

aria*soho*
Digital Hybrid PABX for SOHO

SMART Communications



SMART partners for communications

New technologies in the realm of telephony bring us advancement in communications which in turn influence changes in business from large-sized enterprises to small ones. However, traditional imperatives in the SOHO telephony market stand fast asking for values like cost effectiveness, easy Operation & Maintenance (O&M) at the forefront.

SMART partners for communications





SMART telephone system with Plug& Play facility

ARIA SOHO is designed to be a user-centric telephone system in regard to installation and O&M. With Plug & Play facility thru a full-hybrid architecture, the ARIA SOHO gives a maximum flexibility in selecting types of user terminals whether dealing with Analog SLT, FAX or Digital phone. And when connecting external lines, ARIA SOHO recognizes varying signals identifying FAX from voice and automatically delivering them to the appropriate types of terminals.

In fact, this facility can especially satisfy the needs of small- to medium-sized enterprises as well as home users with little-to-no engineering background.

As one of basic components, LG-Nortel has developed an integrated device and implemented it into a basic cabinet of ARIA SOHO making some of services costless.

- Call Processing Tone Detection
- SMS / Caller ID Sending / Receiving
- DTMF Processing
- Fax Tone Detection



LG-Nortel DIGITAL Technologies: Making services cost less

Traditionally in the small telephony environment, fundamentals in technology seem to be beyond the interest of users as long as basic services are satisfied.

This nature often keeps users from evolving to an upgraded environment for smarter communications and also forces them to resort to a separate payment for additional services.

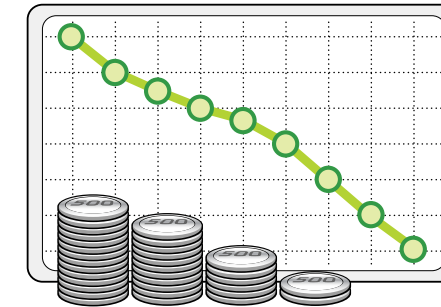
Affordable scale to 48 extensions

Due to its digital architecture, ARIA SOHO easily and affordably expands up to 48 extensions without wasting initial investment.



Managing communication costs

ARIA SOHO provides services to monitor and restrict outgoing traffic (as needed) in order for a manager to control communication cost.



Sophisticated service options

On users' requests, ARIA SOHO can provide additional sophisticated options usually offered in larger telephone systems.

- TAPI interface for integration with 3rd party applications
- PC based attendant : **ez-attendant**
- TAPI based PC phone : **ez-phone**
- Built-in voice mail / Auto Attendant
- Modem unit for remote maintenance
- LAN interface for Ethernet connection



Empowering analog extensions

As cost can be a primary issue for most small offices, digital telephones could be selectively given to only a few employees.

Accordingly, the majority of system features should be easily supported to SLT users rather than digital proprietary telephones users.

In ARIA SOHO, the upgraded services represented by SMS, CID and several PC applications are analog extension focused.

Customer driven system

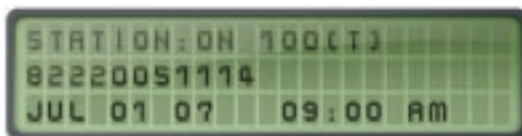
Small enterprises or home users may want to have full-control to manage the system for themselves. ARIA SOHO gives hands-on methods for M&O like PC-Admin (On-line / Off-line) software and Speed Editor for updating the User database.





SMART Features for Communication

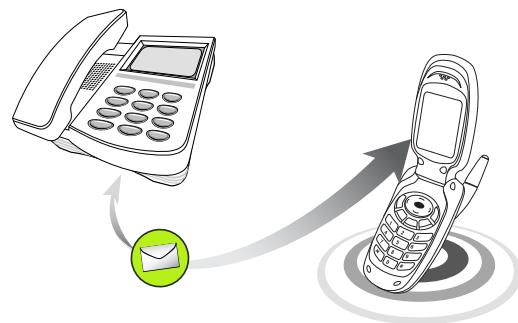
Caller ID for CO lines & analog extensions



ARIA SOHO detects caller identification information (CID) from the CO Line and displays it on CID capable SLT as well as digital telephone. Compatible CID signals for CO line are FSK-type, Dual Tone Multi-Frequency (DTMF) type and ANI. For extension side, a SLT user should have a CID capable SLT supporting FSK or Dual Tone Multi-Frequency (DTMF) type protocol.

