QuickQ*-supplied 66-type connector block per the following house wiring table.
4. Select the kit-supplied modular to 25-pin EIA adapter, connect it to the computer's COM2 port, and secure the adapter with the screws provided.
5. Using a kit-supplied line cord, connect the DXP's serial data port 1 to the modular jack you installed in step one. If you are using the DXP–Plus, you must connect the PC to a serial data port on a communications card (for more information on communications card installation, see IMI89–190). If you are using the FX Series, you can connect the PC to any available COM port.
6. Using a kit-supplied line cord, connect the modular to 25-pin EIA adapter that you installed in step 4 to the modular jack you installed in step 2.
7. Connect the *QuickQ* PROTECKEY to the computer's 25-pin parallel connector.

House Wiring Table

Link Assembly From DCS To 66-Block For PC Modular Jack	***QuickQ***-Supplied 66-Type Connector Block				Link Assembly From PC To 66-Block For OAI Modular Jack
Pins	Terminal Name	Clip Terminal	Clip Terminal	Terminal Name	Pins
4	W/B	37	37	B/W	3
3	B/W	38	38	W/B	4
2	W/O	39	39	O/W	5
5	O/W	40	40	W/O	2
1	W/G	41	41	G/W	6
6	G/W	42	42	W/G	1

QuickQ Modular To 25-Pin EIA Adapter

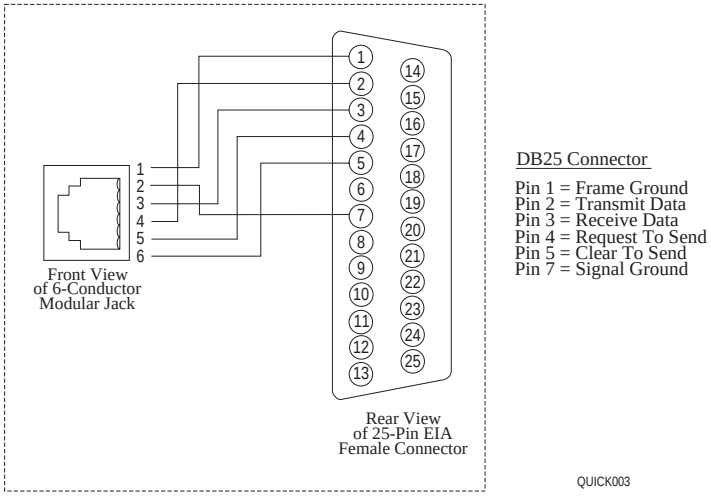


Figure 3-3. Detailing The Kit-Supplied Modular To 25-Pin EIA Adapter

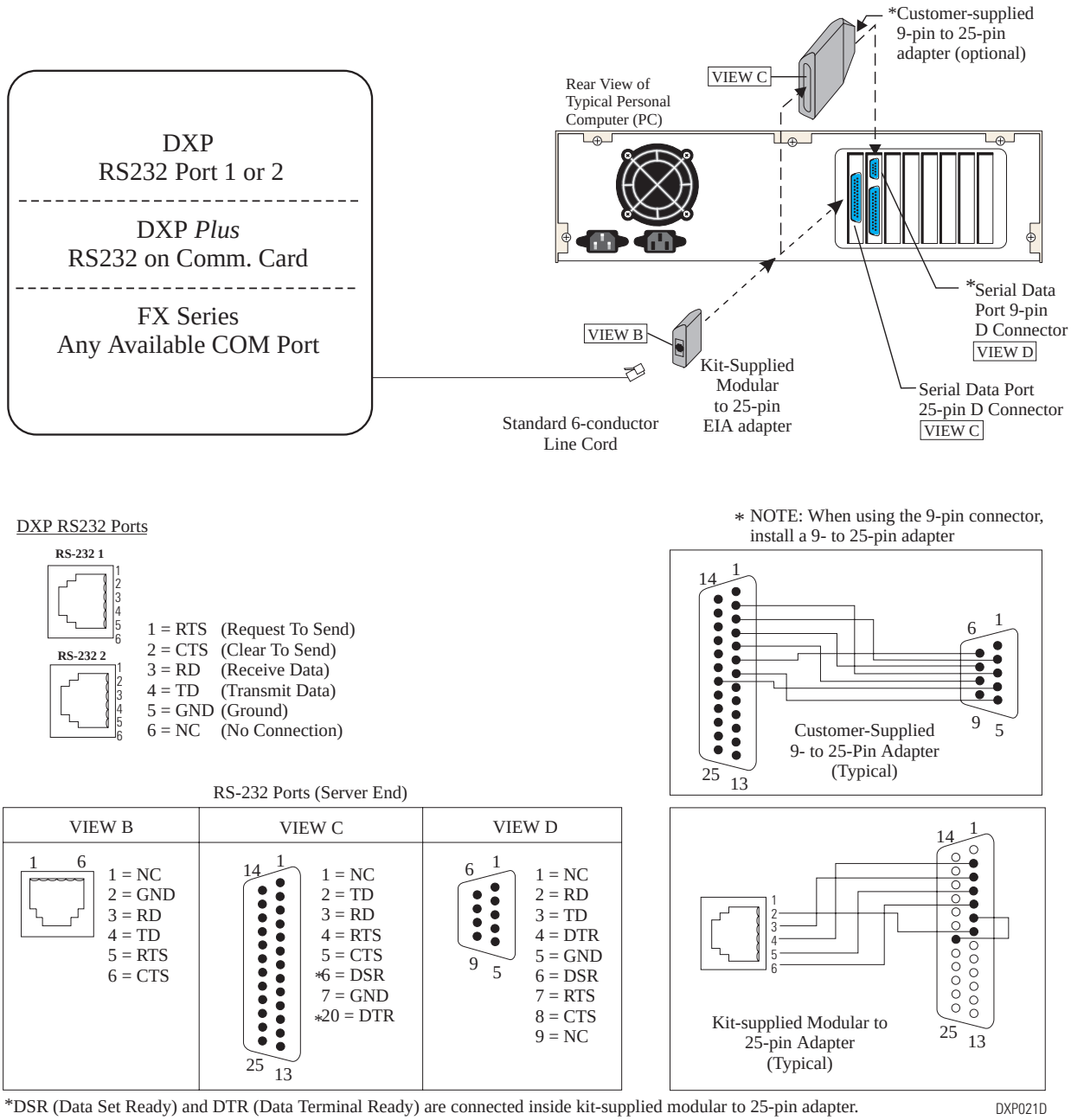


Figure 3-4. Connecting The Personal Computer To The Digital Communications System

Connecting The Digital Communications System To The DVA

Complete the *QuickQ* system installation by connecting the DCS to the DVA. You will not need any kit-supplied components; however, you will need a 66-type station connector block and a 25-pair cable.

1. Mount a 66-type station connector block, and connect it to a digital station board.
2. Mount the QuickQ-supplied connector block, and connect its pre-wired cable to the DVA.
3. Use a 25-pair cable to connect the *QuickQ* connect block to the block that you mounted in step 1.

Wiring The Connector Block

Station Connector Block Clip Terminals	Typical 25-Pair Cable	QuickQ-Supplied Connector Block Clip Terminals	DVA Voice Port	DVA Voice Channel Card
1	white-blue	1	1	1
2	blue-white	2		
3	white-orange	3	2	
4	orange-white	4		
5	white-green	5	3	
6	green-white	6		
7	white-brown	7	4	
8	brown-white	8		
9	white-slate	9	5	2
10	slate-white	10		
11	red-blue	11	6	
12	blue-red	12		
13	red-orange	13	7	
14	orange-red	14		
15	red-green	15	8	
16	green-red	16		
17	red-brown	17	9	3
18	brown-red	18		
19	red-slate	19	10	
20	slate-red	20		
21	black-blue	21	11	
22	blue-black	22		
23	black-orange	23	12	
24	orange-black	24		
25	black-green	25	13	4
26	green-black	26		
27	black-brown	27	14	
28	brown-black	28		
29	black-slate	29	15	
30	slate-black	30		
31	yellow-blue	31	16	
32	blue-yellow	32		

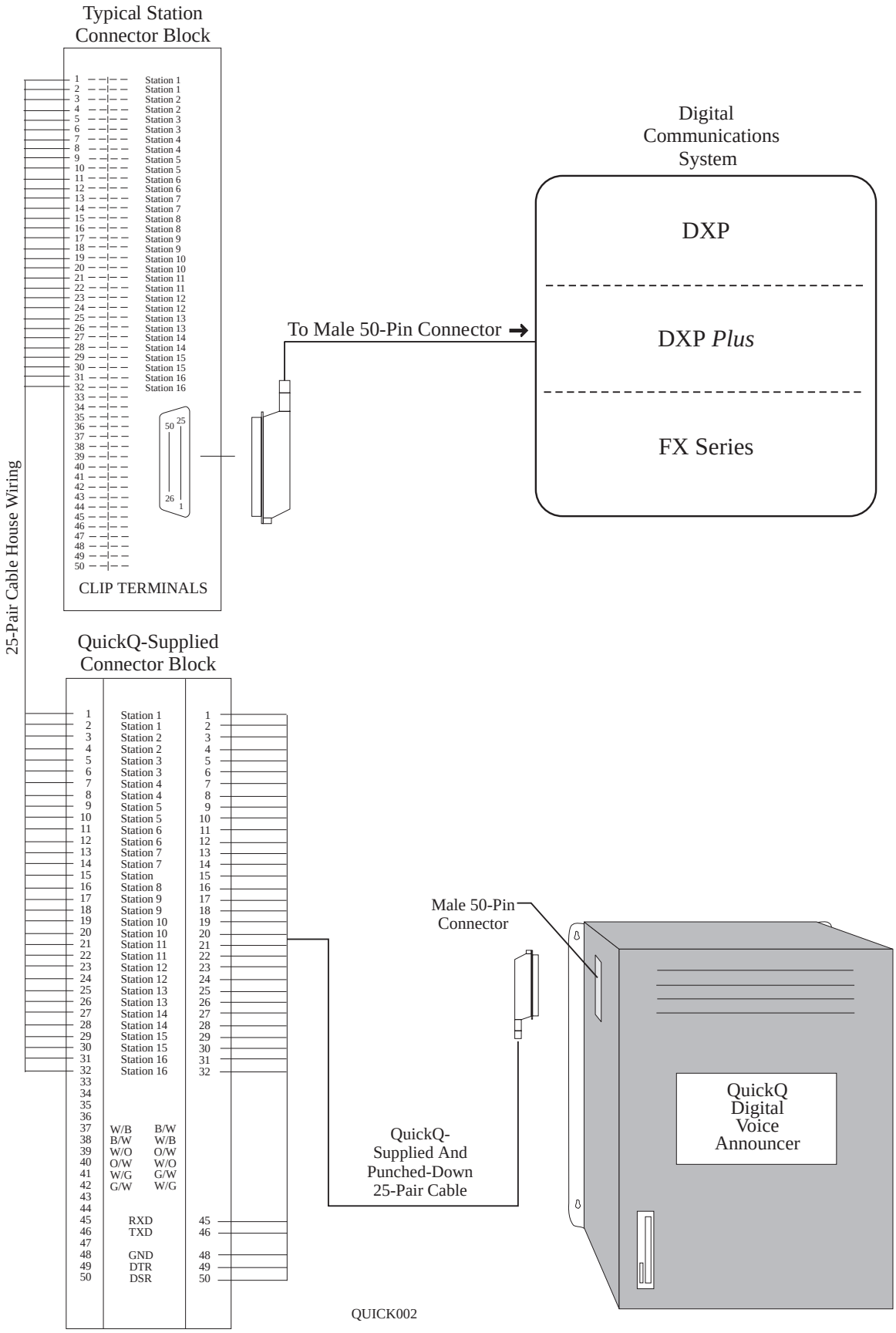


Figure 3-5. Connecting The Digital Communications System To The DVA

Connecting Wallboards To The Personal Computer

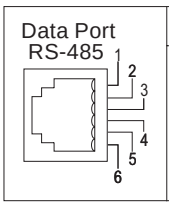
When optional mono or color wallboards are being used with the *QuickQ* system, you will need to connect them to a RS485 network. The RS485 network interfaces with a converter box that plugs into COM4, one of the RS232 serial ports on the rear of the personal computer.

1. Check to make sure that the personal computer has a properly configured RS232 serial port for driving the wallboards. This port must be configured as COM4 and IRQ10.
2. Plug one end of a type A serial data cable for the converter box into the COM4 serial port. See the pinout information below. If COM4 is a 25-pin (DB25) connector, you will need a 9- to 25-pin adapter. These are available at most computer stores.
3. Plug the other end of the serial data cable into the DB9 connector on the rear of the converter box.

Pin Number		
PC	Converter	RS232 Signal Name
Shield	Shield	Ground
3	3	Transmit Data (TXD)
2	2	Receive Data (RXD)
7	7	Request To Send (RTS)
8	8	Clear To Send (CTS)
6	6	Data Set Ready (DSR)
1	1	Data Carrier Detect (DCD)
4	4	Data Terminal Ready (DTR)
5	5	Signal Ground
9	9	No Connection (NC)

QQ12

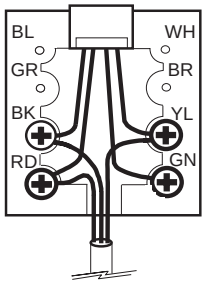
4. See the two views in Figure 3-6 and determine if you are using a terminated or unterminated configuration. If it is terminated, plug the modular connector on one end of the RS485 network into the jack labeled “RS485" on the rear of the converter box, and set the switch to ”TERM" on the rear of the box. See the pinout details below for the modular jack. If you are using an unterminated configuration, connect both branches of the RS485 network cable to the screw terminals and set the switch to “UNTERM” on the rear of the converter box.



Pin	Signal Name
1	NC
2	RS485 (-)
3	NC
4	Shield
5	RS485 (+)
6	NC

QQ13

5. Install a modular network adapter at each network drop (wallboard location).
6. Make sure a grounded 115 VAC wall outlet is located close to each wallboard location.
7. Connect the RS485 network cable from the converter box to the first network adapter.
8. Connect the RS485 network cable to the modular network adapters at all network drops. See the figure below.



Network Wire Connections		
Network Wire	Signal Name	Modular Network Adapter
Red	RS485 (-)	Yellow terminal
Black	RS485 (+)	Black terminal
Shield	Ground	Red terminal

QQ11

9. Connect each wallboard to it’s network adapter with a four-conductor, eight-foot, RS485 cable terminated at each end with a modular connector. Make sure to wrap the wallboard-end of the cable three times around a ferrite bead (provided with the wallboard) before plugging it into the wallboard connector.
10. Plug an End Of Line (EOL) terminator into the connector provided on the last wallboard. If you are using an unterminated configuration, you must plug an EOL terminator into the last wallboard on each of the two network branches. See Figure 3-6.
11. Plug the power cable from the 9 VAC power adapter, supplied with the converter box, into the power connector on the rear of the converter box labeled “9 VOLT AC ~ NOMINAL.” Plug the adapter into a 115 VAC wall outlet. Check to make sure the POWER LED is lit on the front panel of the converter box.
12. Plug each wallboard into a 115 VAC wall outlet.
13. Address wallboards from *1 to 16* using the wallboard remote control. *QuickQ* will only recognize wallboards with those addresses.

