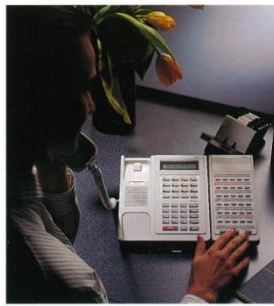


NEC Ranger AK 412 VS NEC Ranger AK 824

Colour Scan of Brochure



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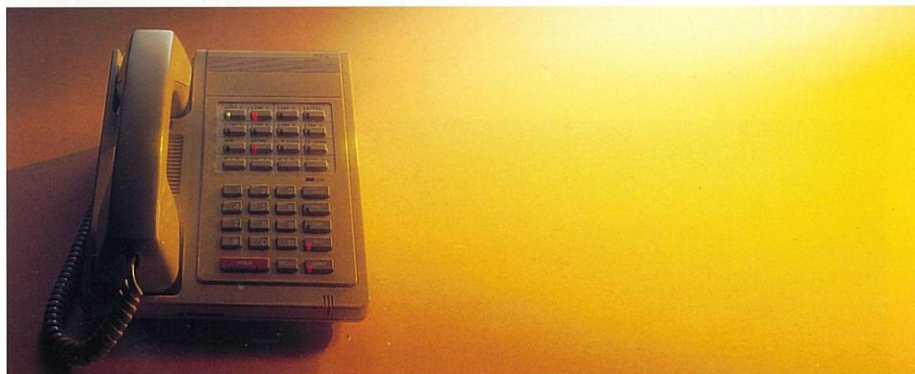
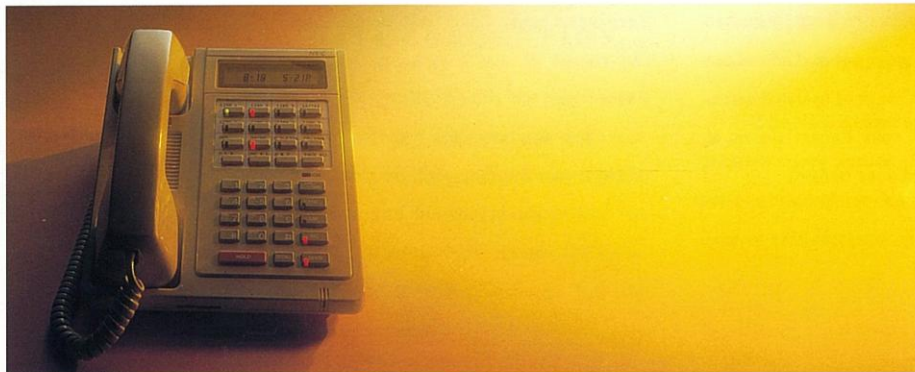
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C&C for Human Potential

R A N G E R

BUSINESS TELEPHONE SYSTEMS

R A N G E R A K



FLEXIBILITY AND FEATURES

NEC

INTRODUCING THE NEC RANGER

It's the very latest in business telephone system technology - from Australia's leading supplier of telephone systems, NEC.

The new Ranger system has been specifically designed for small business. Although it is not a PABX, it does offer similar features. However, the main benefit of the Ranger to business is that any telephone exchange line can be picked up from any extension. So you don't need an operator.

The Ranger is surprisingly easy to install. A compact unit is simply mounted on the wall - a real space-saver. And you can choose from a wide range of optional extras that let you design your Ranger system to suit your needs and your budget.

THE RANGER FLEXIBILITY

The NEC Ranger series consists of two extraordinarily flexible systems. The AK-VS is a 2 exchange line, 6 extension system. This can be expanded to 4 exchange lines and 12 extensions by the insertion of an expansion card.

The AK is the larger of the two systems. The basic system has 4 exchange lines and 12 extensions.

The system can accommodate a maximum of 8 exchange lines and 24 extensions with the insertion of up to 2 expansion cards. Conversely, both systems can consist of just 1 exchange line and 2 extensions.

You can also use the Ranger to increase your PABX capacity.

THE RANGER FEATURES

The NEC Ranger has all the standard features you expect from a telephone system these days. But it also has some outstanding features all of its very own.

VOICE MAIL MESSAGING

VOICE MAIL INTERCOM

This unique feature will help you save time and money. It puts an end to lost messages and unanswered calls.

For internal calls, you can record your message into the telephone by simply pressing a sequence of buttons on the handset. The system can hold up to 8 thirty-second messages or 16 fifteen-second messages at any one time.