Short Message Service (SMS)

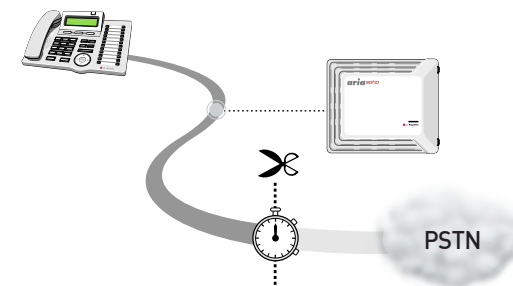
Messaging has become a very useful tool for modern lifestyles. No wonder that its applications in the business environment is recently being identified as an effective way for sharing information. ARIA SOHO recognizes SMS messages sent from PSTN, where available, and sends them to SMS capable SLT or LG-Nortel's TAPI phone (ez-phone). The compatible specification for SMS in ARIA SOHO is "Protocol type I of ETSI ES 201 912".



Call Cost Control/Monitoring

Telecommunication cost seems to be one of the major issues that takes a big place in the cost sheet for running a small enterprise.

ARIA SOHO provides a variety of Call Cost Control/Monitoring facilities.



Call Cut-Off Timer for each extension

Activated and set by system programming; when the timer expires, the on-going call will be disconnected.

Pre-paid Call

Works with the optional Call Metering Unit (CMU) that recognizes specific billing signals sent from the PSTN and give each extensions limited minutes for out-going calls.

Barge in

Enables a designated extension to intrude in on-going conversations after a warning tone is presented.

SMDR

For billing in ARIA SOHO, up to 1000 calls be logged in before being printed out or downloaded to a PC.

Least Cost Routing (LCR)

Automatically uses LCR tables and types of operation to identify the least expensive routing for outgoing calls.

PC Applications



Due to its digital architecture, ARIA SOHO can be activated to run as an application service platform by implementing proper key codes.

TAPI Interface (1st / 3rd party)

The most commonly used CTI interface from Microsoft –can be enabled that extensions can use TAPI compatible software for making calls.

LG-Nortel's TAPI based PC phone (ez-phone)

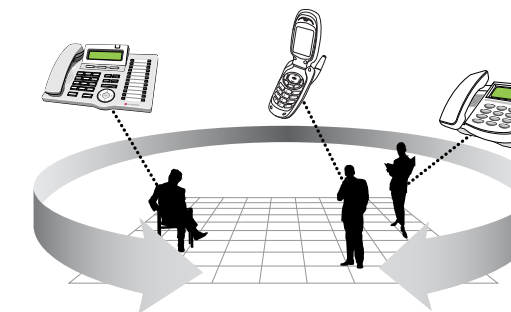
Improves individual call controls and provides a handy tool to send/receive/save SMS.

PC Attendant (ez-attendant)

PC based attendant console running on MS-Windows will be a good supplementary option replacing an attendant console. Normally, running the software attendant is preferred in larger scale configuration of ARIA SOHO consisting of 2 cabinets rather than a small configuration.