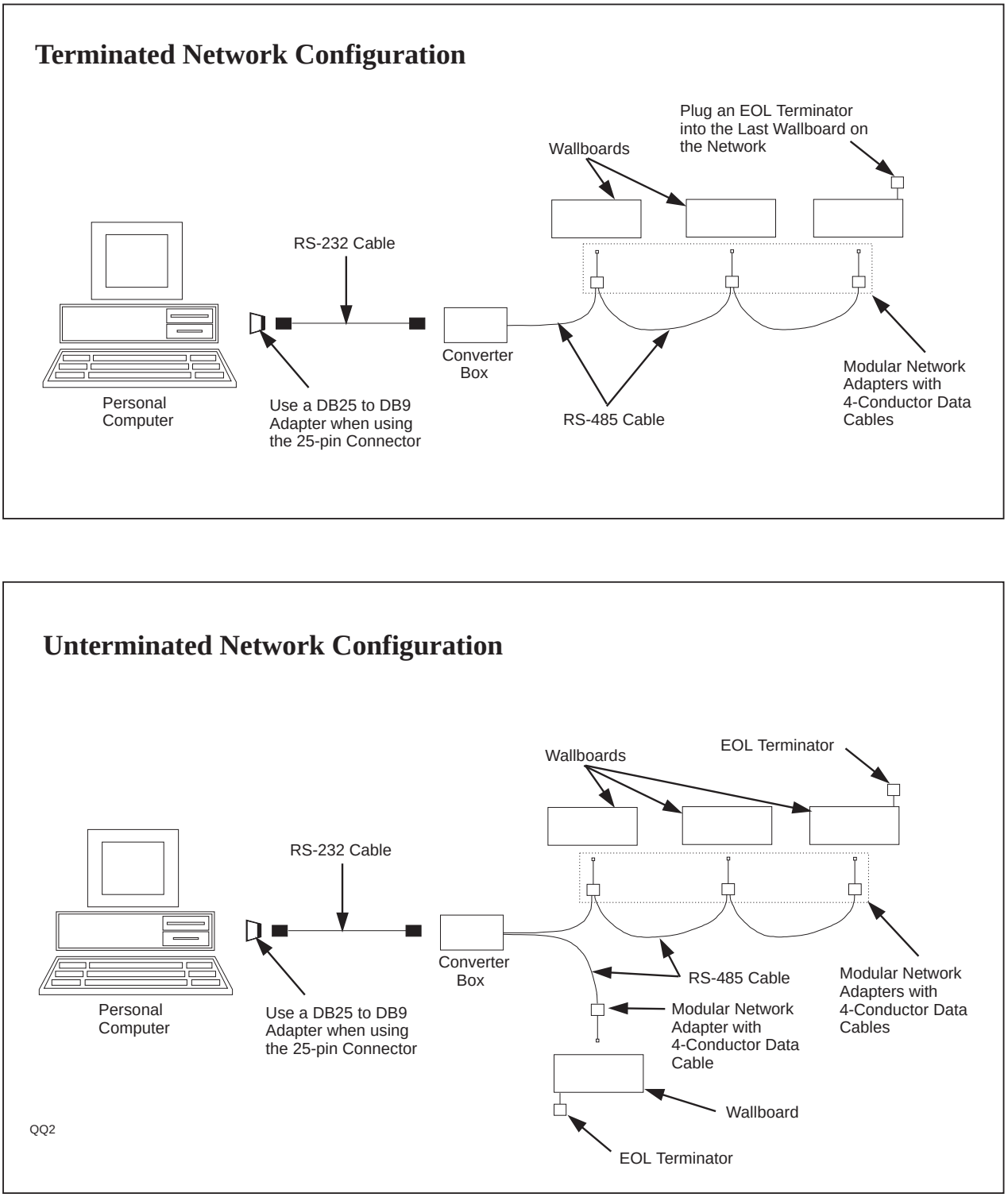


Figure 3-6. Connecting Wallboards In Terminated And Unterminated Configurations

Connecting The QuickQ PROTECKEY

You must connect the supplied *QuickQ* PROTECKEY to the computer's parallel port. Refer to Figure 3-7 for details. To program *QuickQ* without a PROTECKEY, type /Q3 at the the command prompt. The QuickQ software will then operate for approximately one hour,

CAUTION

The system will not continue functioning if you fail to connect the QuickQ PROTECKEY.

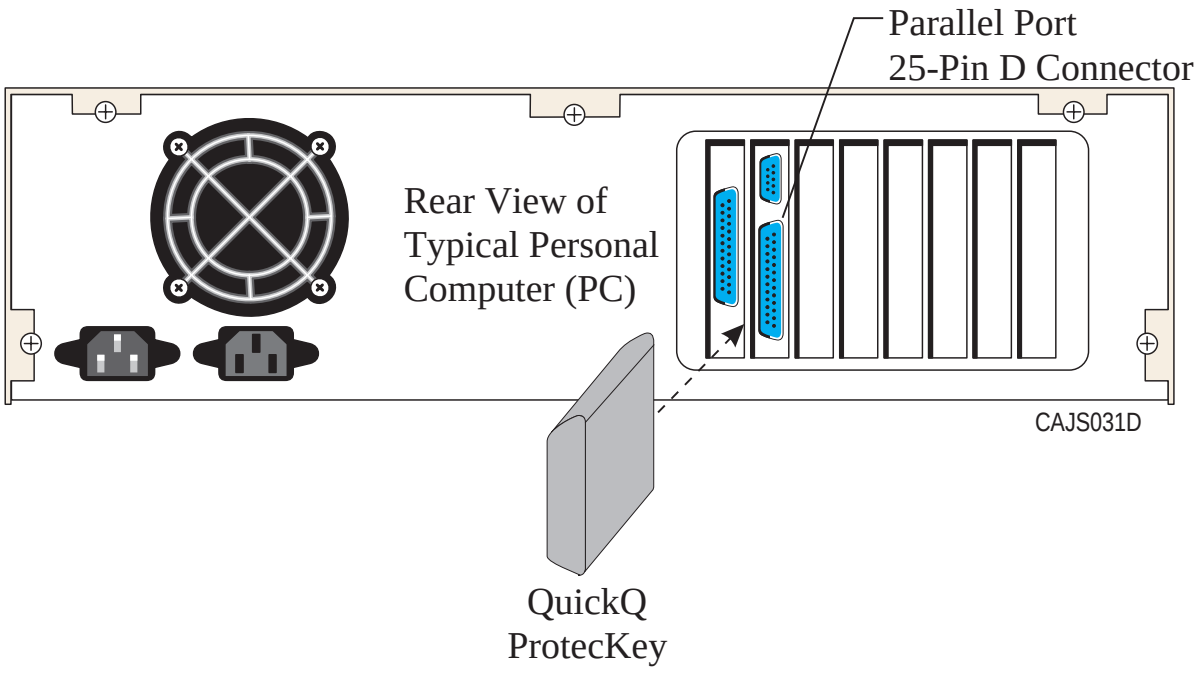


Figure 3-7. Connecting The QuickQ PROTECKEY

Connecting AC Power To The DVA

Before applying power to the DVA, check all wiring connections and ensure that you have properly configured the Voice Channel Card as described in Section 6, *Reviewing The QuickQ DVA Components.*

Always employ a dedicated 115VAC 15 AMP circuit, with a third-wire ground, supplied to a non-switched standard electrical outlet (NEMA 5-15R) for the AC power connection. For added equipment protection, connect a plug-in power line surge protector between the power cord and the AC outlet.

Be sure that the DVA is switched off, and connect the AC power per this procedure:

1. plug the female end of the AC power cord into the power supply receptacle located on the left side of the *QuickQ* DVA,
2. plug the male end of the AC power cord into the power line surge protector.

Reviewing The System Interconnection

Compare your system interconnection with the Figure 3-8 illustration.

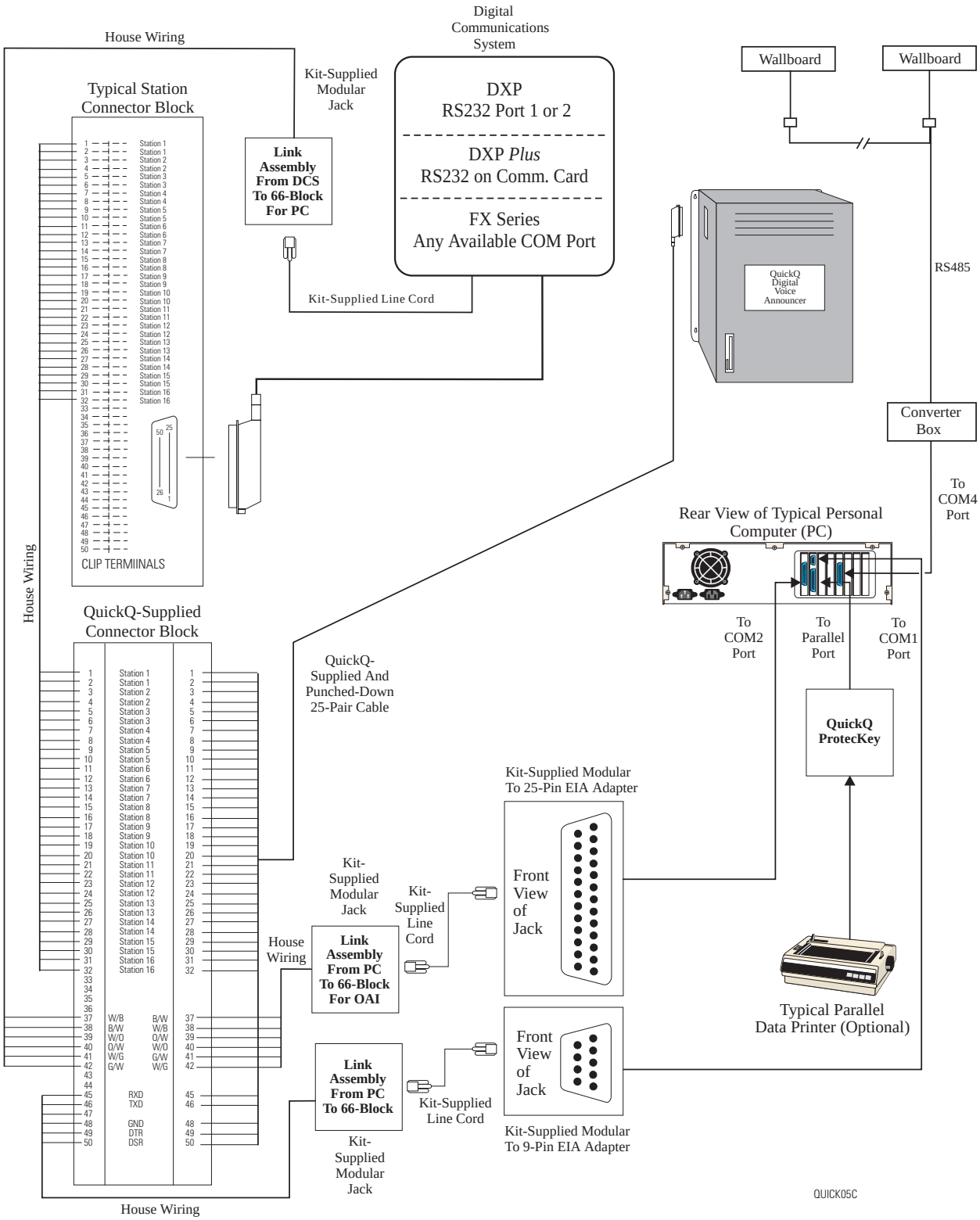


Figure 3-8. Reviewing The System Interconnection

This page remains blank intentionally.

Section 4
Programming The Digital Communications System

You must make certain programming arrangements to ensure that the Digital Communications System will work properly with the *QuickQ* DVA. This section details those system parameters that you must arrange. Refer to the Video Terminal Programming Instructions for complete programming details. You can find those instructions included in the literature binder that accompanies your Digital Communications System.

Programming The System Parameters

Feature Name	QuickQ Parameter
Synchronized Ringing	No
Auto Attendant Immediate Transfer	No
Automatic Route Selection	Disabled
System Status Reporting	Disabled
Central Message Desk	None
IST Ringing Per Phase	8
Operator Station	Master
Line Disconnect Automatic Camp-On	Disabled
Default Relocation Response	Yes
Day 1—Begin Time	None
Day 1—End Time	None
Day 2—Begin Time	None
Day 2—End Time	None
Night—Begin Time	None
Night—End Time	None
Highlighted Features = Critical Settings	

Programming The System Line Parameters

Configure each line with the parameters shown in the table. Program the line names until you have named every line that you need for the *QuickQ* installation. You must use the same names as you used for the *QuickQ* lines. For example, if *QuickQ* line 1 = Bob, then system line 1 must = Bob. You cannot change these line names.

Feature Name	QuickQ Parameter
Name	
Type	Loop Start
Disabled	No
Music On Hold	Source 1
Privacy Release	No
SMDR Record	Yes
Cost Incoming	No
—Incoming Cost Delay	No Delay
—Incoming Cost Route	32
Dialing Mode	Tone
Abandon Hold Release	350 Ms
Positive Disconnect Time	2 Sec
Toll Groups	1
DTMF Level	Normal
Disconnect Supervision	**Yes**
Caller ID Active	Yes
ExecuMail ID	
Line Group	1, 16
Highlighted Features = Critical Settings	

NOTE: When using the T1 digital carrier transmission option, there are 24 channels of digital information. You cannot set analog line parameters for these digital channels.

Programming The Serial Data Ports

Feature Name	Port	Baud Out	Baud In	Data Bits	Stop Bits	Parity	Flow Control
QuickQ Parameters	**1 ⁂**	**9600**	**9600**	**8**	**1**	**None**	**None**
	2	300	300	7	2	None	None
Highlighted Features = Critical Settings							

⁂ You cannot use ports one or two if you are using the DXP *Plus*.

Selecting The 19200 Baud Rate

Select the 19200 baud rate when using the DXP *Plus* by adding the /b19200 switch in line four of the *QuickQ*.BAT file (see page 5-17).

Programming Class Of Service For Master Channels And DVA Ports

You can assign any class of service from COS1 through COS32 to the master channels and DVA ports; however, reserve the COS that you do assign exclusively for the master channel and the DVA ports. Be sure to enter the COS number that you use here as the COS entry on the station programming features for the master channels and DVA ports.

Feature Name	QuickQ Parameters
Account Code	No
Automatic Hold On Intercom	Yes
Automatic Hold On Lines	Yes
Background Music	No
Call Cost Display	No
Call Forward All	No
Call Forward Busy/RNA	No
Call Forward Personal	No
Call Park Access	1–9
Call Pick-Up	No
Call Waiting	No
Camp-On Originate	No
Camp-On Receive	No
DND Inhibit	No
DND Override	No
Exclusive Hold	No
Executive Override	No
Executive Override Block	No
Idle Line Preference	No
IST Distinctive Ringing	No
LCD Messaging	No
Meet Me Page	No
Message Deposit	No
Message Wait Originate	No
Music On Intercom Hold	No Music
Paging Receive	No
Paging Transmit	No
Ringing Preference	No
Day Route Access	4
Night Route Access	4
Day Restriction Level	1
Night Restriction Level	1
System Speed Dial Groups	1–20
Station Monitoring	No
Directed Station Hold	No
Remote Station Disable	No
Line Answer	1–128 (1-240 for DXP *Plus*)
Line Originate	None
Periodic Line Tone	None
Maximum Call Duration	None
Line Group Access	None
Line Group Queue	No
Line To Line Transfer	Yes
Voice Announce Block	Yes
Internal IST Flash	No
Forced Account Codes	No
Highlighted Features = Critical Settings	

Programming The Master Channel 1 Voice Port Station Features

Port Number	1 (you can use any digital port without a connected telephone)
Port Type	Digital
Port Model	DigiTech 24-Line LCD Speaker-phone

Feature Name	QuickQ Parameters
Personal Intercom	**101**
Name	MASTER 1
Class Of Service (enter COS for master channel)	*****
Speed Dial Sets	3
Idle Line Priority	None
Intercom Hunt List	None
Group Intercom Access	**4201–4264**
Prime Type	No Prime
—Line	1
—Line Group	1
—Intercom	101
Tone First	**Yes**
Call Announce Beeps	1
Default Forward Type	No Forward
—Intercom Forward To:	101
—Forward Type	Personal Calls
Forward Ring No-Answer Ring Busy	No
Direct Ring	None
Delayed Ring	None
Day 1 Ring	None
Day 2 Ring	None
Night Ring	None
Caller ID Ring No-Answer	None
Ring No-Answer Rings	4
Personal Ring tone	1
LCD Contrast	5
Initiate Service Observe	No
Service Observable	No
Day Exception Number	1–3
Night Exception Number	1–3
SOHVA Beeps	6
SOHVA Groups	None
Busy On SOHVA	No
Pick-Up Groups	1
Through-Dialing	No
Single Line TAP	Call Wait Answer
Ring On Busy	Yes
Allow Ringer Off	No
Disabled	No
Consoles Installed	No
Console Ports	None
Programming Port	No
Automatic Attendant Transfer On Busy	**No**
Headset	No
Recall Call Forward	No
Attendant	No
—Alternate Attendant	None
—Overflow Attendant	None
Extended DTMF Dialing	No
Softkeys Setup	No
IST Hold Configuration	No
Transfer Ring Cadence	Cadence 1
Highlighted Features = Critical Settings	

**Use the same unique class of service for the master channel and the voice port.*

Programming The Master Channel 2 Voice Port Station Features

Port Number	2 (you can use any digital port without a connected telephone)
Port Type	Digital
Port Model	DigiTech 24-Line LCD Speaker-phone

**Use the same unique class of service for the master channel and the voice port.*

NOTE: You cannot button-map the group intercom numbers 4201–4264 on any station.