VOICE MAIL INTERCOM

CALL ACCOUNTING



RANGERS' UNI

CUSTOMISED ANSWERING

When you're not at the office, external callers can be greeted by a personalised message. Up to three such messages can be created and stored simultaneously by pressing access codes.

MESSAGE ON HOLD

Voice Mail also allows you to give callers placed on hold a pre-recorded message while you are answering a call on another line. This feature ensures that all calls are answered promptly, so your callers aren't left listening to a ringing tone. You can also use the message on hold feature as a marketing tool by introducing new product information to the callers placed on hold.

CALL ACCOUNTING

If controlling telephone costs is a problem, then the Call Accounting feature is the solution. With the Ranger's Call Accounting feature you can keep a check on all outgoing telephone calls. Using a printer, detailed outgoing call reports can be generated, including: • Start time of call • End time of call • Telephone number called • Extension number calling • Date of call • Exchange line used for call.

You can also connect the Ranger to an external computer with a TIMS package if more detailed reports are required.

DATA CONNECTION

This facility is built into your Ranger system. Attach a computer and modem to the display handset and you can transfer computer data via the telephone line (in and out). With the NEC Ranger there's no need for a dedicated exchange line for data transmission.

You can also transfer computer data from one display handset to another within the office using a modem at each handset.

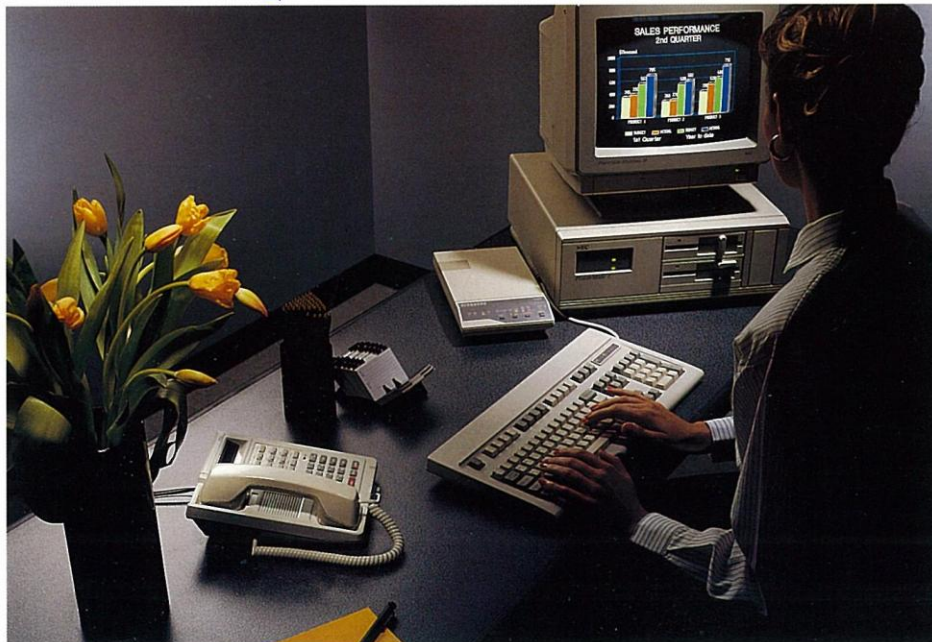
SHARED FACSIMILE PORT

Many businesses need a dedicated exchange line for their facsimile machine. NEC's Ranger, however, has, as standard, a facsimile connection allowing the use of one of the Ranger's own exchange lines for facsimile transmission. And when it's not being used, you can use this line to dial out.

DOOR PHONE AND DOOR LOCK RELEASE

The NEC Ranger can even make your premises more secure. A speaker with a built-in microphone can be installed at the front or rear entrance.

DATA CONNECTION



The door lock can then be unlatched by pressing a code on one of the telephones within the premises. Other security devices are also available.

CALL BACK

If you call an extension that is busy or unattended, you can leave a visual indication on the other person's handset for them to return your call. Alternatively, if the other party is busy, you may set an automatic "call back" which rings both handsets when free.

OUTDOOR EXTENSION

The Outdoor Extension (ODX) facility is a revolutionary, Australian-designed and cost-effective way of linking your office to another location. You just pay an annual fee for a dedicated exchange line, then every call you make after that is free.

In addition to this feature, the ODX interface lets you link the Ranger key service unit to any Austel approved two-wire product such as a modem, call diverter, cordless telephone or answering machine.

