AB28-0001
September 2, 1994

ACD/MIS APPLICATIONS FOR STRATA DK280 SYSTEMS

INTRODUCTION

Buying a telephone system can be a confusing process for many businesses today. To many buyers, most of the leading systems appear very similar. Every manufacturer claims theirs is the best. Every distributor says they will provide the best service and support.

Competitors in this arena look for ways to distinguish their products and services from the rest. The most successful way is to provide added value through application selling. This pulls you out of the feature wars and enables you to sell productivity tools to improve the customer's service level, lower their costs, and improve their profits. By demonstrating that you understand their needs, you make the customer feel they are getting a solution tailored to meet their specific objectives.

A major distinguishing factor between telephone systems is Automatic Call Distribution (ACD). ACD enables you and the Strata DK280 to provide one of the most powerful yet cost effective value added applications available in the key/hybrid market today. Not just for the traditional, large call center applications, but for smaller departmental applications as well. In fact, it is the increasing growth of these smaller applications that is causing an ever increasing demand for ACD capabilities today.

This phenomenon has created many opportunities for selling Strata DK280 systems because it offers powerful yet affordable ACD options that are ideal for these smaller, departmental ACD applications. Comprehensive MIS options add even greater possibilities, and at an affordable price that makes MIS practical for almost every ACD application.

This application bulletin is intended to give you many good ideas about how to use ACD/MIS to further your Strata DK280 sales. To maximize these opportunities we highly recommend taking the Toshiba sales training course on ACD/MIS Selling Solutions. This will increase your skills in understanding the market, identifying applications and opportunities, cost justifying, and making the sale.

STRATA ACD DESCRIPTION

Automatic Call Distribution is an extremely efficient method for distributing inbound calls among one or more groups of call-handling agents. These agents may work in telemarketing, inside sales, customer service, technical support, or any function in which a group of people handle a large volume of incoming calls. Strata ACD ensures that calls are distributed evenly, so agent productivity is maintained at a high level, and inbound callers are handled effectively and efficiently.

If all agents are busy, calls to an ACD group are queued to wait for an available agent in the group. While in queue, callers typically are provided messages encouraging them to wait to be answered. Music from the system's music-on-hold device is often provided to make the waiting period more tolerable. If there are multiple ACD Groups, each can have separate music source and different announcements.

SBDK-0014
September 29,1997

4027070

Announcing Strata DK14 & DK40
New Small Systems With Big System Features

Toshiba is very pleased to announce two exciting new small systems, the Strata DK14 and DK40. These two powerful systems offer capabilities that will keep you ahead of the competition.

The **Strata DK14** is the new version of the original Strata DK8. The DK14 has all the features of the DK8 and, like the Strata DK40, has most of the features of and DK424 Release 3.1, including Caller ID, CTI TAPI integration, Multiple DNs, External Call Forward with Remote Change, Call Park Orbits, Handset OCA, Release/Answer button, “Assumed 9” Centrex Dialing, 10-digit local dialing, Distributed Hunting, Directory Number Call Pickup, SMDI Voice Mail Integration, System Speed Dial/digit Restriction enhancements, and Least Cost Routing and Toll Restriction enhancements, and more.

The Strata DK14 is an all new system. The Strata DK8 cannot be upgraded to a DK14.

The **Strata DK40** is an expanded and improved version of the Strata DK16e. Strata DK40 hardware is identical to DK16e hardware, except for the name on the cabinet. The DK40 is the same system as the DK16e, except it has new software that increases CO line capacity and adds some new features. CO line capacity is increased from 8 to 12. The DK40 also adds some DK424 Release 3.1 features that include Distributed Hunting, Directory Number Call Pickup, SMDI Voice Mail Integration, System Speed Dial/digit Restriction enhancements, and Least Cost Routing and Toll Restriction enhancements.

The Strata DK40 is also exciting news for existing DK16e customers. Strata DK16e systems can be chip upgraded to the DK40 to provide 12 CO line capacity and the additional DK40 features.

Product Line Strategy

The new Strata family consists of the DK14, DK40, and DK424. The Strata DK14 replaces the DK8, and the DK40 replaces the DK16e in the Strata product line.

DK14 System Description

The Strata DK14 is an all new system. Cosmetically, the KSU looks like the current Strata DK8, but has all new software and hardware components inside. The Strata DK14 uses a compact, flat-pack, wall mount, one-cabinet KSU design. The DK14 has maximum capacity for 4 lines, 8 digital stations, and 2 standard stations.