Feature Name	QuickQ Parameters
Personal Intercom	**102**
Name	MASTER 2
Class Of Service (enter COS for master channel)	*****
Speed Dial Sets	3
Idle Line Priority	None
Intercom Hunt List	None
Group Intercom Access	**4201–4264**
Prime Type	No Prime
—Line	1
—Line Group	1
—Intercom	102
Tone First	**Yes**
Call Announce Beeps	1
Default Forward Type	No Forward
—Intercom Forward To:	102
—Forward Type	Personal Calls
Forward Ring No-Answer Ring Busy	No
Direct Ring	None
Delayed Ring	None
Day 1 Ring	None
Day 2 Ring	None
Night Ring	None
Caller ID Ring No-Answer	None
Ring No-Answer Rings	4
Personal Ring tone	1
LCD Contrast	5
Initiate Service Observe	No
Service Observable	No
Day Exception Number	1–3
Night Exception Number	1–3
SOHVA Beeps	6
SOHVA Groups	None
Busy On SOHVA	No
Pick-Up Groups	1
Through-Dialing	No
Single Line TAP	Call Wait Answer
Ring On Busy	Yes
Allow Ringer Off	No
Disabled	No
Consoles Installed	No
Console Ports	None
Programming Port	No
Automatic Attendant Transfer On Busy	**No**
Headset	No
Recall Call Forward	No
Attendant	No
—Alternate Attendant	None
—Overflow Attendant	None
Extended DTMF Dialing	No
Softkeys Setup	No
IST Hold Configuration	No
Transfer Ring Cadence	Cadence 1
Highlighted Features = Critical Settings	

Programming The DVA Station Features

Port * Number	*
Port Type	Digital
Port Model	*Impact* 24-Line LCD Speaker-phone

Feature Name	QuickQ Parameters
Personal Intercom*	*
Name*	*
Class Of Service (enter COS for master channel)	*
Speed Dial Sets	3
Idle Line Priority	None
Intercom Hunt List	None
Group Intercom Access*	*
Prime Type	No Prime
—Line	1
—Line Group	1
—Intercom*	*
Tone First	**Yes**
Call Announce Beeps	1
Default Forward Type	No Forward
—Intercom Forward To:	*
—Forward Type	Personal Calls
Forward Ring No-Answer Ring Busy	No
Direct Ring	None
Delayed Ring	None
Day 1 Ring	None
Day 2 Ring	None
Night Ring	None
Caller ID Ring No-Answer	None
Ring No-Answer Rings	4
Personal Ring tone	1
LCD Contrast	5
Initiate Service Observe	No
Service Observable	No
Day Exception Number	1–3
Night Exception Number	1–3
SOHVA Beeps	6
SOHVA Groups	None
Busy On SOHVA	No
Pick-Up Groups	1
Through-Dialing	No
Single Line TAP	Call Wait Answer
Ring On Busy	Yes
Allow Ringer Off	No
Disabled	No
Consoles Installed	No
Console Ports	None
Programming Port	No
Automatic Attendant Transfer On Busy	**No**
Headset	No
Recall Call Forward	No
Attendant	No
—Alternate Attendant	None
—Overflow Attendant	None
Extended DTMF Dialing	No
Softkeys Setup	No
IST Hold Configuration	No
Transfer Ring Cadence	Cadence 1
Highlighted Features = Critical Settings	

QuickQ uses 16 DVA stations for system operation. Assign any personal intercom numbers to them that you wish. These personal intercom numbers need not be consecutive numbers; however, they **must be in sets of four and **each set must be from a particular digital station board**.*

Name the DVA stations DVA1 through DVA16 and assign a group intercom access number (from 4265 through 4280) to each DVA station. (For example, assign DVA1 to ext. 4265, DVA2 to ext. 4266, and so forth until you assign DVA16 to ext. 4280)

Programming The Supervisor And Agent Station Features

Port * Number	*
Port Type	Digital
Port Model	*Impact* 12- or 24-Line LCD Speaker-phone

Feature Name	QuickQ Parameters
Personal Intercom*	*
Name*	*
Class Of Service	32
Speed Dial Sets	3
Idle Line Priority	None
Intercom Hunt List*	*
Group Intercom Access*	*
Prime Type	**No Prime**
—Line	1
—Line Group	1
—Intercom*	*
Tone First	**Yes**
Call Announce Beeps	1
Default Forward Type	No Forward
—Intercom Forward To:	MASTER
—Forward Type	Personal Calls
Forward Ring No-Answer Ring Busy	No
Direct Ring	None
Delayed Ring	None
Day 1 Ring	None
Day 2 Ring	None
Night Ring	None
Caller ID Ring No-Answer	None
Ring No-Answer Rings	4
Personal Ring tone	1
LCD Contrast	5
Initiate Service Observe	**Yes**
Service Observable	**Yes**
Day Exception Number	1–3
Night Exception Number	1–3
SOHVA Beeps	6
SOHVA Groups	None
Busy On SOHVA	No
Pick-Up Groups	1
Through-Dialing	No
Single Line TAP	Call Wait Answer
Ring On Busy	Yes
Allow Ringer Off	No
Disabled	No
Consoles Installed	No
Console Ports	None
Programming Port	No
Automatic Attendant Transfer On Busy	No
Headset	No
Recall Call Forward	No
Attendant	No
—Alternate Attendant	None
—Overflow Attendant	None
Extended DTMF Dialing	No
Softkeys Setup	No
IST Hold Configuration	No
Transfer Ring Cadence	Cadence 1
Highlighted Features = Critical Settings	

** Assign any personal intercom numbers to agent and supervisor stations that you wish. Name the agent and supervisor stations as desired (such as, AGENT1, SUPERVS, and so forth). assign any two unique group intercom numbers to the intercom hunt list and group intercom access for each station.*

Button Mapping The Stations

Button Mapping The DVA Stations

Button Designation	Feature Mnemonic	Button Designation	Feature Mnemonic
L01	# # #	L13	# # #
L02	# # #	L14	# # #
L03	# # #	L15	# # #
L04	# # #	L16	# # #
L05	# # #	L17	# # #
L06	# # #	L18	# # #
L07	# # #	L19	# # #
L08	# # #	L20	# # #
L09	# # #	L21	# # #
L10	# # #	L22	# # #
L11	# # #	L23	# # #
L12	# # #	L24	# # #
Ensure that the stations have no lines or features assigned to them (# # # = blank, or unassigned buttons).			

Button Mapping The Agent And Supervisor Stations

Button Designation	Feature Mnemonic	Button Designation	Feature Mnemonic
L01	Group Intercom	L13	Headset
L02	Group Intercom	L14	# # #
L03	Line Group 1	L15	# # #
L04	Park Orbit 1	L16	# # #
L05	Park Orbit 2	L17	# # #
L06	# # #	L18	# # #
L07	# # #	L19	# # #
L08	# # #	L20	# # #
L09	# # #	L21	# # #
L10	# # #	L22	# # #
L11	# # #	L23	# # #
L12	# # #	L24	OAI (QuickQ button)

Button Mapping The Master Channel Port Stations

Button Designation	Feature Mnemonic	Button Designation	Feature Mnemonic
L01	# # #	L14	# # #
L02	# # #	L15	# # #
L03	# # #	L16	# # #
L04	# # #	L17	# # #
L05	# # #	L18	# # #
L06	# # #	L19	# # #
L07	# # #	L20	# # #
L08	# # #	L21	# # #
L09	# # #	L22	# # #
L10	# # #	L23	# # #
L11	# # #	L24	# # #
L12	# # #	L25	# # #
L13	# # #	L26	# # #
Ensure that the stations have no lines or features assigned to them (# # # = blank, or unassigned buttons).			

NOTE: *To use the optional* **"Calls Waiting In Queue"** *button, map selected button to OAI61.*

Button Mapping The Function Buttons On The Scout Telephone

Button Designation	Feature Mnemonic	Button Designation	Feature Mnemonic
F1 (Level 1)	OAI01 (*QuickQ* button)	F1 (Level 2)	OAI01 (*QuickQ* button)
F2 (Level 1)	###	F2 (Level 2)	Interactive 1 (OAI62)
F3 (Level 1)	Group Itcm	F3 (Level 2)	Interactive 2 (OAI63)
F4 (Level 1)	Itcm	F4 (Level 2)	Interactive 1 (OAI64)

NOTE: *Level 2 button mapping for F2, F3, and F4 as shown in above table is required for Scout phones.*

This page remains blank intentionally.

Section 5
Setting Up The Personal Computer

Follow the information that Sections 2 and 3 provide for installing and wiring the *QuickQ* system. Then refer to this section to set up the computer hardware and perform the initial programming required for the *QuickQ* system.

Using QuickQ With A Keyboard

You can use either a keyboard or a mouse to access the *QuickQ*. It is a good practice to use the keyboard for programming until you become comfortable using a mouse. For instruction on using a mouse and the *QuickQ*, refer to Appendix 1 page A1-1.

There are five keys that can be used in place of a mouse.

TAB Press to highlight a word (or item) and move the cursor. Press Shift-TAB to move the highlight backward.

ENTER Press when you require a specific word (or item) once you have highlighted it. Press to close a message or error window.

ESC Press to close a message or error window or to close the current window.

ARROW Press to move the cursor.

ALT Press and hold while typing an underlined letter to open a window. For example, to access the sign-in menu you can press and hold ALT and then type S. The ALT key will move the control from a window back to the menu title bar without closing the window.

F1 Press to cause a help window to appear.

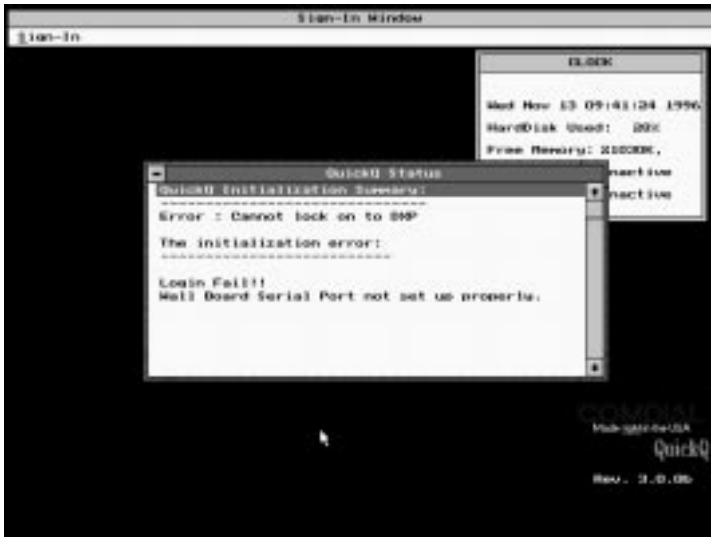
NOTE: *The PRINT SCREEN and PAUSE keys are not functional in QuickQ.*

NOTE: *The name* **DXP** *used throughout this section applies equally, in most cases, to the* **DXP Plus** *and* **FX Series** *systems.*

Performing Initial Programming For QuickQ

If you switch the *QuickQ* on without having first programmed the master channel extension numbers into the *QuickQ* software, an error window will open with an appropriate error message. See Figure 5-1 for an example of this window.

Whenever a connection problem occurs during a system reboot, the type and location of the problem will appear in this window. Press **ESC** to close *QuickQ* status.



QQ50

Figure 5-1. Viewing The Error Window

Signing Into The Technician Access Level

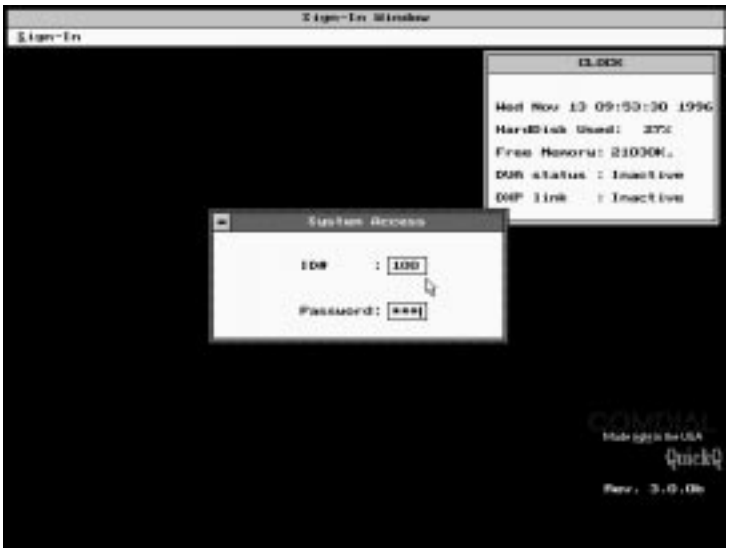
Use the following procedure to access *QuickQ*'s technician programming level.

1. Select the Sign-in menu bar option. Hold down the **ALT** key and press the **S** key or press the **ENTER** key with *Sign-in* highlighted. The *system access* window will open with the highlight in the ID# box, a default value of 100 will also be in the ID# box. See Figure 5-2 for an illustration of this.

2. Type the technician's ID number (default 832) and press the **ENTER** key. The highlight will move to the *password* box.

3. Type the technician's password (default 832) and press the **ENTER** key. The *supervisor/manager sign-in* window will appear (see Figure 5-3).

NOTE: *The system hides the password digits when you type them.*



QQ51

Figure 5-2. Viewing The System Access Window

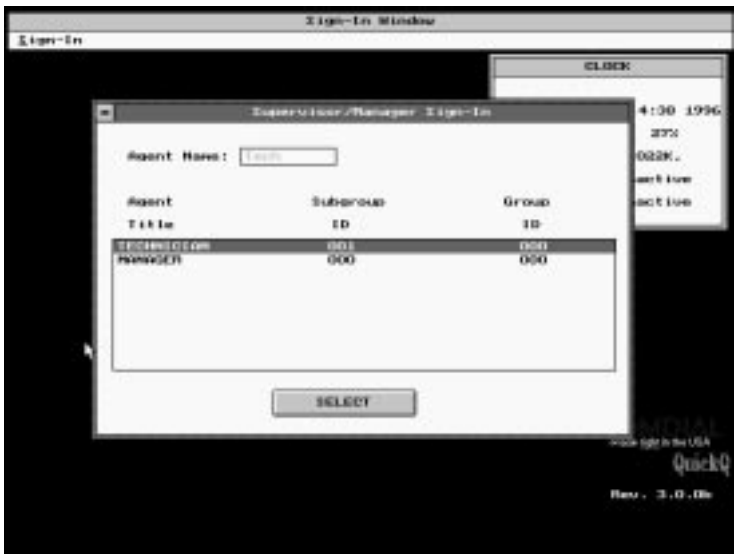


Figure 5-3. Viewing The Supervisor/Manager Sign-In Window

4. Place the highlight on the line with *agent title technician* and press the **ENTER** key. The screen display changes to show the *technician window* and the menu bar shows a series of four options (see Figure 5-4). Selecting *MANAGER* will allow access to the manager window. Further descriptions are shown in the *System Manager's Guide.*

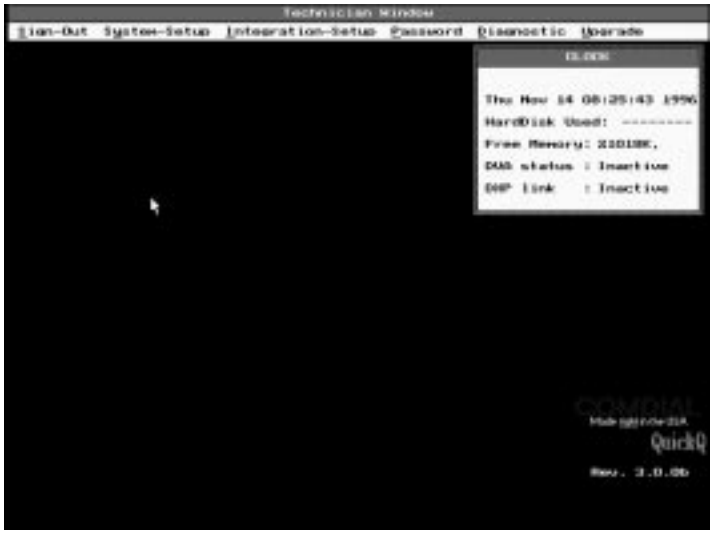
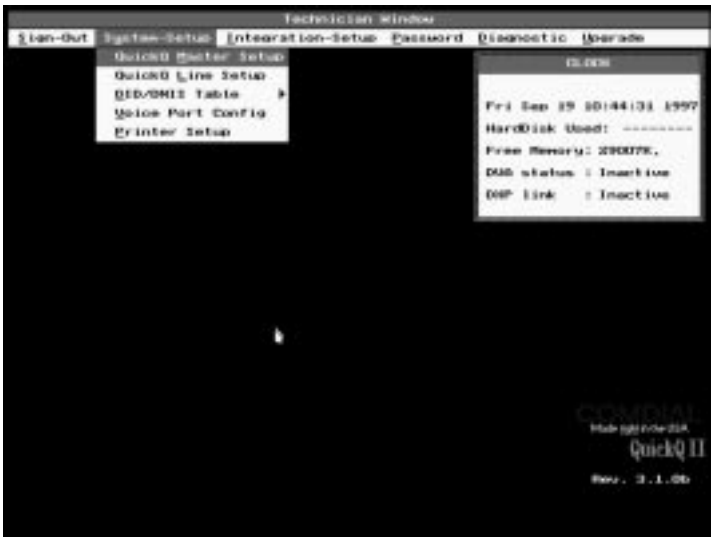


Figure 5-4. Viewing The Technician Window

Programming The OAI Number And Master Channel

The master channel refers to a digital station port that you have reserved for call processing control.