TWIN COLOUR LED'S

In the past, it has been a little confusing when you put a call on hold. Because all the LED (Light Emitting Diode) lights have been red, it's been easy to pick up someone else's exchange line accidentally.

This won't happen with the NEC Ranger. Your exchange line light will always be green while on other extensions it will be red - you can't make a mistake.

ATTENDANT CONSOLE

The attendant console is an option that can be used with the display handset. The first 24 buttons on the attendant console indicate the extension status. If one of the

LEDs is red, that extension is being used. If the LED is flashing red, that extension has placed their telephone on "do not disturb" or they have forwarded their calls to another extension.

The remaining 9 buttons can be used to access system features such as zone paging, door phone and night transfer.

HEADSETS

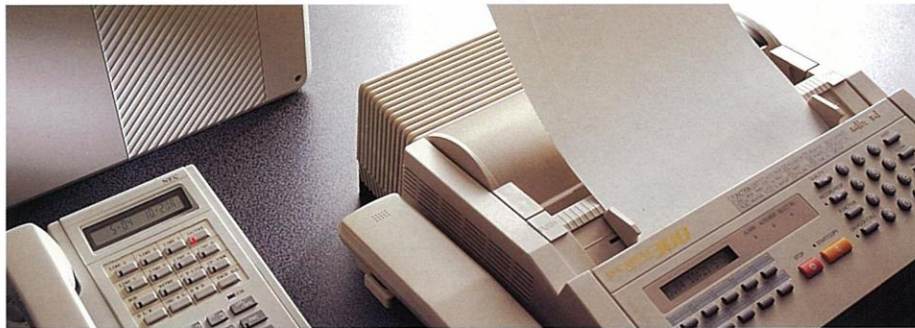
Headsets are available as an option for use with the display handset.

PAGING FACILITIES

The Ranger has full paging facilities including zone paging, internal paging (through telephone handsets) and external paging (through optional loudspeakers).

You can also answer a page from any extension.

SHARED FAX PORT



TWIN COLOUR LED'S

POWER FAILURE FACILITIES

With the Ranger, you won't lose calls because of power failures. The key service unit comes with a standard 10-minute battery. An optional 2-hour battery is available for longer power failures.

In extreme cases, optional power-fail telephones are available for every exchange line to give you direct access to your exchange lines. System and extension programming will continue to be stored for at least seven days without power to the Ranger.

FEATURE ACCESS KEYS

Each Ranger handset has a number of feature access keys. They allow you to access your most frequently used telephone numbers or system features quickly, by one-touch dialling.

The LEDs on the feature access keys will indicate the status of designated extensions as well as providing one-touch access.

SYSTEM PROGRAMMABLE NUMBERS

Eighty telephone numbers can be programmed into the system for use by every extension.

EXTENSION PROGRAMMABLE NUMBERS

Twenty extension-based speed dial numbers can be programmed for personalised numbers. These speed dial numbers can only be accessed by your extension.

CONFERENCE CALLS

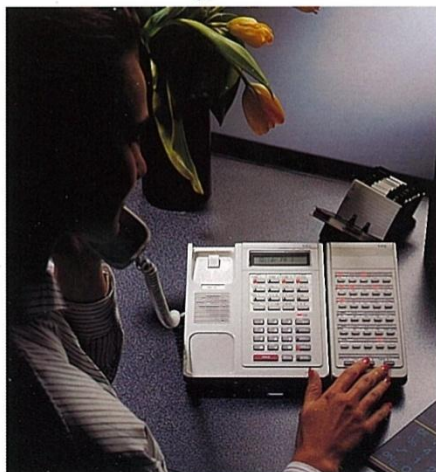
You can use your Ranger to hold a conference call with up to 3 parties, including 2 external callers.

PRIVATE OUTGOING TELEPHONE LINES

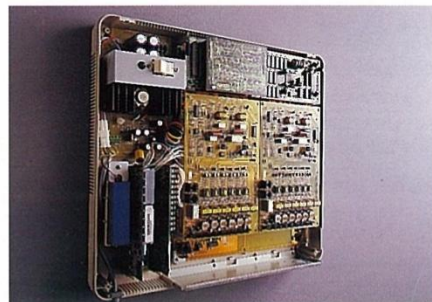
With this feature certain staff members can have their own personal exchange line. This puts a stop to busy executives having to wait for the next available line.

Inside the office, and out, your business will communicate better with the NEC Ranger.