The DK14 KSU comes equipped standard with the following:

- Central processor and power supply.

- A battery connector plug for system battery backup.
- A 600 ohm page RCA jack.
- A music-on-hold/background music RCA jack.
- MOH/BGM volume control.
- A power failure transfer modular connector.
- Two CO line circuits with modular jacks.
- Four digital station circuits (amphenol).
- A 25-pair female amphenol connector to station tip/ring and relay contact.

The following interfaces can be added inside the DK14 KSU:

- **CO Line/Digital Telephone Interface Unit (QCDU2):** This new combo card provides 1 loop start CO line and 2 digital station circuits. Maximum 2 per system.
- **Standard Telephone Interface Unit (QSTU2):** This new card provides 2 standard telephone circuits for standard telephones, auto attendant devices, separate BGM source connection, voice mail systems, and facsimile machines. Maximum 1 per system.
- **DTMF Receiver/ABR Tone Detector Unit (QRCU3):** This new card provides 3 DTMF/ ABR circuits that enable the DK14 to recognize DTMF tones, detect busy tone for Auto Busy Redial, and is required for DISA. Maximum 1 per system.
- **Auto Attendant Feature Key Subassembly (QKYS):** This is the current DK8 feature key which will continue with the DK14. The QKYS supports the built-in Auto Attendant.
- **Serial Interface Unit (WSIU):** This new card provides 2 serial interface ports for SMDR, connection of call accounting device, customer-provided external modem for local/remote maintenance, and Caller ID CO line interface.
- **Caller ID:** An external 4-circuit dealer-supplied Caller ID Interface box (Tel-Control model TC-1041available directly from Tel-Control, Inc., Huntsville, AL, 205-881-4000) can also be added to the system to enable the 4 loop start lines for Caller ID. The CO lines connect to the Caller ID Interface box and the DK14 KSU. There is no Caller ID card inside the DK14 KSU to activate Caller ID on the CO line circuits. This is accomplished by the WSIU which connects the Caller ID Interface box to the DK14 KSU.

DK14 Hardware Compatibility

Strata DK8 components are not compatible with the DK14, with the exception of the power supply and the Auto Attendant Feature Key (QKYS).

Most Strata DK14 components are **backwards compatible** with the DK8 and include the following:

- CO Line Digital Telephone Interface Unit (QCDU2)
- Standard Telephone Interface Unit (QSTU2)
- DTMF Receiver/ABR Tone Detector Unit (QRCU3)
- Auto Attendant Feature Key Subassembly (QKYS)

The following Strata DK14 components are not backwards compatible with the DK8:

- Serial Interface Unit (WSIU)
- Caller ID Interface box

DK14 New Features

The Strata DK14 provides the following new capabilities that were originally introduced with the DK280 Release 3.0:

- **Caller Identification** displays the calling party's telephone number on the ringing telephone's LCD and/or is sent to an application computer or voice mail when they ring and when they are answered. In addition to the number, Caller ID can also provide the name of the caller, if provided by the local Central Office. The Strata DK14 can store up to 200 abandoned Caller ID numbers. An external dealer-supplied Caller ID Interface box and the WSIU card are required to enable the 4 CO lines with Caller ID.
- **Multiple Directory Numbers** provide the same call coverage flexibility the Strata DK40 and DK424 provide. Station directory numbers can appear on multiple telephones, and individual telephones can have multiple appearances of their own station directory numbers. All DNs can be used to originate and answer calls. A DN button can also be used to release an existing call and originate another call at the press of one button. While on a call, simply press the DN button you are using. It will automatically release the existing call and give dial tone to make another call. Three types of directory numbers are available.
  - **Primary Directory Numbers:** The system provides up to 10 primary directory numbers. Each telephone has a unique primary DN and can have up to 4 appearances of its own primary DN for simultaneous multiple calls.
  - **Secondary Directory Numbers:** The primary DN of one telephone can also appear as a secondary DN on all other digital telephones on the system, and can ring on all telephones. Incoming and outgoing calls can occur on each primary or secondary DN.
  - **Phantom Directory Numbers:** The system also provides 10 phantom DNs. A phantom DN is assigned to a designated telephone owner, who can set call forward for the phantom DN and receive off-hook call announce. A phantom DN can be assigned as a message waiting LED. A phantom DN can also appear on all other digital telephones on the system, and can ring on all telephones. Each phantom DN can only appear on one button of a given telephone, but up to 8 different phantom DNs can appear on each telephone. Phantom DNs are typically used as "Department DNs" where one DN may appear on all telephones in one department for group answering.
- **Call Park** has been enhanced for easier use, and to match DK40 and DK424 operation. Any telephone can hold a call for easy retrieval by that user or any other user with the following capabilities.
  - **Call Park Orbits:** A station user can place a call temporarily in an orbit so that the call can be retrieved by any user, from the same station or from a different station. There are 20 General Park Orbits for the system and one Personal Park Orbit for each station. 10 Personal Park Orbits are available to any types of telephones, including standard telephones. If a call is parked, but not retrieved within a preprogrammed time period, it will recall the parking telephone. The Park recall time is set individually for each station.
  - **Park and Page:** A station user can park a call in any of the General Park Orbits or in a personal Park Orbit, then enter a Page Zone or Group access code and announce to the paged party the orbit number of the waiting call. The user's telephone can be connected to a pre-designated External Paging circuit, a Telephone Paging group, or both. Note that zone page only applies to DK40. DK14 does not support zone paging.
  - **Auto Park:** This feature is only available to LCD telephones. When a telephone user parks a call, the user can enter 9 9 9 instead of a specific Orbit Number. The system