1. After signing into the *technician access* level, select the *system-setup* option. Hold down the **ALT** key and press the **Y** key or highlight *system-setup* and press **ENTER**. The *system-setup* options will open. See Figure 5-5 for details.
2. Select the *QuickQ master setup*. Hold down the **ALT** key and press the **M** key or press the **ENTER** key with *QuickQ master setup* highlighted. Enter the intercom number of an **unassigned** digital station port, then press the **ENTER** key. For the Master 2 extension, enter the intercom number of a second **unassigned** digital station port. The cursor will advance to the *OAI code* option. Select the OAI code to use for *QuickQ* (01—64). The number that you use here must match the OAI button number that you assigned to the agent and supervisor's telephone in station button mapping.
3. To save the changes, press and hold the **ALT** key and press the **S** key. The *save changes?* window will open with a *Yes No* option.
4. To select the *yes* option, use the **TAB** key or the left arrow key to highlight *yes* and press the **ENTER** key.



QQ54

Figure 5-5. Viewing The System-Setup Window

Adding Lines To *QuickQ*

The system divides its add option menu into four catagories. These catagories include the following items:

(1) Line Name—ACD line names can be up to seven characters in length. The names are displayed on the LCD of the agent's telephone while that station is logged into the *QuickQ* system.; otherwise, the DXP line name shows in the display. *QuickQ* call reports use the ACD line name while SMDA/SMDR reports use the DXP line name.

(2) Group—This is the ACD group that the system associates with the lines. There are 16 groups available plus an External Transfer Lines selection (Ex Trans.). The Ex Trans. selection allows the proprietary voice mail system or an operator to transfer lines to the *QuickQ* system. Transfers must be to a group intercom associated with a desired ACD group. To ensure proper operation, you must give the master voice channels access to the group intercoms being used. The *QuickQ* system associates particular group intercom numbers with each of the 16 ACD groups. That association is as shown on the following chart. The system only supports the use of unscreened transfers.

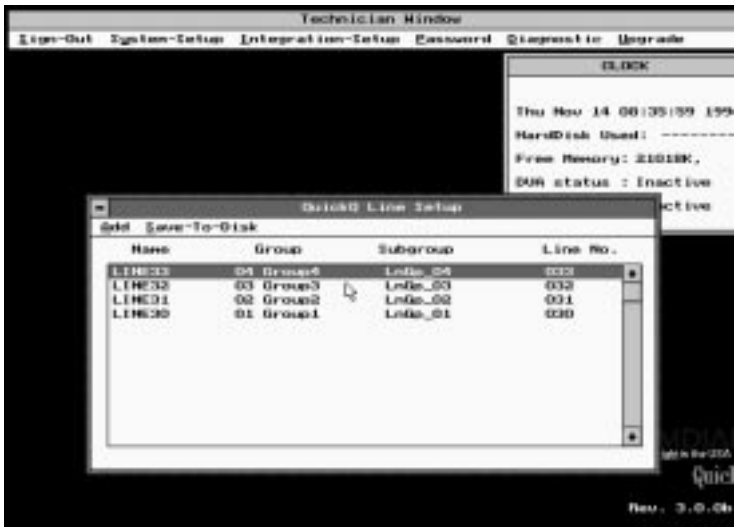
Gp 1	Gp 2	Gp 3	Gp 4	Gp5	Gp 6	Gp 7	Gp 8	Gp 9	Gp10	Gp 11	Gp 12	Gp 13	Gp 14	Gp 15	Gp 16
4201	4202	4203	4204	4205	4206	4207	4208	4209	4210	4211	4212	4213	4214	4215	4216
4217	4218	4219	4220	4221	4222	4223	4224	4225	4226	4227	4228	4229	4230	4231	4232
4233	4234	4235	4236	4237	4238	4239	4240	4241	4242	4243	4244	4245	4246	4247	4248
4249	4250	4251	4252	4253	4254	4255	4256	4257	4258	4259	4260	4261	4262	4263	4264

(3) Subgroup—This catagory usually remains at its default value of LNGP1 unless the site has several line types (such as WATS FX, Local) and you must differentiate between them.

(4) Line Number—This is the DXP line port. Enter it in a three-character format (for example, line 1 = 001).

Use this procedure to add lines to the *QuickQ* system .

1. Open the *technician access* level and select the *system-setup* option. Either press and hold the **ALT** key and press the **Y** key or highlight *system setup* and press the **ENTER** key. The *system-setup* options will open.
2. To select the *QuickQ line setup*, press the down arrow key to highlight *QuickQ line setup* option and press the **ENTER** key. The *QuickQ line setup* window will open (see Figure 5-6).

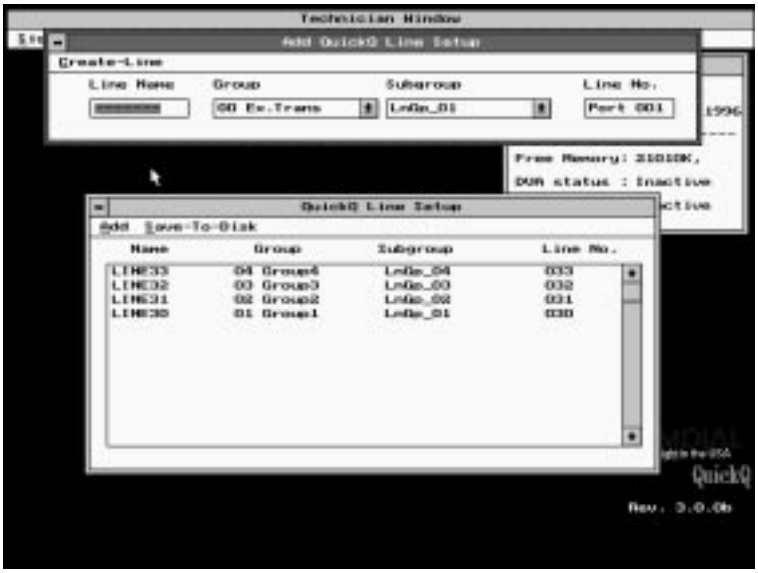


QQ55

Figure 5-6. Viewing The QuickQ Line Setup Window

3. To select the *add* option, press and hold the **ALT** key and press the **A** key. The *QuickQ line setup add* window will open with the highlight in the *line name* box. See Figure 5-7. Type the name for the line (limited to 7 characters) and press the **ENTER** key.

***NOTE**: The line names must be unique. The system uses this name in the reports and displays it on the ACD agents telephones when QuickQ presents the line to the telephone. These line names do not affect the DXP names for the lines.*



QQ56

Figure 5-7. Viewing The ACD Line Setup Add Window

4. To select the line's assigned ACD group, press the up or down arrow key to change between the groups, and press the **TAB** key to select the group required. Alternately, you can press the **ENTER** key to make the list of the groups appear, use the arrow keys to highlight the selection, press the **ENTER** key, and press **TAB** to select. the group.
5. To select the line's ACD line subgroup, press the up or down arrow key to change between the subgroups, and press the **TAB** key to select the subgroup required. Alternately, you can press the **ENTER** key to make the list of the subgroups appear, use the arrow keys to highlight the selection, press the **ENTER** key, and press the **TAB** key to select the subgroup.
6. Highlight the *Line No.* box, enter the three-digit number for the DXP line port where you have physically connected the line, and press the **ENTER** key.
7. To save the line programming select the *create-line* option, press and hold the **ALT** key and then press the **C** key. The *create new line?* window will open. Highlight *Yes* in this window and press the **ENTER** key to save the line programming.
8. If a line is assigned to a line subgroup that does not exist, *QuickQ* will open the *create new line-subgroup?* window. Highlight *Yes* and press the **ENTER** key to save a new line subgroup.
9. To close the *QuickQ line setup ADD* window press the **ESC** key.
10. Press and hold the **ALT** key and press the **S** key to save programming to the hard drive. Select *YES* when the *Save Line Setup?* window opens.

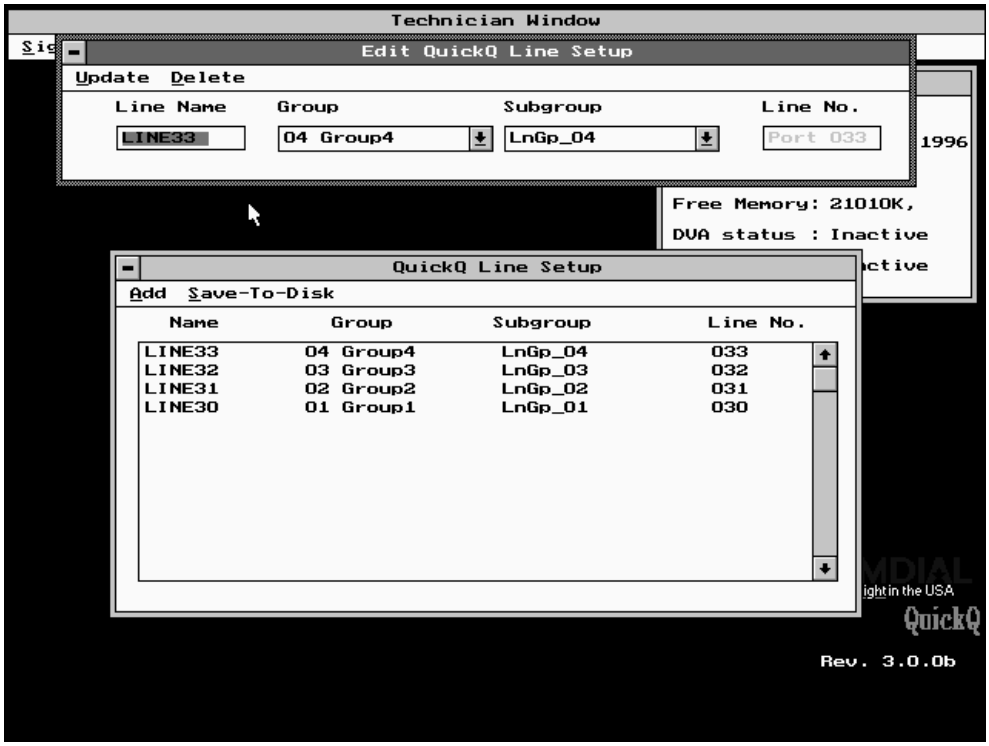
***NOTE:** The Save_to_Disk will enable the line if the system is active.*

Deleting Lines From *QuickQ*

Use the following procedure to delete lines from the *QuickQ* system.

1. Sign into the technician access level and select the *system-setup* option. Either press and hold the ALT key and press the **Y** key or highlight *system-setup* and press the **ENTER** key. The *system-setup* options will open.
2. To select the *QuickQ* line setup, press the arrow key to highlight *QuickQ line setup* and press the **ENTER** key. The *QuickQ line setup* window will open.
3. To delete an ACD line, press the arrow keys to highlight the line you wish to delete, and press the **ENTER** key. The *edit QuickQ line setup* window will open (see Figure 5-8).
4. To delete the selected line, press and hold the **ALT** key and press the **D** key. The *delete line?* window will open. Highlight *Yes* and press the **ENTER** key to delete the line.
5. Press and hold the **ALT** key and then press the **S** key to save programming to the hard drive. Select *YES* when the Save Line Setup? window opens.

***NOTE**: If line is currently active, system will not delete line. When you delete a line, exit and re-enter the QuickQ program. This action makes the change affective.*



QQ57

Figure 5-8. Viewing The Edit QuickQ Line Setup Window

Moving The QuickQ Lines

Use the following steps to move ACD lines from one group to another group or from one line subgroup to another line subgroup.

1. Sign into the *technician access* level and select the *system-setup* option. Either press and hold the **ALT** key and press the **Y** key or highlight *system-setup* and press the **ENTER** key. The *system-setup* options will open.
2. To select the *QuickQ line setup*, press the arrow key to highlight *QuickQ line setup* and press the **ENTER** key. The *ACD line setup* window will open.
3. To select the ACD line that you wish to move, press the ALT key to highlight the line, press the arrow keys to highlight the line to be moved, and press the **ENTER** key. The *Edit QuickQ line setup* window will open (see Figure 5-8).
4. To move the selected line to a different group, press the **TAB** key once to advance the highlight to the *group* column. Press the arrow keys to change between the groups. Press the **TAB** key to select the group required. Alternately, you can press the **ENTER** key to display the list of the groups, use the arrow keys to highlight the required selection, press the **ENTER** key, and press the **TAB** key to select the group required.
5. To move the selected line to a different line subgroup, press the **TAB** key once to advance the highlight to the *subgroup* column. Press the arrow keys to change between the subgroups. Press the **TAB** key to select the subgroup required. Alternately, you can press the **ENTER** key to display the list of the subgroups, use the arrow keys to highlight the required selection, press the **ENTER** key, and press the **TAB** key to select the line subgroup required.
6. To save the line programming, select the *update* option, press and hold the **ALT** key and then press the **U** key. The *save changes to line?* window will open. Highlight *Yes* in this window and press the **ENTER** key to save the line changes.
7. Press and hold the **ALT** key and then press the **S** key to save programming to the hard drive. Select YES when the *save line setup?* window opens.

***NOTE**: You cannot use this procedure to change the line number. To change a line number, delete the line with the current number and then add the line with a new line number. When you make a change to the program, exit and re-enter the QuickQ program. This action makes the change effective.*

External Transferring To Line Subgroup

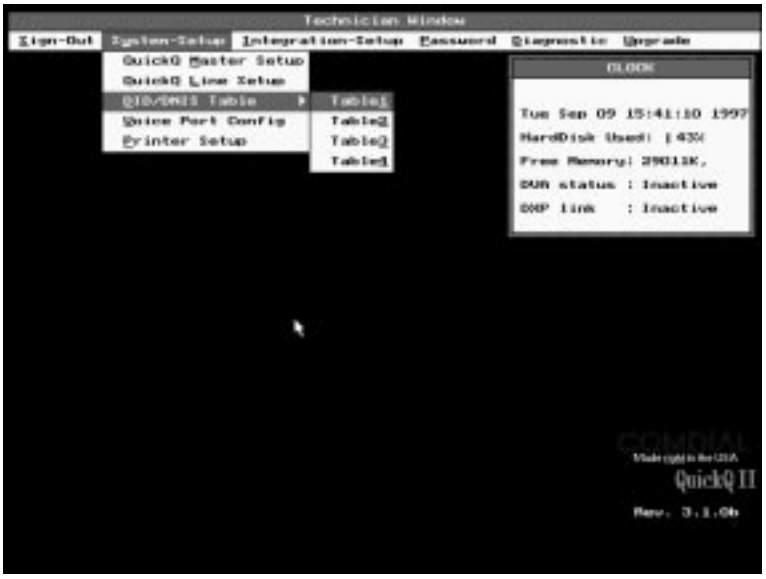
This feature allows an auto-attendant or other external device to transfer a call to a specific subgroup within the group selected.

When the system has been properly modified, you can program the line subgroup for external transfer in the *QuickQ* Line Setup window (Figure 5-6).

NOTE: The line subgroup must be created manually in supervisor programming for this feature to operate.

Programming The QuickQ DID/DNIS Tables

Incoming DID/DNIS calls are sent to an unused hunt group according to the Digital Communications System's DID/DNIS table. Callers hear a ringback tone while their calls are sequenced in the ACD queues. As soon as an agent or DVA port becomes available, *QuickQ* answers the call. This scheme saves customers money as well as the company when it is using 1-800 lines because the toll charge does not start until *QuickQ* answers the call. You can program up to four DID/DNIS translation tables and up to 100 C. O. numbers per table. When a caller calls one of these numbers, *QuickQ* routes the call to the group and subgroup designated by the translation table. Program these tables as follows.