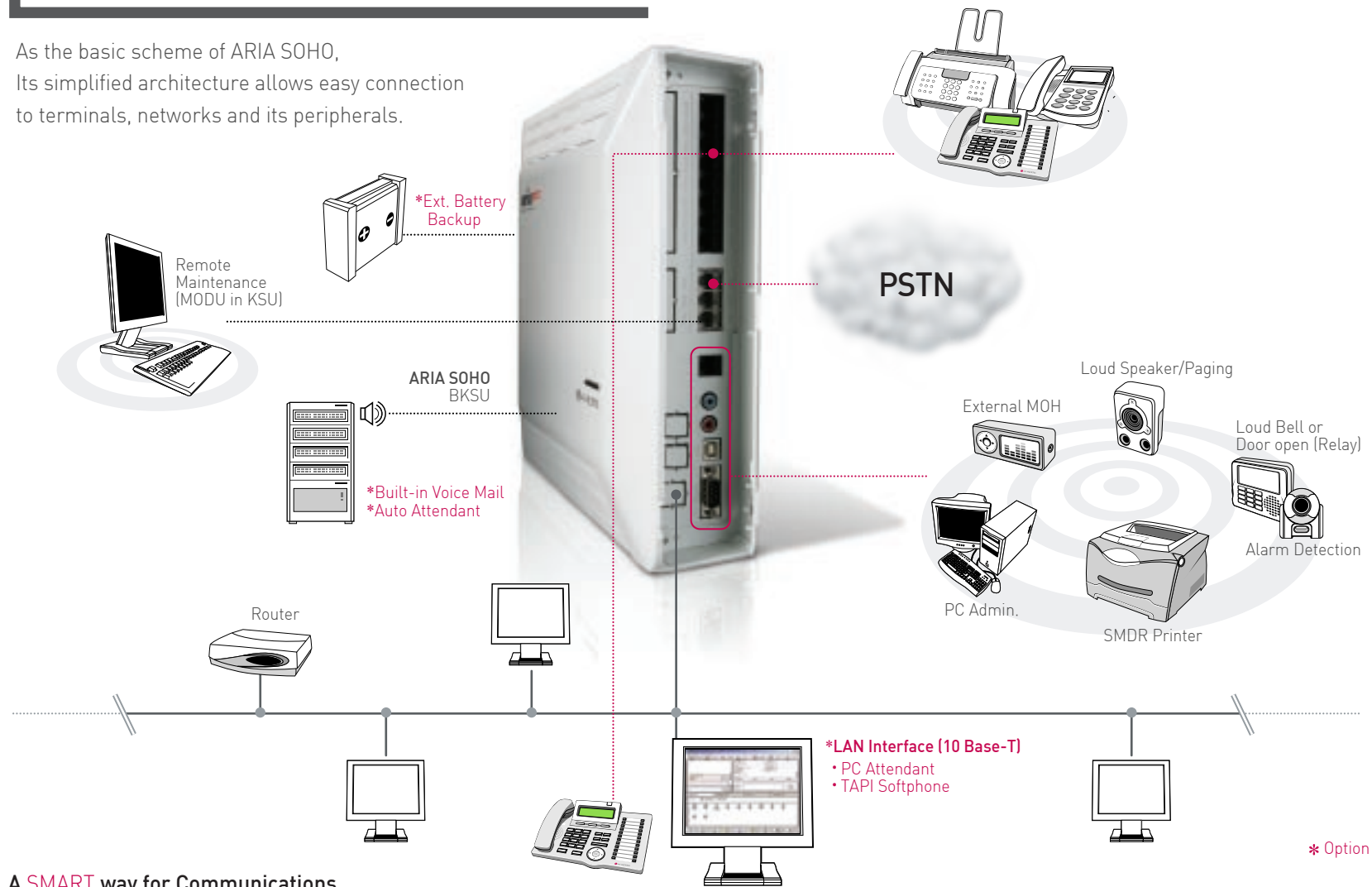
Conferencing

ARIA SOHO gives two ways of conference which are "Multi-party conference (max. 15 parties)" and as an upgraded conferencing method - "Conference rooms".



A **SMART** way for Communications

As the basic scheme of ARIA SOHO,
Its simplified architecture allows easy connection
to terminals, networks and its peripherals.



A **SMART** way for Communications

Proprietary digital telephones

As proprietary digital terminals, ARIA SOHO offers customers several choices - LDP-7224D, LDP-7208D, LDP-7248DSS as desk top telephones and LDP-DPB as a door phone.

LDP-7224D can be normally used as a programming terminal as well as an attendant console.

For accommodating an user's convenience, wall mount brackets are provided as an option for desktop digital phones.

LDP-7224D

- Triple line LCD (3 x 24)
- 3 soft keys
- Navigation key
- Headset jack
- 24 flexible buttons
- 7 fixed function keys
- Speaker phone
- Dual LED
- Wall mount brackets



Wall-mount brackets 4



LDP-7208D

- Dual line LCD (2 x 24)
- 8 Flexible buttons
- 5 Fixed function keys
- Speaker phone
- Single LED
- Headset jack
- Wall mount brackets



LDP-7248DSS

- 48 Programmable keys
- Direct Station Selection



LDP-DPB

- Digital door phone
- Rotary type volume
- Dimension (mm)
: 99 (W) * 132 (L) * 33.1 (H)





Product Components

ITEM	ADD-ON OPTIONS	MAX. CAPACITY		SPECIFICATION	
		CO	*Ext.		
BKSU [Basic Key Service Unit]	1 CHB308 / CSB316 / SLIB8 1 VMIU/AAFU 1 LANU 1 MODU 1 DPU2 1 CMU	6	1D+15H / 1D+7H+16A	3 CO lines & 8 Ext.(1 Digital + 7 Hybrid) 1 Alarm detection 1 Door open relay 1 External MOH Interface 1 Paging Interface 1 USB (USB 1.0 and 1.1 compliant, Slave) 1 RS-232C 1 Power failure transfer circuit	
EKSU [Expansion Key Service Unit]	1 CHB308 / CSB316 / SLIB8 1 DPU2 1 CMU	6	16H / 8H+16A	3 CO lines & 8 Hybrid Ext. 1 Alarm detection 1 Door open relay 1 Power failure transfer circuit	
Expansion Board	CHB308	1 CMU	3	8H	3 CO Lines and 8 Hybrid Ext. 1 Power failure transfer circuit
	CSB316	1 CMU	3	16A	3 CO Lines and 16 SLT Interface Board 1 Power failure transfer circuit
	SLIB8	N/A	0	8A	8 SLT Interface Board
function Unit	VMIU	N/A	N/A	N/A	Voice Mail Interface Unit - 4 ch. / 2 hrs
	AAFU	N/A	N/A	N/A	Auto Attendant Function Unit, 4 channels
	LANU	N/A	N/A	N/A	LAN interface Unit : 10 Base-T Ethernet (IEEE 802.3)
	MODU	N/A	N/A	N/A	Modem Unit (33Kbps)
	DPU2	N/A	N/A	N/A	2 Door Phone interface Unit & relay
	CMU	N/A	N/A	N/A	Call Meeting detection Unit (3 channels)