will then automatically select the next available General Park Orbit and park the call. The parking telephone's LCD will show the Park Orbit that has been automatically selected for the parked call.

- **Off-Hook Call Announce (OCA)** has been enhanced to include two different methods of operation, handset/headset or speaker mode. OCA operation mode can be enabled individually for each telephone that receives OCA.
  - **Handset Mode:** The OCA is sent to the called telephone's handset or headset receiver. The OCA called party will hear both the original talking party and the OCA calling party. The called telephone user can respond to the OCA calling party by pressing and holding the Mic button and talking into the telephone handset or headset transmitter. The outside original talking party will not hear the OCA calling party or the response, so this is a more private method of OCA than the speaker OCA mode. An OCA button can be programmed on a flexible key, set to operate in the push-on/push-off mode, for each individual telephone that receives OCA. When the OCA button is pressed on, the outside caller hears music-on-hold. This is a new method of operation for Strata DK14 and is a standard feature. Handset OCA does not require the DVSU in the telephone set.
  - **Speaker Mode:** The OCA is sent to the called telephone's speaker. The called telephone user can respond to the OCA caller by talking into the telephone microphone. The OCA call may be heard by other people near by, or by the outside original talking party, depending upon the speaker volume setting. This is a current method of operation for all Strata DK systems and is an optional feature. Speaker OCA requires the optional DVSU in the telephone set.
- **Call Forward External with Remote Change** capability permits CO line calls to be routed over an outgoing CO line to an outside directory number. The station user has the ability to cancel or change the destination of forwarded CO line calls from either inside or outside the office. This increases availability to receive incoming calls and makes it efficient and easy to control. It is great for very mobile users, particularly those using car phones.
- **Release/Answer Button** provides an efficient way to handle multiple incoming calls. When talking on a call and receiving a new call, pressing the Release/Answer button will automatically disconnect or transfer the active call and answer the next incoming call. This button will normally be programmed to appear on telephones that answer calls in heavy traffic situations.
- **Auto Attendant Delayed Ringing** enables the auto attendant be used for overflow and secondary answering purposes. This is useful in applications in which the auto attendant only answers if no one is available to handle the primary answering of calls. This is the same operation as the Strata DK40 and DK424 auto attendant.
- **Internal Station-to-station Transfer** enables the transfer of an internal station call, as well as a CO line call, to another internal station. This is very useful for answering positions who get lots of internal calls asking for other station users.
- **Assumed "9" Centrex Dialing compatibility** enhances the current system operation by allowing toll restriction override and LCR local route selection when * or # is entered as the first or last digit of a Centrex feature code or extension number. This is useful in Centrex applications and for Caller ID call blocking. This feature works on outgoing calls using CO Line keys, Pooled Line keys, or Least Cost Routing. It is a system wide on/off setting in system programming.
- **10-Digit Local Dialing** enhances Toll Restriction and Least Cost Routing to allow up to 6 special area codes to be routed as local calls without dialing a digit "1" prefix before the

area code. This feature is not required in most areas of the country, but helps in some areas where local dialing rules have this exception to the standard new North American Dialing Plan.