QQ118

Figure 5-9. Viewing The DID/DNIS Tables Setup Window

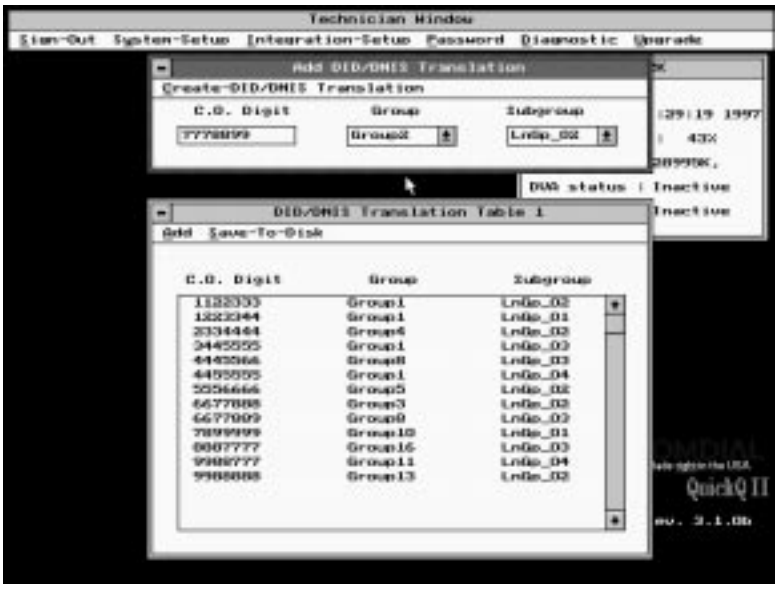
1. Sign into the technician access level and select the *System-Setup* option. Either press and hold the **ALT** key while pressing the **Y** key or highlight the *System-Setup*. The system-setup options will open.
2. To select the *DID/DNIS Table*, press the up or down arrow key to highlight the *DID/DNIS Table* and either press the **ENTER** key or click on the *DID/DNIS Table*. The Table menu will open listing the table choices (see Figure 5-9).
3. To select one of the four tables that you wish to program, highlight your choice by pressing the up or down arrow key. When your table is highlighted, either press **ENTER** or click on the highlighted table number. The translation table for your selection appears.
4. To enter a C.O. Number, press and hold **ALT** while pressing **A** or click on *Add*. The *Add DID/DNIS Translation* window appears over the *DID/DNIS Translation Table* (see Figure 5-10).
5. Click near the left side of the *C.O. Digit* box in the *Add DID/DNIS Translation* window and enter the first C.O. Number. You can enter up to, but not over seven digits.
6. Select the group and subgroup to which you want to route the call when a caller calls in using that C.O. number. Make the group selection by either clicking the arrow in the *Group* box or placing the cursor inside the box and then pressing the **ENTER** key. A list of groups (*Group 1* through *Group16*) appears. Select the group number by pressing the up or down arrow key to highlight your choice and then pressing the **ENTER** key. Make the subgroup selection (*LnGp_01* through *LnGp_04*) in the same manner only use the *Subgroup* box instead of the *Group* box.

7. When you have completed your entries in the three boxes under the *Add DID/DNIS Translation* window, click on *Creat–DID/DNIS Translation* or press and hold **ALT** while pressing **C**.
8. The *Add DID/DNIS Translation?* window will open. Click on *Yes* or press the **ENTER** key. If the *Create Line Sub-Group?* window then opens, click on *Yes* or press the **ENTER** key to add your entry to the translation table.
   Close the *Add DID/DNIS Translation* window by clicking on the close box. Then, press and hold **ALT** while pressing **C** or click on *Close* in the pulldown menu.
9. To edit a line, press the up or down arrow key to highlight the line in the translation table you want to edit, then click on the highlighted line or press the **RETURN** key. The Edit *DID/DNIS Translation* window opens showing the selected line.
   After making changes to the line, press and hold **ALT** while pressing **U** or click on *Update*. The *Update DID/DNIS Translation?* window opens with *Yes No* options. When you are satisfied with your changes, click *Yes* or press the **ENTER** key.
10. To delete a line, press the up or down arrow key to highlight the line you want to delete from the translation table. Then, click on the highlighted line or press the **RETURN** key. The *Edit DID/DNIS Translation* window opens showing the selected line. Press and hold **ALT** while pressing **D** or click on *Delete*. The *Delete DID/DNIS Translation?* window opens with *Yes No* options. If you are certain you want to delete this line, click on *Yes* or press the **RETURN** key.
11. To save your programming to the hard drive, either press and hold **ALT** while pressing **S** or click on *Save-To-Disk*. The *Save Translation Table?* window opens with *Yes No* options. Click on *Yes* or press the **ENTER** key. To exit DID/DNIS Translation Table programming without saving your changes, click on the close box and then click on *Close* in the pulldown menu or press and hold **ALT** while pressing **C**.

Night Time Routing Of DID/DNIS Calls

DID/DNIS calls will route to a designated extension during night time if an extension is set up in the Digital Communications System's translation table for night transfer operations. Night routing starts as soon as the system turns into the night mode.

In MIS reporting, the DID/DNIS calls will be treated the same as *QuickQ* external transfer calls.



QQ119

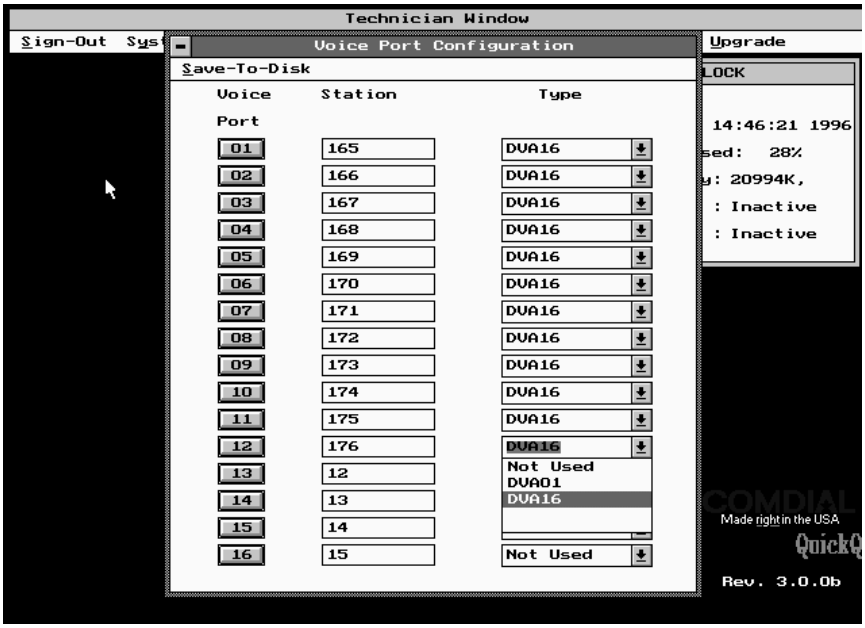
Figure 5-10. Viewing The DID/DNIS Translation Table

Programming The QuickQ Voice Ports

The following steps allow you to program the voice port information that *QuickQ* requires to control the voice ports.

1. After you have opened the technician access level**,** select the *system-setup* option. Press and hold the ALT key and press the **Y** key or highlight *system set-up* and press the **ENTER** key. The *system-setup* options will open.

   Use the up and down arrow keys to highlight the selection required and press the **ENTER** key. Press the **TAB** key to select the option required.



QQ58

Figure 5-11. Viewing The Voice Port Configuration Window

2. To select the *voice port configuration* option, press the up or down arrow key to highlight *voice port config.*, then press the **ENTER** key. The *voice port configuratio*n window will open (see Figure 5-11).
3. Press the **TAB** key to highlight the box for *voice port 01* under the *station* column. Enter the intercom number for the first voice port and press the **ENTER** key. The highlight will now be under the *type* column.
4. To change between the *not used, DVA01, and DVA16* option, press the up or down arrow key. Press the **TAB,** key to select the option required. Alternately, press the **ENTER** key and the *not used, DVA01,* and *DVA16* options will appear.

   Only one type of DVA unit can be selected at a time.

   NOTE: "Not used" disables the voice port.

5. Use the **TAB** key to advance to the next voice port to be set up. Repeat steps 3 and 4 as required.
6. After you have set up all the voice ports used in *QuickQ*, save the programming. Press the **ALT** key and the **S** key to save programming to the hard drive. The *save voice port configuration?* window will open with a *Yes No* option.
7. Press the **TAB** key to select the *yes* option or press the left arrow key to highlight *yes* and press the **ENTER** key.

Setting Up The DVA01

Use the following guidelines when setting up the DVA01.

1. Use dedicated DVA01 units for *QuickQ* messages.
2. Refer to the DVA01 operating instructions in your *DXP, DXP Plus, and FX Series Digital Communications Systems LCD Speakerphone Reference Manual* (GCA70-250 for Impact telephones and GCA70-226 for DigiTech telephones).
3. If you are using other DVA01 units for purposes other than *QuickQ* (DISA calls, for example), unplug those units while recording *QuickQ* messages.
4. If you have two dedicated DVA01 units for *QuickQ*, record two copies of your messages at the same time. Note that you cannot have more than two DVA01 units installed for *QuickQ*.
5. Verify programming results when you are finished recording by checking the voice allocation (by DVA) in the DXP programming printout.
6. Make sure that a DVA16 is not installed. The QuickQ system cannot use both DVA types at the same time.

DVA01 Limitations

When using the DVA01 with *QuickQ*, the following limitations apply.

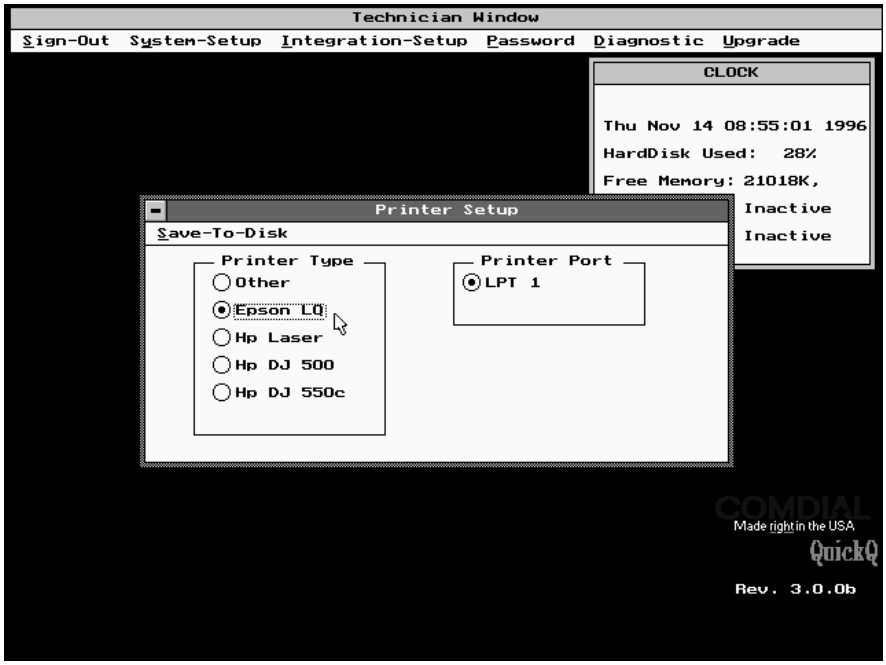
1. *QuickQ* cannot support more than two DVA01 units.
2. You can record only four messages and they must be assigned to message numbers 44 through 47. These message numbers are reserved for *QuickQ*.
3. *QuickQ* cannot support both DVA16 and DVA01 at the same time.
4. You must control all DVA01 functions, like recording or deleting messages, from the DXP attendant's station (station 10).
5. You can record messages on the DVA01 while *QuickQ* is active; however, if you are recording at the same time the system is receiving a call, the caller may not hear any recorded message.
6. The installer must know where the *QuickQ* messages reside and program the appropriate extension numbers using the voice port programming screen.
7. Neither the *QuickQ* technician nor the supervisor can record or play DVA01 messages.
8. *QuickQ* cannot display message limits for the DVA01.
9. The DVA status, displayed in the CLOCK window, always shows **DVA01** when the system is using the DVA01.
10. The announcement (message) backup feature is disabled.

Programming The *QuickQ* Printer Information

Use the following steps to program the information required by *QuickQ* to allow it to print to the data printer.

1. After you have opened the technician access level, select the *system-setup* option. Hold down the ALT key and press the **Y** key or highlight the system set-up and press the **ENTER** key. The *system-setup* options will open.

To ensure reliable printout results, only use those data printers that the menu lists. Data printers other than the ones listed on the menu may not interface properly with the *QuickQ* software.



QQ59

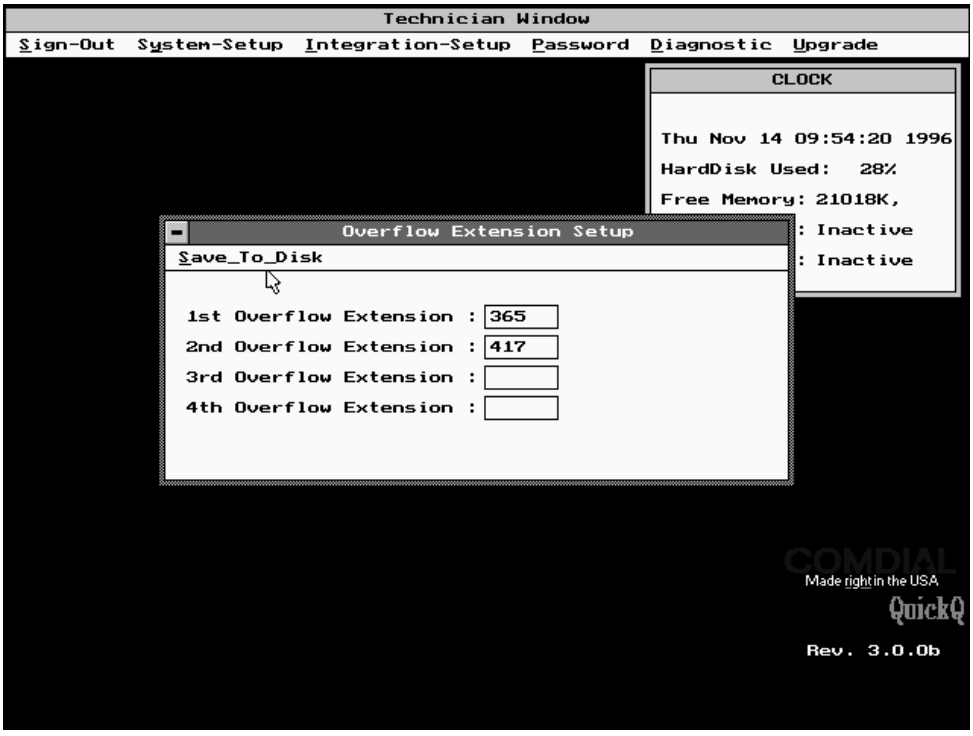
Figure 5-12. Viewing The Printer Setup Window.

2. To select the *printer setup* option, press the up or down arrow key to highlight the *printer setup* option and press the **ENTER** key. The *printer setup* window will open with the highlight under the *printer type* selections. See Figure 5-12 for details.
3. To select the *printer type*, press the up or down arrow keys to highlight required printer and press the **TAB** key to select it. The highlight will move to the *printer port* selections.
4. To select the *printer port*, press the up or down arrow keys to highlight the required port and press the **TAB** key to select it. The highlight will move back to the *printer type* selections.
5. To save the printer parameters, press and hold the **ALT** key and press the **S** key. The *save printer configuration?* window will open with a *Yes No* option.
6. To select the *Yes* option, either press the **TAB** key or press the left arrow key to highlight *Yes* and press the **ENTER** key.

Programming The External Overflow Extensions

You can select up to four DXP personal or group intercom numbers to accept redirected unanswered calls. These numbers must be intercom numbers that are not part of the *QuickQ* ACD group assignments. These overflow extensions accept overflow calls from all 16 ACD groups. External overflow is associated with the inter group overflow feature discussed in GCA70-336, *System Manager's Guide*. That feature causes a call to overflow within a group a maximum of four times. The fourth overflow is to the extension numbers that you set with this external overflow feature. With that, further call processing occurs outside the *QuickQ* environment.

1. After you have opened the *technician access* level, use the arrow keys to highlight the *integration-setup* option, and press the **ENTER** key to select the feature.
2. The display highlights the *external overflow* selection. Press the **ENTER** key to select the feature.
3. To assign the *overflow extension*s, press the **TAB** key to select the desired overflow extension, and type the intercom number. Repeat this procedure until you have entered all desired overflow extensions.
4. To save the overflow extension parameters, press and hold the **ALT** key and press the **S** key. The *save overflow extension?* window will open with the *Yes No* option.



QQ60

Figure 5-13. Viewing The Overflow Extension Setup Window

Upgrading The System

You can upgrade the system's "B" and "C" packages by typing in a specific password in *QuickQ*. You can then increase the number of agents by 24 in increments of 12 agents. In this manner, you can grow the "B" package to a maximum capacity of 72 agents and the "C" package to a maximum size of 96 agents. Using the *QuickQ system upgrade* window shown in Figure 5-14, you enter a password to change the agent size, and disable or enable the optional wallboards when they are used.