ATTENDANT CONSOLE



KEY SERVICE UNITS



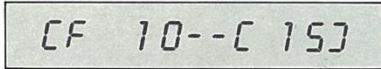
FUNCTIONS AVAILABLE WITH THE RANGER KEY TELEPHONE

① 16-Digit Liquid Crystal Display

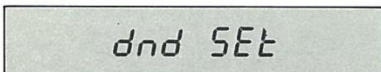
Paging - Paging through telephone handsets.



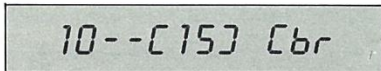
Call forward - Forward your calls to another extension.



Do not disturb - Place your telephone on do not disturb.



Callback Request - Send a callback request to another extension.



② Exchange Line Buttons

To place exchange line calls or answer incoming exchange line calls on hold.

Exchange Line Lamps

Blink or light up to show exchange line calls are being made or to show outside lines that are on hold.

Twin colour LEDs for easy exchange line identification. Your exchange line is green and it is shown on other handsets as red.

③ Feature Access Buttons

By designating these buttons for specific functions, you can activate several special features at the touch of a button.

Examples:

One-Touch Dialling Button for placing outgoing calls to a frequently called party.

DSS/BLF Button for placing specified intercom calls. You can also designate One-Touch Transfer with this button.

Do Not Disturb for rejecting incoming calls.

Receiving Volume Control Button for increasing reception volume control.

④ Dial Pad

Lets you use the dial pad for push-button dialling even when the exchange line is designated for dial pulses.

⑤ HOLD Button

To put an exchange line or intercom call on hold.

⑥ RECALL Button

To transfer an exchange line or intercom call or when used in a PABX system.

⑦ SPKR Button

To listen to the other party's voice through the speaker.

SPKR Lamp

Indicates speaker is on.

⑧ MIC Button

To turn microphone on when you wish to answer or speak without picking up the handset.

MIC Lamp

Indicates microphone is on.

⑨ CNF Button

To set up a conference call by adding a third party to a conversation between two extensions.

CNF Lamp

Indicates conference in session. Also lights up when the line used for conferences is full.

⑩ FNC Button

Used with other buttons for various special functions.

FNC Lamp

Lights up when the FNC button is pressed. Blinks when making intercom calls, for message waiting, for callback requests, and for intercom voice mail messaging.

⑪ LNR/SPD Button

For last number dialled or speed dialling.

⑫ ICM Lamp

Blinks for incoming intercom calls. Lights up to indicate intercom is in use, or when all intercom paths (maximum 5) are busy.

⑬ Speaker

⑭ Speaker Volume Slide Control

Increases or decreases speaker volume.

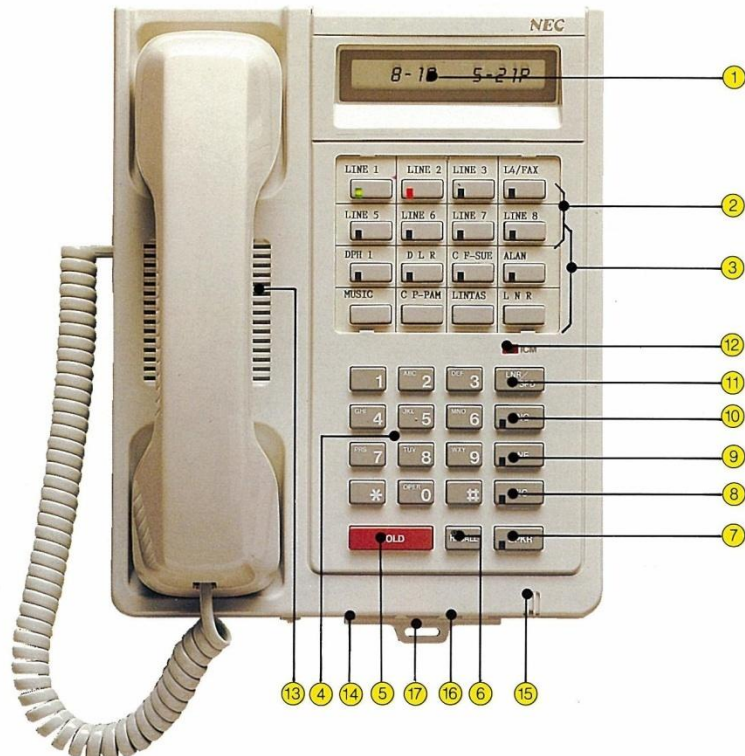
⑮ Microphone

⑯ Ringing Tone Control Switch

(Mounted on the Bottom)

To adjust the ringing tone.