- **Alert Signaling Button** enables a digital telephone user to signal a pre-designated station. Whenever the user presses the Signal button, they will automatically ring the designated station, in either idle, busy, or DND status, with a distinctive alert tone signal. This feature is useful in boss/secretary applications to alert someone about some pre-arranged event or action.
- **Standard Telephone Camp-on Tone** is optional to alert a standard telephone user that a call is camped-on.
- **Pooled Line Key enhancement** has been made to LED flashing on incoming calls. When an incoming CO line call rings on a line included in a pooled line key group, the LED will flash only on telephones which are programmed for ringing. Stations that are not programmed for that CO ringing will not have their pooled line key's LED flash on incoming calls to CO lines in that pooled line key group. This eliminates the accidental pickup of incoming calls when trying to call out, and reduces the confusion or distraction from LEDs flashing on stations that do not have an incoming CO line call for them. This is the same operation as the Strata DK40 and DK424.
- **Distinctive Station Ringing has been enhanced** to provide digital and electronic telephones with one of three very different ring tones for incoming CO line calls. This is an improvement over the two ring tones available with the previous Strata DK8.
- **Call Pickup for Multiple Station Groups** enables you to pick up calls ringing in predetermined groups with programmable buttons or brief access codes that are easy to use and remember. Station users can pickup incoming calls at any station in their own group, and can pickup calls from other groups. Up to 16 call pickup groups can be created to provide maximum call coverage.

The Strata DK14 also provides the following new capabilities that were recently introduced with the DK424 Release 3.1:

- **Directory Number Call Pickup** enables calls held or ringing on any Primary or Phantom directory number to be picked up by any other station. This is useful in answering a specific call on a specific DN at another telephone that has multiple calls holding or ringing.
- **Distributed Hunting** enhances previous hunting capabilities to add up to 16 Distributed Hunt Groups. The functionality is the same as with the Strata DK40 and DK424 Release 3.1, with the same programs as the DK424. Distributed Hunt is very popular in voice mail applications with voice mail ports all in a distributed hunt group. This provides very efficient utilization and availability of voice mail ports.
- **SMDI Voice Mail Integration** provides RS-232 connection between the DK14 and voice mail. This provides many benefits. For example, Stratagy uses the call forwarding status supplied by SMDI to provide better call coverage. The status information also enables Stratagy to perform custom applications using Stratagy RNA and Busy Chain options. SMDI also applies the internal calling party's identification to the voice mail so the user does not have to enter their user ID when entering their mailbox or replying to a message. SMDI is faster and more efficient integration compared to DTMF (in-band) integration. SMDI can be connected using the same programs as the Strata DK40 and DK424 Release 3.1.

- **System Speed Dial/digit Restriction enhancements** have been made so that when system speed dial is used to override Toll Restriction, digit restriction is only applied to stations that have digit restriction enabled in programming. This provides flexibility of operation on a per station basis. In previous Strata DK software versions, digit restriction is always applied after system speed dial overrides Toll Restriction.
- **Least Cost Routing and Toll Restriction enhancements** have added a new option to allow LCR to route calls and apply Toll Restriction to telephone numbers dialed after dialing special codes like caller ID blocking code *85. This ensures calls get properly routed by LCR even if they include special codes that are also used as the last digit of a Centrex feature code. Centrex station numbers and 10-digit numbers always route via the LCR local route.

DK40 System Description

The Strata DK40 uses the same hardware as the current DK16e. The Strata DK40 system uses the same compact, flat-pack, wall mount KSU base and expansion cabinet design as the DK16e. It consists of a DK40 base KSU and an expansion cabinet that are the same as the DK16e except for the labels. The DK40 has new software that provides some new features and maximum capacity for 12 CO lines and 28 stations.

The base KSU houses the processor, power supply with battery back interface, 600 ohm page RCA jack, music-on-hold RCA jack, MOH volume control, one power failure transfer modular connector, and provides 8 digital station circuits built-in. Because of the different type CO line interfaces available, there are no CO line circuits built-in the base KSU.

All existing CO line, station, and option interfaces will continue to be used in the DK40 base KSU. The only exception is the new **DTMF Receiver/ABR Tone Detector Unit (K5RCU1)**. This new 5-circuit DTMF/ABR unit installs onto the motherboard in the base KSU. Maximum 1 per system. The K5RCU1 takes the place of the K4RCU3 and is backwards compatible with DK16e and DK16 systems. When the K5RCU1 is used in DK16e and DK16 systems only 4 circuits will function.

DK40 Increased Capacity

CO line capacity is increased from 8 to 12 in the Strata DK40. Four more of any one type (Tie, DID, Ground, or Loop Start) line may be added to the system. Maximum CO line capacities are as follows (with various combinations as shown in the Strata DK Installation & Maintenance Manual):

- 8 Tie Lines
- 8 Ground Start Lines
- 12 Loop Start Lines
- 12 DID Lines

The increased CO line capacity complements the increased station capacity added last year with the DK16e. Maximum capacity of the Strata DK40 is 12 CO lines and 28 stations.