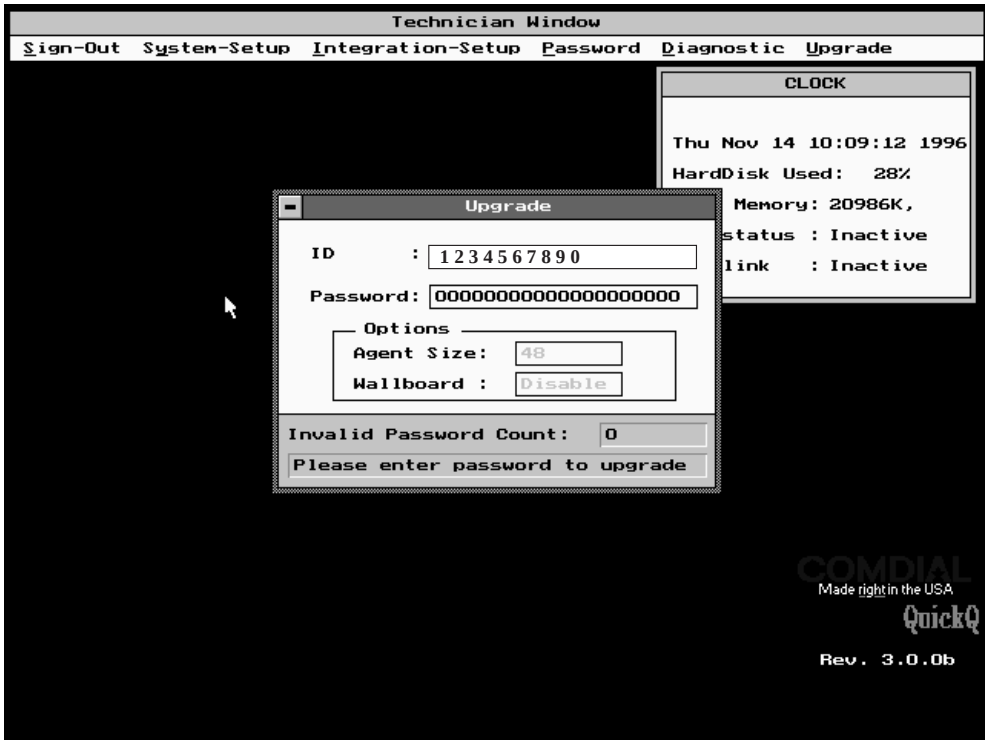
NOTE: *DVA announcement capacity and group capacity is fixed. Growth of agents is all that the growth allows.*

1. After you have opened the *technician access* level, use the arrow keys to highlight the *Upgrade* option, and press the **ENTER** key to select the feature.
2. The display highlights the *Upgrade* selection. Press the **ENTER** key to select the feature.
3. Copy down the unique ID in your system and contact COMDIAL for the password to change the agent size and/or wallboard options.
4. Enter your Password and press the **ENTER** key.

NOTE: *The upgrade window displays the current agent size and wallboard option.*

CAUTION

Do not enter an invalid password. This may disable your capability to upgrade your overall system.



QQ62

Figure 5-14. Viewing The System Upgrade Window

Detailing The QuickQ Batch Files

This section details several batch files that are crucial to *QuickQ* operation.

The contents of the **CONFIG.SYS** file are shown in the following list.

```
FILES=40
BUFFERS=40,0
BREAK=ON
STACKS=0,0
```

The contents of the **AUTOEXEC.BAT** file *with REACHOUT* software are shown in the following list.

```
@echo off
prompt $p$g
PATH C: \DOS;C:\;C:\quickq;
c: \mouse\mouse
set rchpath=C:\REACHOUT\
C:\REACHOUT\\rchsr/name=QUICKQ
C:\REACHOUT\\rchdos
C:\REACHOUT\\dosgraph
C:\REACHOUT\\rchfiled buffer size=8
cd\quickq
delay 120
IF ERRORLEVEL 1 GOTO EXIT
quickq
:EXIT
```

The contents of the **AUTOEXEC.BAT** file *without REACHOUT* software are shown in the following list.

```
@echo off
prompt $p$g
PATH C: \DOS;C:\;C:\quickq;
c: \mouse\mouse
cd\quickq
delay 120
IF ERRORLEVEL 1 GOTO EXIT
quickq
:EXIT
```

The contents of the ***QuickQ*.BAT** file are shown in the following list.

```
ECHO OFF
REM QuickQ program
:begin
acd  /c2  /q3  /e3  /b19200        (See detailed descriptions of these switches below.)
if errorlevel 3 goto report
if errorlevel 2 goto data
if errorlevel 1 goto exit
scandisk c: /autofix /nosummary
datechk
if errorlevel 1 goto month1
goto month0
:month1
defrag c: /f
:month0
booting
goto begin
:report
echo Execute report backup/cleanup utility
qqback
goto begin
:data
echo Restoring data files.
copy a:*.dat
if exist *.bak del *.bak
goto begin
:exit
scandisk c: /autofix /nosummary
```

The descriptions of the software switches you can set in line four of the QuickQ.BAT file are as follows:

Switches	***Description***
/b19200	Selects 19200 baud rate (DXP *Plus* only). When switch is not used, the default baud rate is 9600.
/c2	Activates COM port 2 on the personal computer . (*QuickQ* uses COM port 2.)
/d2	Turns the debug routine on. Data is buffered and then written to the disk. (Use this switch only when recommended by Comdial's Technical Services.)
/e?	Changes the queue escape digit (? = 1 through 9).
/q3	Selects software revision 3.1 (/q2 selects software revision 2.2)
/v	Causes night ringing into QuickQ to be ignored (when *QuickQ* is in night mode).
/r	Ringback tone is generated when a call is transferred to *QuickQ* by an external device.
/a[xxx]	Delay for abandon call timer. [xxx] is number in seconds.
/h[xxx]	Number of idle hours before automatic shutdown for system cleanup.

This page remains blank intentionally.

Section 6
Reviewing The QuickQ DVA Components

This section provides information on the components within the Digital Voice Announcer (DVA).

Reviewing The DVA Chassis Components

The components shown in Figure 6-1 are the standard components within the chassis and, in most cases, you would not be change them in the field.

DVA Motherboard
This is the system processing device. The *QuickQ* DVA's task of playing and recording announcements are controlled by the DVA motherboard. The announcements are stored digitally on the DVA motherboard in the Random Access Memory (RAM). The program that controls the DVA resides in the program chips on the motherboard.

IDE Controller
The IDE Controller Card is plugged into the DVA motherboard. This card provides the interface between the DVA motherboard and the computer's RS-232 serial communication link and also provides the controller for the Floppy Back-up.

Floppy Back Up
The floppy back up is used to store the digital announcements on a 3 1/2" 1.44 Megabyte (MB) floppy disk in the case of a power failure to the DVA. The DVA automatically restores messages from the floppy disk upon power-up.

Power Supply
The power supply converts AC line voltage to DC. It provides the proper voltage to the DVA motherboard and floppy back up.

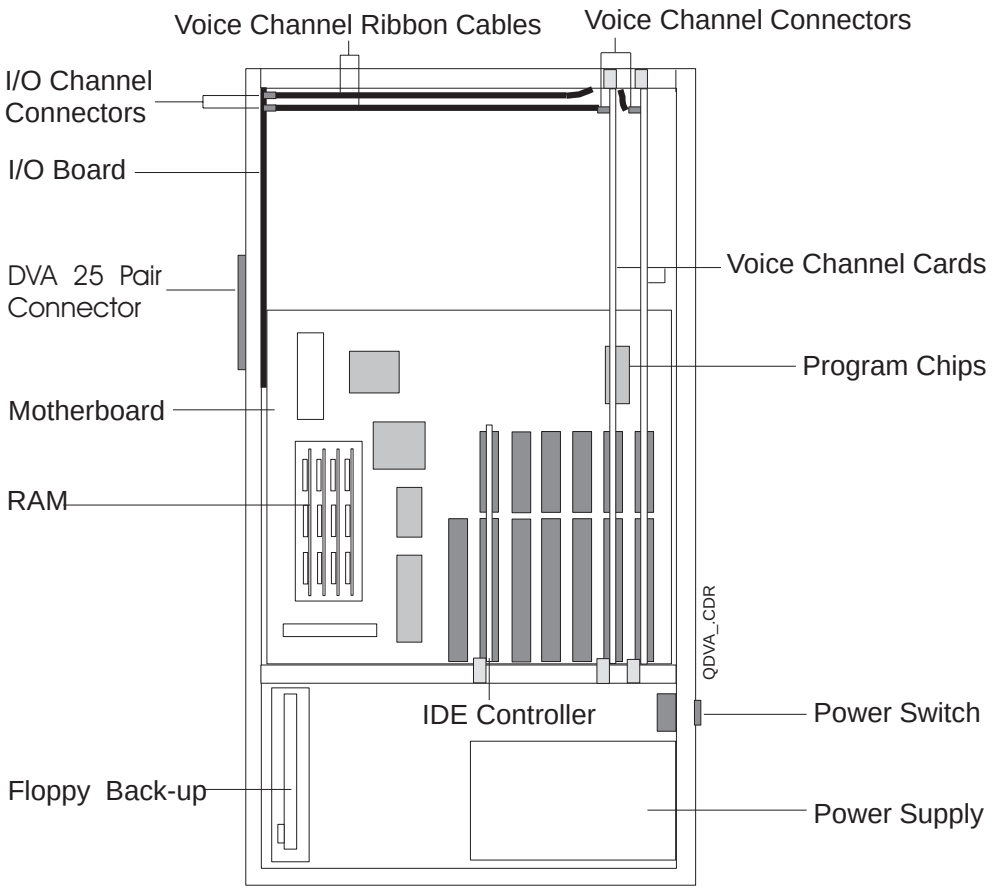


Figure 6-1. Reviewing The QuickQ Digital Voice Announcer

Reviewing The Voice Channel Card

The voice channel card (Figure 6-2) is designed with four digital recording and playback channels. Each channel includes circuitry that directly interfaces with a DXP digital station port. The DVA can hold a maximum of four voice channel cards. Since each voice channel card provides four voice channels, the system capacity is a maximum of 16 voice channels.

The voice channel card connects to the I/O Board through a voice channel ribbon cable. You must connect all four voice channels to station ports from the same DXP station board, and you must connect them in sequence. This means that you can not skip a channel. If you need to add or replace a voice channel card, you must turn the power off while you make the installation.

By changing the card select jumper J2 and J3 (Figure 6-3), you can select the different voice channels (see Table 6-1 for details).

Example: If you set the jumpers for CARD 0, the first of four voice channels becomes Voice Channel 1. This corresponds to voice channel 1 on the I/O Board. If you set the jumpers for CARD 2, the first of four voice channels becomes Voice Channel 9 on the I/O Board.

Card	Card Select Jumper		Voice Channel
	J2	J3	
0	0	0	1
	0	0	2
	0	0	3
	0	0	4
1	0	1	5
	0	1	6
	0	1	7
	0	1	8
2	1	0	9
	1	0	10
	1	0	11
	1	0	12
3	1	1	13
	1	1	14
	1	1	15
	1	1	16

Table 6-1. Selecting The Voice Channel

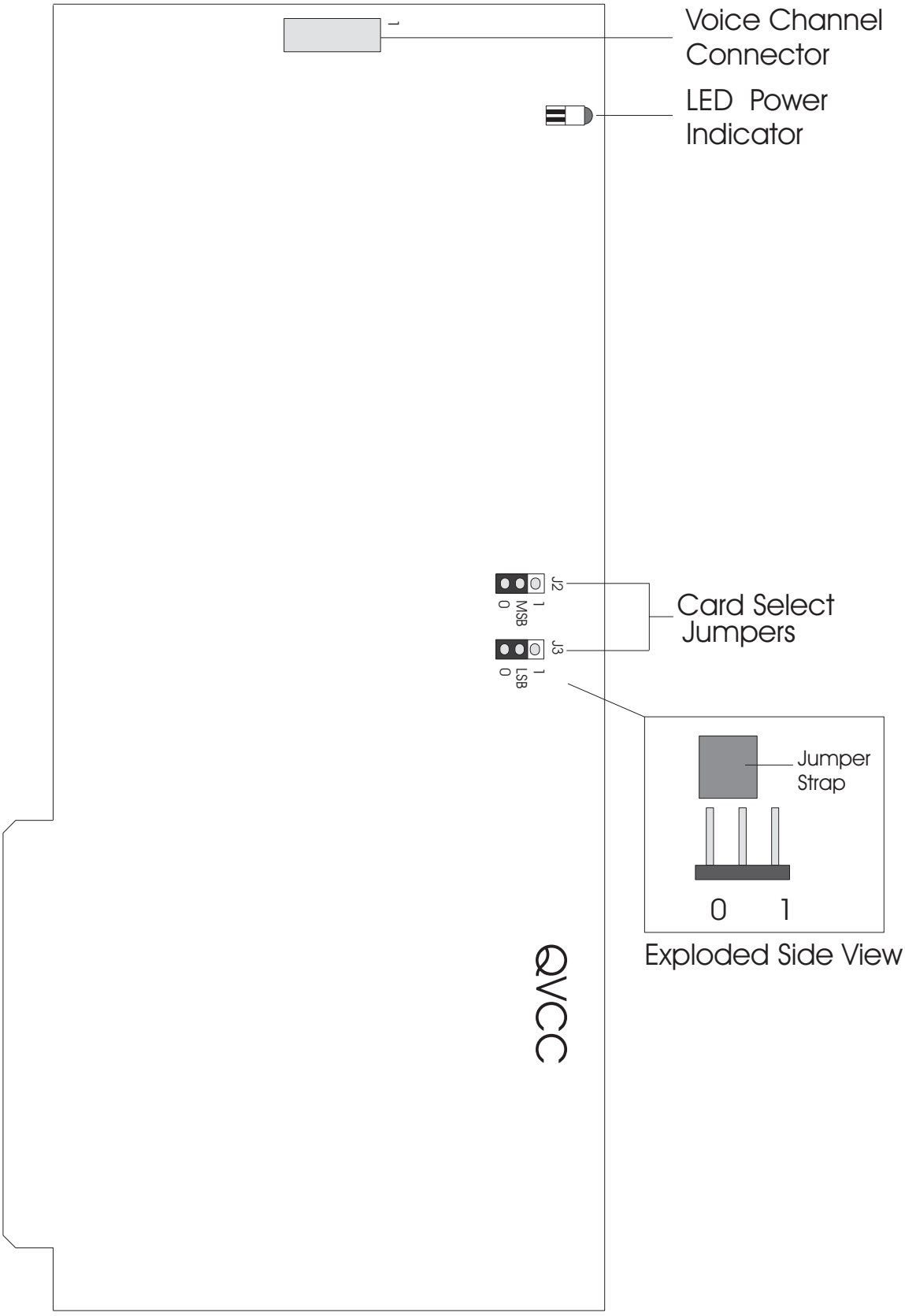


Figure 6-2. Reviewing The QuickQ Voice Channel Card

Reviewing The I/O Board

The I/O Board (Figure 6-3) provides both the I/O interface from the voice channel cards to the DXP and the RS-232 serial communication link to the computer through a male 50-pin connector. There is lightning surge protection built in the I/O board to protect the DVA components.

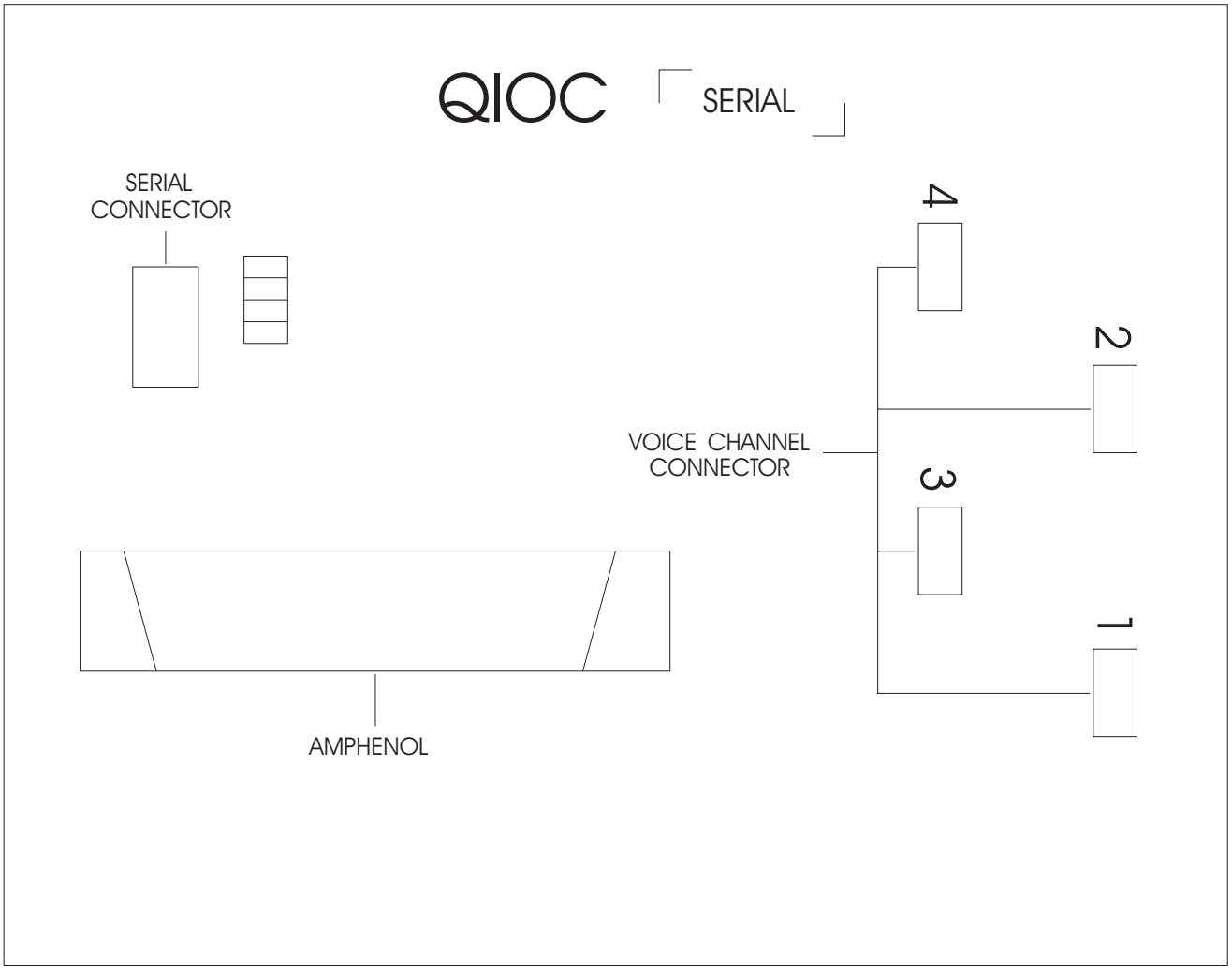


Figure 6-3. Reviewing The QuickQ I/O Board

Section 7
Testing And Troubleshooting

This section provides the basic test procedure and troubleshooting information for the *QuickQ* ACD hardware and software installation

Testing The DVA Installation

The following paragraphs provide the testing and troubleshooting information for the DVA during installation.