⑰ Directory Tray



SERVICE FEATURES

Origination of an Exchange Line Call

- Automatic idle exchange line seizure
- Automatic pause behind PABX
- Chain dial
- Consecutive dialling
- Exchange line on-hook origination
- Desired exchange line seizure
- DP/MF mixed use
- Last number dialled memory
- Manual pause – dialling
- Manual pause – speed dialling memory
- MF signal switching
- Nesting dial
- Outgoing restriction
- Outgoing restriction by digital counting
- Pause time selection
- Prime line assignment
- Release of system speed dialling restriction
- Selectable 10 PPS/20 PPS signal assignment
- Specified exchange line seizure
- Speed dialling – station
- Speed dialling – system
- Toll restriction
- Trunk queueing

Reception of an Exchange Line Call

- Answering an exchange line call
- Exchange line ringing assignment – individual telephone
- Night mode ringing assignment
- Ringing tone variation – individual telephone
- Exchange line automatic answer

Talking with an Exchange Line Call

- Add-on conference
- Busy ringing tone
- Hook flash (recall button)
- Interrupting an exchange line call
- Memo dial/save dial
- Memo dial/stock dial
- Privacy release on an exchange line call
- Three-minute alarm
- Three party conference with 2 exchange lines

Hold/Transfer of an Exchange Line Call

- Automatic transfer
- Automatic transfer to an extension group
- Consultation hold
- Exclusive hold
- Hold
- Hold alarm
- Hold indication
- Music on hold
- One-touch transfer
- Release of call restriction of transfer in PABX
- Ringing tone transfer
- Verbal transfer (hold call re-answer)

• Basic. •• Optional

Voice Mail Option

- Answer message-sending service – automatic
- Answer message-sending service – manual
- Recorded hold message
- Message waiting
- Voice mail intercom

Doorphone Option

- Door lock release
- Doorphone access
- Doorphone to extension calling
- Doorphone monitor
- Security alarm

Intercom Call Facilities

- Automatic callback
- Automatic selection of intercom path
- Callback request
- Call forwarding
- Call pick-up
- Call waiting
- Chain dialling
- Do not disturb
- DSS with BLF at station
- Extension number display
- Group hunt
- Hands-free answer-back on intercom
- Individual station call
- Intercom add-on conference
- Intercom call automatic answer
- Intercom call hold
- Intercom call transfer
- Internal zone paging
- Internal zone paging with meet me answer
- Privacy on intercom
- Shift call
- Signal tone/voice switching
- Tone burst
- Tone override

Common to Exchange Line Call and/or Intercom

- Confirmation tone
- Distinctive ringing tone
- In-use indication
- Last number redial
- Monitoring through built-in speaker
- One-touch dial
- On-hook dialling and monitoring
- Privacy on exchange line calls
- Push-button dialling
- Receiving volume control
- Ringing tone control
- Seized self exchange line number display
- Speaker volume control
- Two colour LED

System and other

- Automatic day/night mode switching
- Built-in MDF
- Common accommodation of group hunt and tenant
- Exchange line class assignment
- 16-digit digital display (7 segment LCD)
- Directory tray
- Feature access buttons
- Flexible extension number assignment
- Flexible time out
- Last number dialled memory confirmation
- Mic on/off
- Operator call
- Private line
- Programming via key telephone set
- Resident system program
- Self extension number confirmation
- Self extension number display
- Speed dialling confirmation
- Tenant service
- Wall mounting – key service unit
- Wall mount for key telephone handset

External Speaker Package Option

- External hold tone source connection
- External amplifier control
- External tone ring control
- External zone paging
- External zone paging with meet-me answer
- Background music – external speaker
- Background music – individual telephone

Out-door Extension (ODX) Option

- Single line telephone
- Direct-in termination (single line telephone)
- Call transfer – single line telephone
- Long telephone card

Power Fail Features

- Back-up of system programming (battery back-up – memory)
- Call origination during power failure
- Power failure transfer
- Full back-up with built-in battery