The maximum number of stations is 28 digital stations or 20 standard stations or various combinations in between. The many maximum combinations of digital and standard stations, as well as CO line interfaces, are described in the Strata DK General Description. Cards must be installed in the expansion cabinet exactly as shown in the Strata DK Installation & Maintenance Manual for correct operation.

DK40 New Features

The Strata DK40 provides the following new capabilities that were recently introduced with the DK424 Release 3.1:

- **Directory Number Call Pickup** enables calls held or ringing at any Primary or Phantom directory number to be picked up by any other station by dialing an access code and the DN to be picked up. This is useful in answering a specific call on a specific DN at another telephone that has multiple calls holding or ringing.
- **Distributed Hunting** enhances previous hunting capabilities to add up to 16 Distributed Hunt Groups. The functionality is the same as with the Strata DK424 Release 3.1, with the same programs as the DK424. Distributed Hunt is very popular in voice mail applications with voice mail ports all in a distributed hunt group. This provides very efficient utilization and availability of voice mail ports.
- **SMDI Voice Mail Integration** provides RS-232 connection between the DK40 and voice mail. This provides many benefits. For example, Stratagy uses the call forwarding status supplied by SMDI to provide better call coverage. The status information also enables Stratagy to perform custom applications using Stratagy RNA and Busy Chain options. SMDI also applies the internal calling party's identification to the voice mail so the user does not have to enter their user ID when entering their mailbox or replying to a message. SMDI is faster and more efficient integration compared to DTMF (in-band) integration. SMDI can be connected using the same programs as the Strata DK424 Release 3.1.
- **System Speed Dial/digit Restriction enhancements** have been made so that when system speed dial is used to override Toll Restriction, digit restriction is only applied to stations that have digit restriction enabled in programming. This provides flexibility of operation on a per station basis. In previous Strata DK software versions, digit restriction is always applied after system speed dial overrides Toll Restriction.
- **Least Cost Routing and Toll Restriction enhancements** have added a new option to allow LCR to route calls and apply Toll Restriction to telephone numbers dialed after dialing special codes like caller ID blocking code *85. This ensures calls get properly routed by LCR even if they include special codes that are also used as the last digit of a Centrex feature code.

Upgrades

The **Strata DK8 cannot** be upgraded to the DK14. The Strata DK14 is an all new KSU with all new hardware.

The **Strata DK16e can** be upgraded to the DK40. All that is required is a chip upgrade kit called the DK40-ROM-KIT. All other hardware is common between the DK16e and the DK40.

- Upgrading is easy using DKBackup or DKAdmin.
- See *Technical Bulletin TBDK-0008*, previously sent to you, for DK40 chip upgrade instructions.

In fact, Toshiba has been conducting a **DK40 early upgrade program** to get you started with the DK40 early. Beginning earlier this month, all new DK16e systems have been shipped with a DK40 upgrade kit. This enables you to provide your customers the additional CO line capacity and new features immediately.

Documentation

A new brochure has been created for the Strata DK14 & DK40.

An all new General Description has also been created for the new Strata DK product family. It contains information on the Strata DK14, DK40, and DK424.

All documentation, including the Strata DK Installation & Maintenance manual, Programming manual, User Guides, and Quick Reference Guides are being revised and will be available before product release. The Strata DK Feature Description Manual is also being revised and will be available later.

Also note that this new documentation will soon be available on CD-ROM. We will mail it to you in mid-October. This will provide you electronic access to this valuable reference information. It will also enable you to print these documents as you need them.

Pricing

Great news! The Strata DK14 is the same price as the DK8, enabling the DK14 to take the DK8's place in the Strata product line with greater functionality and greater value at the same price.

More great news! The Strata DK40 is the same price as the DK16e, enabling the DK40 to take the DK16's place in the Strata product line with greater functionality, greater capacity, and greater value at the same price.

These exciting new products will be more competitive than ever. See the new *Strata DK Price Book* for all the details.

Availability

The Strata DK40 started shipping earlier this month. Orders can now be placed.

Beginning earlier this month, a DK40 upgrade chip has been shipped with every new DK16e system. This enabled you to begin selling and installing new DK40 systems early. Additional DK40 upgrade kits are now available for existing DK16e installed systems.

The Strata DK14 is scheduled to begin shipping mid-November. Orders can be placed beginning 10-15-97.