Testing Voice Channel Cards

Make sure the voice port stations that are connected to the voice channels are programmed properly.

When you first switch on the computer, the message *QuickQ Initialized. All components acquired. OAI Code* must appear to indicate that *QuickQ* is enabled.

From any DXP telephone, press the ACD key (the programmed OAI button arranged for this purpose) then dial ✳✳832 (✳✳TEC). This action enables the technician's program.

The telephone will show the following displays:

Test	
Voice	Logout

Logout = leave ACD program
Voice = test voice channel

Voice Port:	
	Quit

Voice Port = voice port channel to be tested
Quit = stop the test

Message 1		
REC	PLAY	Quit

REC = record test message 1 (listen for tone that indicates start of recording).
Quit = stop the test

Recording	
	STOP

STOP = stop recording (listen for tone that indicates stop recording.)

You can play a recorded message to verify that a voice card is functioning properly.

Message 1		
REC	PLAY	Quit

PLAY = play message 1

Playing	
	STOP

Record and play back a message at each voice channel of every voice channel card.

Examining Typical Problems

Problem 1: When selecting VOICE to test voice port a message, you see the following display:

Voice Port N/A	
Voice	Logout

This message appears either if a voice port card is not initialized properly or if the voice port selected does not exist. Check the *QuickQ* program (message channel under system programming) to see if the voice port is active.

Problem 2: When selecting VOICE to test voice port a message, you see the following display:

PC link N/A	
	Logout

This message appears when the RS-232 serial communication link is lost. Check the DVA to see if it is powered on and check all connections between the PC and the DVA.

NOTE: *The message recording and playback test verifies all components of the announcement channel. If the voice port passes these tests, no other voice port tests are required.*

Testing The QuickQ Software

This discussion provides information on typical software related problems and error messages.

During Initial QuickQ Programming

This paragraph discusses the problems that you may encounter during the initial QuickQ programming.

NOTE: After making programming changes, reboot the ACD computer to implement your changes.

Examining Typical Problems

Problem 1: After you have entered the ID# in the Sign In window, the error message Invalid ID# appears.

Solution: Be sure the ID# is between 100 and 999. Press the **ENTER** key to close the error message window. Use the backspace key to delete previously entered ID# digits, re-type the ID#, and press the **ENTER** key.

Problem 2: After you have entered the proper ID# and password, the system access window will not open.

Solution: You may have entered an extra digit into the ID# or password. Press the **ESC** key to close the *Sign In* window and clear the ID# and password. Re-open the *Sign In* window, re-enter the ID#, and press the **ENTER** key. Then re-type the password and press the **ENTER** key.

Problem 3: After approximately one hour of programming without a software key installed, the ACD computer exits the *QuickQ* program and returns to the Windows screen.

Solution: Install the *QuickQ* ProtecKey in the parallel port on the rear of the ACD computer.

During QuickQ Operation

When *QuickQ* is in operation, you have troubleshooting utilities located at the *Technician Access* level. There are four utilities located under the *diagnostics* selection. They are the *enable QuickQ status*, the *agent status*, the *line status*, and the *voice port status*.

Examining The Enable QuickQ Status Utility

The *enable QuickQ status* allows you to enable the *QuickQ* after you have programmed the voice port extensions and without resetting the computer. After you have enabled *QuickQ*, the *enable QuickQ option* will be the *QuickQ* status feature. This feature indicates *QuickQ*'s current operating status.

The *enable QuickQ status* option can provide information on the hardware status as seen by *QuickQ* upon initialization and after you display the *QuickQ status* window. The messages that will appear are shown on the following list.

All Components acquired	This indicates that the lines and the Voice Ports are functioning.
Line not initialized	This indicates a problem with a line that was programmed as an ACD line. Check the line going into the *QuickQ* DVA. Check programming of lines in ACD.
Link established between PC and DVA	This indicates that there is proper RS-232 serial data communication between the PC and the DVA but there is a problem with one of the other initialization parameters.
Lost link between PC and DVA	This indicates a problem with the RS-232 serial data communication link. Check all serial communication wiring plus, be sure the DVA is powered on.
Voice Ports not initialized	This indicates a problem with a voice port card that you have programmed as a message channel. Check the wiring between the DVA and the DXP station port. Also check the *QuickQ* message channel and extension length programming for the voice port extension.
All voice ports initialized	This indicates all voice port cards programmed in *QuickQ* are functioning properly but there is a problem with one of the other initialization parameters.
QuickQ initialized	This indicates the ACD software is initialized.
OAI Key Code = xxx	This indicates the OAI key code.

NOTE: If no DVA is connected, the display is normal.

The *QuickQ status* window provides information on the communication status of *QuickQ* and the feature codes. The messages that show are listed below.

Lost communication with announcer	This indicates a problem with the RS-232 serial communication link. Check all serial communication wiring and be sure the DVA is powered on.
Normal communication with announcer	This indicates correct RS-232 serial communication between the PC and the DVA.
OAI Key Code = xxx	This indicates the OAI key code.

Examining The Agent Status Utility

The *agent status* is a real-time agent status window. This window shows the current state of the ACD agents. The first column shows the agent's name. The second column shows the agent's state. The third column shows the call state for the agent's line.

The agent status states that will appear are shown in the following list.

ACCEPT	Supervisor accepts request for help
ACC_CODE	Agent or supervisor entering account code
IN_ANSWER	Agent answered incoming call
BUSY_STATE	Agent in busy state
CALL_WAIT	An ACD call is presenting to an agent
HELP_REQ	Agent requesting help from the supervisor
IDLE_STATE	Agent in idle state
OUT_ANSWER	Agent on outgoing call
PASSWORD	Agent or supervisor entering password
REJECT	Supervisor reject request for help
SIGN_IN	Agent or supervisor signing in
TRAN_FAIL	An ACD call is presenting to an agent. (The call should redirent to another agent, but no other agent is available).
S_MODE	Supervisor changing mode of operation
S_PLAY	Supervisor playing message
S_RECORD	Supervisor recording message
S_STOP	Supervisor stop playing or recording message
WRAP_UP/WAIT_DISP	Agent has ended call and is in wrap_up state

The call state that will appear are shown below.

C_ANSWER_STATE	Call answered by an ACD agent
C_DISPLAY_STATE	Call displayed on an ACD agents telephone
C_HOLD_STATE	Call on hold by agent
C_IDLE_STATE	No call activity
NO CALL	No call activity
C_MESSAGE_STATE	Call listening to announcement
C_MUSIC_STATE	Call listening to music, on-hold tone, or silence
C_OUT_STATE	Outgoing call by agent
C_RING_STATE	Call processor detects ringing on line

Examining The Line Status Utility

The *line status* scan is a real-time line status window. This window shows the current state of the ACD lines. The first column shows the line name. The second column shows the line state. The third column shows the call state for the line. The fourth column shows the agent with whom the line is associated. The last column shows the voice port on which the message is played from.

The line status states that will appear are shown in the following list:

ANSWER_STATE	Line answered by an agent
ANSWER_WAIT	Line answered by an agent
CALLERID_STATE	Collecting caller ID information. (Caller ID feature must be enabled in both *QuickQ* and DXP.)
DVA01_MESSAGE	Message to be played on line with DVA01
IDLE_STATE	No line activity
MESSAGE_STATE	Message to be played on line
MONITOR_STATE	Line monitored by *QuickQ* waiting for a transfer to the voice port (auto attendent mode)
MUSIC_STATE	Music, on-hold tone, or silence to be connected to line
OUTGOING_STATE	Line used for outgoing call by an ACD agent
RING_STATE	Line ringing—incoming call
RINGON	Line ringing, but no message to play on line

The call states that appear are shown below:

C_ANSWER_STATE	Call answered by an ACD agent
C_ANS_WAITING	Call waiting for agent or voice port
C_DISPLAY_STATE	Call displayed on an ACD agents telephone
C_HOLD_STATE	Call on hold by agent
C_IDLE_STATE	No call activity
NO CALL	No call activity
C_MESSAGE_STATE	Call listening to announcement
C_MUSIC_STATE	Call listening to music, On-hold tone, or silence
C_OUT_STATE	Outgoing call by agent
C_RING_STATE	Call processor detects ringing on line

Examining The Voice Port Status Utility

The *voice port status* scan is a real-time voice port status window. This window shows the initialized voice ports and their current state. The voice port states are shown on the following list:

CH_NOT_INIT	Voice port not initialized
CH_IDLE	Voice port idle
CH_RECORD	Voice port used for recording
CH_PLAY XX	Voice Port used for playing message [xx] to a line.
CH_SUPER_PLAY	Voice port used for playing a message by the supervisor or technician
CH_WAITING	Voice port is waiting for a message to be played or recorded

The *clock* window provides useful information. The line under the clock shows the status of the DVA. It also show the hard disk usage. The clock states are as shown below:

Normal	indicates there is no problem with the DVA
Inactive	indicates that there is a problem with the DVA
Backup	indicates that the floppy back-up is currently backing up the messages in the DVA

Problem: Clock shows DVA inactive.

Solution: Check to see if DVA is powered off. If so, turn on the power to it. Also, check all wiring for the RS-232 serial communication link. Finially, reset the DVA by powering the unit off and on.

Using Caller Input Queue Escape

This discussion provides information on the use, programming, and troubleshooting the queue escape feature.

Using The Queue Escape Feature

This feature provides callers with an escape option while waiting in a queue for an available agent. When *QuickQ* is playing a message, callers can enter a preprogrammed digit to go to the escape extension. The digit which the caller is instructed to enter is defined by the program manager and is programmed by the technician. The escape extension is one of the overflow extensions that is selected by the system manager through the Group Setup Window.

Programming The Escape Digit

The default escape digit is number one. You can change this to any number (1–9) by setting a DOS switch outside of *QuickQ*. Enter /E? (? = new escape digit).

Troubleshooting The Queue Escape Feature

Problem: Callers complain that they cannot escape the queue when pressing the escape digit. Also, a number of unsuccessful attempts to escape the queue during the messages is reported in the appropriate reports to the system manager.

Solution: Add more DTMF tone detection devices to the Digital Communications System.

Section 8
Installing The New Voice Channel Cards

This section describes how to install additional Voice Channel Cards.

Insert the new voice channel card into a slot on the DVA motherboard (Figure 6-1). Connect the voice channel card to the I/O Board with a ribbon cable (Figure 4-1), and secure it to the DVA chassis with two #6-32 1/4-inch machine screws.

NOTE: *Wear a ground strap when working inside the DVA chassis to avoid damaging the DVA circuit boards with a static electricity discharge.*

1. Remove the three screws that secure the front cover of DVA chassis, and lift the front cover up slightly.
2. Locate the next open slot in the DVA motherboard to insert the voice channel card.
3. Set the jumpers J2 and J3 to the next voice channel card. Refer to Table 6-1 for jumper settings.
4. Switch the power OFF on the DVA.

NOTE: *Be sure to back up all of the pre-recorded announcements to the floppy disk before powering off the DVA.*

5. Insert the voice channel card into the open slot in the DVA motherboard. Push the voice channel card straight down until it is snugly in place and the metal bracket is flush with the securing bracket.
6. Use the two #6-32 1/4-inch machine screws to secure the voice channel card to the DVA chassis.
7. Connect the ribbon cable to the voice channel connector (Figure 6-2). The red stripe on the ribbon cable indicates Pin 1 on the ribbon connector. The voice channel connector on the voice channel card has pin 1 labeled.

NOTE: *The red stripe on the voice channel ribbon cable must face toward the outside of the DVA chassis.*

8. Connect the other end of the ribbon cable to the voice channel connector on the I/O board (Figure 6-3). The voice channel connectors on the I/O board are labeled 1 through 4, to correspond to the four possible voice channel cards. Select the proper connector for the voice channel card being added. The voice channel connector on the I/O board has Pin 1 labeled.

NOTE: *The red stripe on the voice channel ribbon cable must be facing out of the DVA chassis.*

9. Switch the power ON on the DVA.
10. Test the voice channel card. Refer to the Section 7 paragraph titled, *Testing voice channel card*.
11. Close cover.

This page remains blank intentionally.

Appendix 1
Using QuickQ With A Mouse

A mouse is a device that allows you to move a cursor on the screen to specific points for data entry, and other menu selections (Figure A1-1). An arrow image, called the mouse pointer, moves on the screen when you move the mouse. Practice moving the pointer. Stay away from the menu bar at the top of the screen. (If you accidentally make a menu appear, you can make it disappear by moving the pointer out of the menu and pressing and releasing the left mouse button.)

Occasionally the pointer might seem to disappear. Usually it is just off the screen. To make the pointer reappear, move the mouse in a circle a few times.

To move the mouse without moving the pointer, lift up the mouse. The pointer doesn't move while the mouse is in the air.

Most of the time, you use one of the following two mouse button techniques:

- clicking,
- dragging.

Clicking (Selecting an item): To click, press the left button and immediately release it. By clicking, you can select an item, such as a menu or an icon.

Note that the top left corner of the screen has a sign-in label. Use it to perform the following exercise. Place the pointer at the sign-in title and click the mouse button. *QuickQ* opens a window.

Dragging (Moving a window): Dragging consists of three steps:
1. pressing and holding the left mouse button,
2. moving the mouse,
3. releasing the mouse button.

Dragging allows you to move the position of a window on the screen. You can position different windows on the screen to give yourself a better view of system set-up parameters (for example, the announcement window and the line group window). Having both windows appear at the same time, you can identify the announcement messages assignment that is relative to the line groups. To move the sign in window, place the pointer on the title bar (system access), and drag. As you drag, an outline of the window moves with the pointer's. Practice moving the sign in window on the screen.

Figure A1-1. Using The Mouse

Window Graphic in QuickQ

If you are familiar with a window environment, you can skip this discussion.

QuickQ is easy to use. Most of what you see and do in the ACD console happens in a window. A window is a screen area that the *QuickQ* system uses to exchange information with you. There are many windows. For example, you enter your password through a window, *QuickQ* displays the Line-group data through a window, and so forth. You can move, resize, zoom, overlap, close and open one or more windows in one screen. While you can have any number of windows opened, only one window can be active at any time. The active window is the one that you are currently working in. Any command that you choose or text you type generally applies only to the active window.

The active window always has a close box, and may have a zoom box, scroll bars, and a resize corner. (Figure A1-2 shows a typical window). If your windows are overlapping, the active window is always the one on top of all the others (the foremost one).

As stated above, all *QuickQ* windows have the following features in common:

- a title bar,
- a close box.

The Title Bar: The topmost horizontal bar of a window contains the name of the window. You can drag the title bar to move the window around.

The Close Box: This is the box in the upper left corner. You click your computer's mouse on this box to quickly close the window.

The Zoom Box: This box may appear in the upper right corner. If the icon in that corner is an up arrow, you can click on the arrow to enlarge the window. If the icon is a doubleheaded arrow , you can click on this to return the window to its previous size.