Attendant Console

- Direct station selection
- Busy lamp field

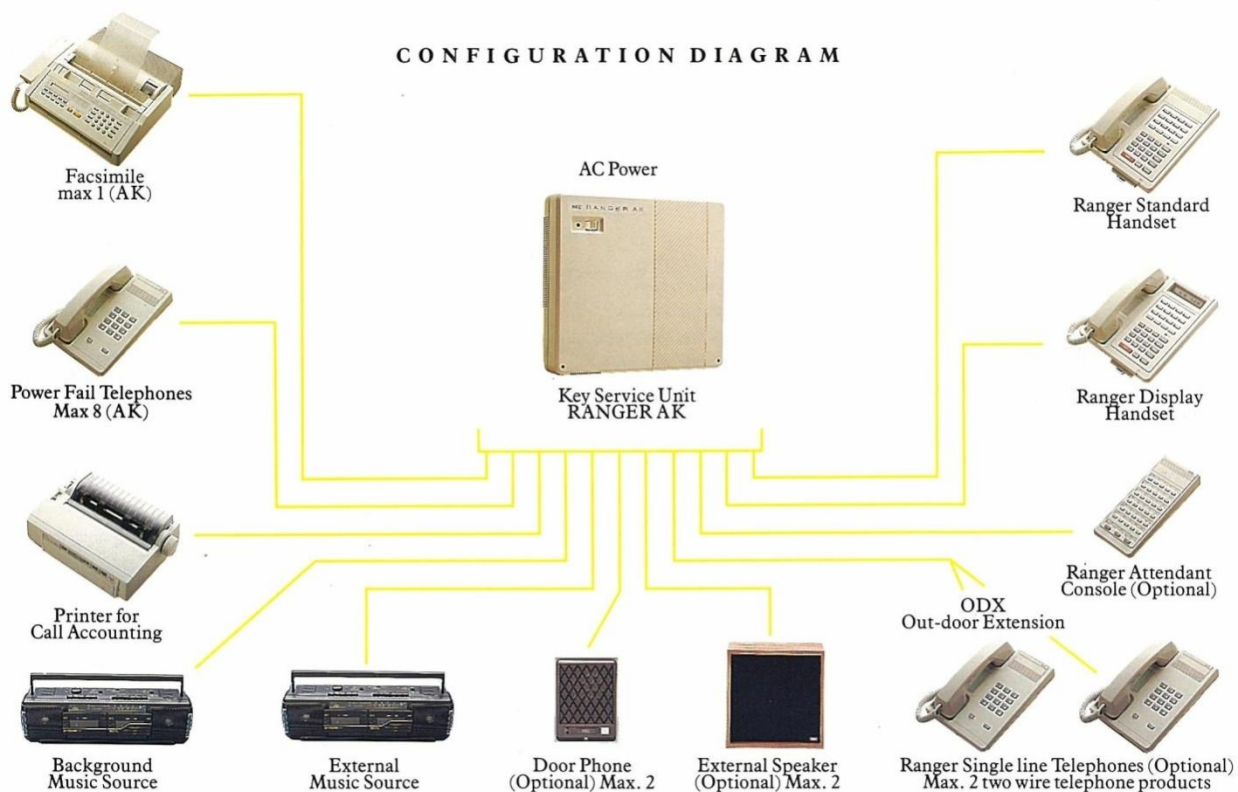
Other Optional Features

- Station message detailed recording (Call accounting)
- Full hands-free facilities
- Headset connection
- Full back-up with external battery

Other Standard Features

- Facsimile connection
- PC connection via a modem

CONFIGURATION DIAGRAM



SPECIFICATIONS

	RANGER AK
Exchange Lines (max.)	8
Key Telephone Sets (max.)	24
Attendant Console (max.)	2
Out-door Extension (ODX) (max.)	2*
Power Fail Telephones (max.)	8
Intercom Path (max.)	5
Doorphone (max.)	2
External Speaker (max.)	2
Speed dial - System Base (max.)	80
Speed dial - Extension Base (max.)	20
Cabling Requirements of key telephone sets	Twisted 2 pairs
Full backup battery - Standard	min. 17 minutes
Full backup battery - Optional	min. 2 hours
Full backup system memory - Standard	min. 7 days
Facsimile Connection (max.)	1
Conference Circuits (max.)	4

*Inclusion of the ODX package reduces the maximum number of extensions to 18 key telephone sets and 2 single line telephones.

DIMENSIONS (m m)

	RANGER AK		
	W	D	H
Key Service Unit	440	80	400
Power Supply Unit	Not Applicable		
Key Telephone Set	186	228	97
Attendant Console	98	228	66

Note: The external design, colour and/or specifications contained herein are subject to change without prior notice.

NEC