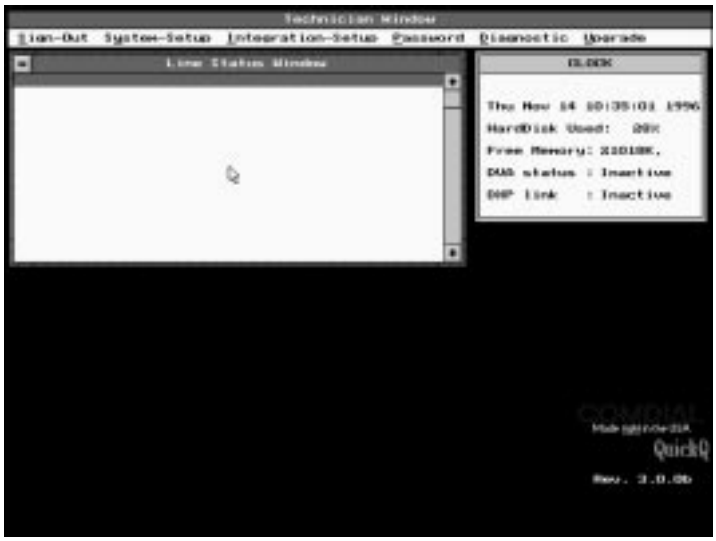
Some of the more complex windows have the following additional features:

- scroll bars,
- resize edges.

Scroll Bar: The scroll bar, if available, appears in the right side of the window. You use your mouse with this bar to scroll the contents of the window. Click on the arrow at either end to scroll one line at a time. (Keep the mouse button pressed to scroll continuously.) You can drag the the scroll box at any spot on its bar to move it to a more convient position.

Resize Edges: The four extreme edges of a window are the resize edges. You can drag any edge to make the window larger or smaller.

Help Box: A help window, if available, will give you further instructions specific to the active window. Press F1 to open the help window.



QQ61

Figure A1-2. Viewing A Typical QuickQ Window

Appendix 2

Reviewing The Programming Road Map

Start-up, Technician's, And System Manager's Screens

Start-up Screens

Sign-In
- ID # XXX
- Password XXX

Technician's Screens

System Setup
- QuickQ Master Setup
  - Master Extension
  - Master 2 Extension
  - QuickQ OAI Key Code
- QuickQ Line Setup
  - Name
  - Group
  - Subgroup
  - Line No.
- DID/DNIS Table
  - Table 1
  - Table 2
  - Table 3
  - Table 4
- Voice Port Config.
  - Voice Port No.
  - Station
  - Type
- Printer Setup
  - Printer Type
    - Other
    - Epson LQ
    - HP Laser
    - HP DJ 500
    - HP DJ 550C
  - Printer Port
    - LPT 1

Integration Setup
- External Overflow
  - Overflow Extension Setup
    - 1st Overflow Extension _ _ _ _
    - 2nd Overflow Extension _ _ _ _
    - 3rd Overflow Extension _ _ _ _
    - 4th Overflow Extension _ _ _ _

Password
- Technician Password
  - Old Password XXX
  - New Password XXX

Diagnostic
- QuickQ Status
- Agent Status Scan
- Line Status Scan
- Voice Port Status Scan

Upgrade
- ID # XXX
- Password XXX
- Agent Size
- Wallboard

System Manager's Screens

System Setup
- Company Name
- ID Password
  - Group Name XXXXXXXX
  - Supervisor Name XXXXXXXX
  - ID # XXX
  - Password XXX
- Time/Date
  - Date dd-mm-yyyy
  - Time HH:MM
- Intergroup Overflow
  - Group 01-16
    - Level 01
    - Level 02
    - Level 03
    - Level 04
- Announcement
  - Message
    - Message 1-16
    - Description
    - Current Time MM:SS
    - Limit Time MM:SS
- Account Code
  - Starting Number Range X
    - Account Code XXX
    - Description
- Stat Bin
  - Answer Bin
    - Time Bin 1 MM:SS
    - Time Bin 2 MM:SS
    - Time Bin 3 MM:SS
    - Time Bin 4 MM:SS
    - Time Bin 5 MM:SS
    - Time Bin 6 MM:SS
  - Abandon Bin
    - Time Bin 1 MM:SS
    - Time Bin 2 MM:SS
    - Time Bin 3 MM:SS
    - Time Bin 4 MM:SS
    - Time Bin 5 MM:SS
    - Time Bin 6 MM:SS
- Wallboard
  - Setup
    - Wallboard 01-16
    - Group 01-16
    - Type Mono/Color
    - Title Yes No
    - Title Display
    - Summary Yes No
    - Buzzer Yes No
  - Parameter
    - Wallboard 01-16
    - Group 01-16
    - Type Mono/Color
    - P1-P6

Group Programming
- Group 01-16
- (Link to Group Supervisor Screens)

System Backup
- Announcement Backup
  - Backup
  - Restore
- Configuration Backup
  - Backup
  - Restore
- Stats Backup
  - Cancel
  - Backup

System Manager's Screens . . . . (continued)

Management Info
- Real Time
  - System Agent Status
  - System Line Status
- Historical Reports
  - Daily (see box)
  - Weekly (see box)
  - Monthly (see box)
- Current Reports
  - Hourly
    - Report Type (see note)
    - Report Format
      - Numerical
      - Graphical
    - Note
      - Abort
      - Save
    - Print
      - Print Numerical
      - Print Graphical
      - Print All
  - Daily
    - Report Type (see note)
    - Report Format
      - Numerical
      - Graphical
    - Note
      - Abort
      - Save
    - Print
      - Print Numerical
      - Print Graphical
      - Print All
- Report Schedule
  - Daily
    - Print Type
      - Numerical
      - Graphical
      - Numerical/Graphical
    - Report Type (see note)
    - Print Time HH:MM
  - Weekly/Monthly
    - Print Type
      - Numerical
      - Graphical
      - Numerical/Graphical
    - Report Type (see note)
    - Weekly Report Print
      - Disable
      - Day of Week
    - Monthly Report Print
      - Disable
      - Enable
- Wallboard Message
  - Add
  - Send
- Wallboard Schedule
- Wallboard Alarm
- Configuration
  - Group
  - System
  - Technician
  - Group 01-16
  - Print

Report type
Report format
Note
Print
Copy
Delete
Export

Note: *Report Types are—*
Answer Bins
Abandon Bins
Incoming Call
Total Time
Average Time
System Capacity
Account Code
Traffic Analysis (not in current hourly report)

SEE NEXT PAGE FOR GROUP SUPERVISOR'S SCREENS

Reviewing The Programming Road Map (continued)

Group Supervisor's Screens

Access Group Supervisor's Screens as follows:

1. Select *MANAGER* from the Sign-in Screen.
2. Select *Group Programming* from the Manager Screeen.
3. Select a Group (*01-16*) from the Group Programming Screen.
4. Answer *Yes* to the question, Sign Through?

Group Setup
- Parameter Setup
  - Overflow Threshold MM:SS
  - Redirect Threshold MM:SS
  - Alarm Threshold MM:SS
  - Alarm Threshold Calls in Queue
  - Priority Override MM:SS
  - Call Screening Yes No
  - Automatic Force Call Yes No
  - Manual Answer Yes No
  - Force Account Code Yes No
  - All Agents Busy Alarm Yes No
  - Calling Line ID Yes No
  - Allow Suspension of Agent Set Yes No
  - Queue Escape Extension None XXXX
  - Queue Escape Digit X
- Day to Night Schedule
  - Disable
  - Monday HH:MM
  - Tuesday HH:MM
  - Wednesday HH:MM
  - Thursday HH:MM
  - Friday HH:MM
  - Saturday HH:MM
  - Sunday HH:MM

Agent Group-Setup
- AgGp_01
- AgGp_02
- AgGp_03
- AgGp_04
  - Agent Group Name XXXXXXX
    - Agent Name XXXXXXX
    - ID # XXX
    - Password XXX
    - Priority 01-04
    - Wrap-up MM:SS

Line Group Setup
- LnGp_01
- LnGp_02
- LnGp_03
- LnGp_04
  - Line Group Name XXXXXXX
  - Announcement Assignment
    - First Message X
    - Second Message X
    - Night Message X
    - Special Message X
  - Announcement Time Setup
    - First Msg Int. Delay MM:SS
    - Music Interval MM:SS
  - Line Group Priority 01-04

CLID
- Customer Setup
  - Add
    - Customer XXXXXXX
    - Phone Number XXXXXXXXXXXX
    - Priority 1-4
    - Group 1-16
  - Night Mode Routing
    - No
    - Yes
- Abandoned Call Report
  - Current
    - Sunday
    - Monday
    - Tuesday
    - Wednesday
    - Thursday
    - Friday
    - Saturday
    - Automatic Printing Interval
      - Disabled
      - 30 Min.
      - 1,2,4,6,8,12,24 Hrs

Management Info.
- Real Time Setup
  - Incoming Call Parameter MM:SS
  - Outgoing Call Parameter MM:SS
  - Busy Time Parameter MM:SS
- Real Time
- Historical Reports
  - Daily (see box)
  - Weekly (see box)
  - Monthly (see box)

  Report type
  Report format
  Note
  Print
  Copy
  Delete
  Export
- Current Reports
  - Hourly
    - Report Type (see note)
    - Report Format
      - Numerical
      - Graphical
    - Note
      - Abort
      - Save
    - Print
      - Print Numerical
      - Print Graphical
      - Print All
  - Daily
    - Report Type (see note)
    - Report Format
      - Numerical
      - Graphical
    - Note
      - Abort
      - Save
    - Print
      - Print Numerical
      - Print Graphical
      - Print All
- Report Schedule
  - Daily
    - Print Type
      - Numerical
      - Graphical
      - Numerical/Graphical
    - Report Type (see note)
    - Print Time HH:MM
  - Weekly/Monthly
    - Print Type
      - Numerical
      - Graphical
      - Numerical/Graphical
    - Report Type (see note)
    - Weekly Report Print
      - Disable
      - Day of Week
    - Monthly Report Print
      - Disable
      - Enable

Management Info.
. . . . (continued)
- Wallboard Message
  - Add
  - Send
- Wallboard Schedule
  - Add
    - Day
    - Time MM:SS
    - Message (70 chars.)
- Wallboard Alarm
  - Add
    - Parameter
    - Function
    - Threshold
- Configuration
  - Group
  - System
  - Technician
  - Group 01-16
  - Print

Note: *Report Types are—*
Answer Bins
Abandon Bins
Incoming Call
Total Time
Average Time
System Capacity
Account Code
Traffic Analysis (not in current hourly report)
Prefer Customer

Appendix 3
Using The Report/Data File Conversion Utility

Use this *QuickQ* conversion utility to upgrade reports or data files from version 2 to version 3 software.

You can convert files directly in the same PC before running the version 3 program or you can copy the version 2 files to a different PC running version 3 software and then run the conversion utility.

Converting Existing QuickQ 2.0.0 Report Files To QuickQ 3.1.0 Report Files

1. Exit *QuickQ* if it is running.
2. Press **Shift** and **F3** keys at the same time.
3. Insert the utility disk labeled *QuickQ Conversion Utility Version 1.0.0* into disk drive A.
4. Typa **a:** at the DOS prompt and press the **Enter** key.
5. Type **conv_rep** and press the **Enter** key.
6. Follow the instructions on the screen.

The conv_rep.bat program will convert the report files in c:\stats directory and its sub directories. A copy of the report files prior to conversion will be saved in the directory called c:\oldstats.

NOTE: Do not attempt to run the utility a second time if the previous try was successful. If, for some reason, you must reconvert the old files, copy the original files from c:\oldstats to c:\stats and then run the conversion utility again.

Converting Existing QuickQ 2.0.0 Data Files To QuickQ 3.1.0 Data Files

NOTE: Run the QuickQ file conversion utility with the Digital Communications System connected to the COM port of the QuickQ computer. The conversion utility will check for the QuickQ line of the Digital Communications System. If the conversion utility cannot verify the line, it will remove the line from the QuickQ programming rather than converting the line data to the new data format.

1. Exit *QuickQ* if it is running.
2. Press **Shift** and **F3** keys at the same time.
3. Insert the utility disk labeled *QuickQ Conversion Utility Version 1.0.0* into disk drive A.
4. Typa **a:** at the DOS prompt and press the **Enter** key.
5. Type **conv_dat** and press the **Enter** key.

NOTE: The default COM port is COM2 and default baud rate is 9600. Different settings can be specified if the command line is as follows:

conv_dat.bat/b96/c1 (for COM port 1 and baud rate 9600)
—or—
conv_dat.bat/b192/c2 (for COM port 2 and baud rate 19200)

Possible options for COM port number is /c1,/c2,/c3, and /c4 while possible options for the baud rate is /b192 and /b96.

6. Follow the instructions on the screen.

The batch program conv_dat.bat will convert the data files in c:\quickq directory and copy the original data files to c:\quickq\qq2_dat directory.

NOTE: Do not attempt to run the utiltiy a second time if the previous try was successful. If, for some reason, you must reconvert the old files, copy the original files from c:\quickq\qq_dat to c:\quickq and run the conversion utility again.

Publication Index

Q

R

S

T

U

V

W

LIMITED WARRANTY

The initial hardware and software of all Comdial Corporation ("Comdial") products shall be referred to collectively herein as the "Product". Products containing some other manufacturer's warranty are warranted solely by the manufacturer thereof as set out in such warranty and are sold by Comdial strictly "as is". Comdial warrants, only to its purchaser and its authorized dealers, that, under normal operating conditions, (a) the Product hardware (except for fuses, lamps and other consummables) and the medium on which the Product software is contained will be free from defects in material and workmanship, and (b) the Product software will perform substantially in accordance with the Product specifications established by Comdial, in each case for the period specifically stated in the installation manual, user guide or other literature accompanying or for the Product, measured from the manufacturing date stamped on the Product hardware or software, as the case may be, provided however, development products, i.e., products which have not yet been approved by Comdial for production, are sold pursuant to Comdial's field trial agreement and are warranted as set out therein. Comdial's sole obligation under this warranty or under any other legal obligation with respect to the Product is to repair or replace, at its option, the Product at its Charlottesville, Virginia, headquarters, free of charge, if the Product is deemed defective by Comdial during the warranty period, with refurbished or new equipment or parts, at Comdial's option, when the Product is returned to Comdial, freight or postage prepaid, during the warranty period, provided however, if Comdial is not able, using reasonable efforts, to cure or correct a defect, Comdial's sole obligation shall then be to refund (or cause to be refunded) an equitable portion of the price Comdial was paid for the Product. This warranty does not apply if, in the sole judgement of Comdial, the Product, or any part(s) or component(s) thereof, have been improperly installed or installed or used in combination or in assembly with hardware or software not supplied by Comdial and which are not compatible with the Product or which are of inferior quality, design or performance, or the Product, or any part(s) or component(s) thereof, have been improperly handled, misused, abused, altered, tampered with, accidentally damaged, or damaged or malfunction or fail to function due to neglect, negligence, contamination (by liquid or otherwise) or as a result of any other causes beyond Comdial's reasonable control, including extraordinary wear and tear and acts of God such as fire, flood, water, or lightning or other incidence of excessive or insufficent voltage or failure to follow instructions. Repair, wiring, or alteration of the Product other than as specifically authorized by Comdial or its authorized repair agent is prohibited and will void this warranty. This warranty does not cover costs associated with installation, removal, or reinstallation of the Product. Comdial does not warrant that the Product is compatible with all telephone or switching systems or that the Product is invulnerable or immune from unauthorized or fraudulent use, or unaccounted for access to the Product. THIS WARRANTY IS EXCLUSIVE, BEING IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF LIABILITY

WITHOUT EXPANDING UPON THE FOREGOING WARRANTY, THE MAXIMUM LIABILITY OF COMDIAL UNDER ANY WARRANTY, STATUTORY, EXPRESS OR IMPLIED, IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT. COMDIAL SHALL HAVE NO RESPONSIBILITY FOR DAMAGE TO PROPERTY OR ANY OTHER LOSS OR INJURY, INCLUDING CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, SUCH AS LOSS OF PROFITS OR LOSS OF BUSINESS INFORMATION, DAMAGES DUE TO BUSINESS INTERRUPTION OR ANY OTHER PECUNIARY LOSS, EVEN IF COMDIAL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR PUNITIVE DAMAGES, RESULTING FROM THE PURCHASE, POSSESSION, INSTALLATION, OPERATION, REPAIR, USE OF OR INABILITY TO USE, THE PRODUCT, OR THE UNAUTHORIZED OR THE FRAUDULENT USE OF, OR UNACCOUNTED FOR ACCESS TO, THE PRODUCT, ALL SUCH CLAIMS BEING HEREBY EXPRESSLY WAIVED. THE PURCHASER'S EXCLUSIVE WARRANTY AND REMEDY SHALL BE ONLY AS STATED HEREIN.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. If the Magnuson Moss Act should be held to apply to the sale of the Product by a court of competent jurisdiction, the implied warranty of fitness for a particular purpose shall extend for one year from the date of manufacture. No Comdial dealer nor any other person or entity other than Comdial may extend or modify this warranty, and no such modification or extension shall be effective unless it is in writing.

Warranty/rev1/lpf: 1/21/97

COMDIAL®

Printed in U.S.A.

IMI66-130.03
9/97