A : Analog extension
D : Digital extension
H : Hybrid extension

Other Specification

ITEM	DESCRIPTION	SPECIFICATION
PSU	AC Voltage Input	230 +/- 10% Volt AC @47-63Hz
	AC Power consumption	90W
	AC Input Fuse	1.25A @250Volt AC
	DC Output Voltage	+5, -5, +27, +30Volt DC
External Backup Battery	Input Voltage	+24 Volt DC(+12VDC x 2ea)
	Battery Fuse	5.0A @250Volt AC
	Charging Current	Max. 200mA
	Battery Load Current	Max. 3A
Operating Environment	Temperature	0 [oC] - 40 [oC]
	Humidity	0 - 80% (non-condensing)
Dimension	KSU	339mm(W) x 288mm(H) x 85mm(D)
Weight	Basic KSU	2.0 Kg
	Expansion KSU	1.9 Kg

HOW TO GET INCOMING CALL

Ring Assignment
PLA (Preferred Line Answer)
DISA (Direct Inward System Access)
CCR (Customer Call Routing)
with VMIB
CO Line Name
UNA (UNIVERSAL NIGHT ANSWER)

HOW TO ACCESS OUTGOING CALL

Basic access
Call time restriction
CO Line Queuing
CO Step Call
Emergency Call service
Hot Line & Warm Line
LCR (Least Cost Routing)
ACNR (Auto Call Number Redial)
Last Number Redialing
Save Number Redialing
Station Speed Dialing
System Speed Dialing
Private Line

REROUTING FEATURE

Call Forward
: Unconditional, Busy, No Answer,
Busy/No Answer, Follow-me
Call Forward Station Off-net
: Unconditional, No answer
Call Forward Station Off-net with Tel No.
: Unconditional, No answer
Call Forward, Incoming CO Off-net
SLT Call Forward
Preset Call Forward
Call Transfer to CO Line / Station
Hold
Hold Preference
Automatic Hold
Park
Directed Call Pick Up
Group Call Pick Up

CALL BARRING FEATURE

Account Code
Authorization Code
Automatic Call Release
COS (Class Of Service)
System Speed Zone
Walking COS

SMDR

Display / Print-out

CALL HANDLING

Absent Text Message
Custom Message
Pre-selected Message
Alarm
Automatic Privacy
BGM (Background Music)
Camp-on
Change Ring Type
Data Line Security
Dialing Security
DND (Do Not Disturb)
DND - One Time DND
Flash
Flexible Button
Headset
Intercom Signal Mode
Intercom Tenancy Group
Message Wait / Call Back
MOH (Music On Hold)
13 Internal melody sources
Mute
On-Hook dialing
Station Name
Station Program
Station Program Menu
Station Relocation
Station Serial Call
Park
Voice Over
Wake-up
Extend CO-to-CO Connection

Forced Hands free Mode
Hot Desk
Call Log
In-Room Indication
Chime Bell
Emergency Intrusion
Forced Trunk Disconnect
Barge In
CLI on Analog SLT

VOICE MAIL SERVICE

Recording System
VMIB Announcement
Remote Control
Two-way Recording
Two-way Recording via SMDI
Two-way Recording via VMIB
Recording User
VMIB Announcement
VMIB Announcement for
Auto Attendant
VMIB Message Transfer
VMIB Message with CLI

HUNT GROUP

Terminal Group
Circular Group
Ring Group
Voice Mail Group
UCD Group (Unified Call Distribution)
ACD
(Automatic Call Distribution)

CONFERENCE FEATURE

Confer ence -
SLT (BROKERS Call)
Paging Conference
Conference Room

PAGING FEATURE

Internal page / External page /

All-Call page / Meet-me Page
Pre-recorded MSGSOS Paging

LINKED STATIONS

Executive/Secretary

EXTERNAL DEVICE CONTROL

Door Opener
Door Phone
Loud Bell

ATTENDANT SERVICE

Assign Attendant
Attendant Call & Queuing
Attendant Forward
Attendant Intrusion
Attendant Override
Attendant Recall
Change LCD Date/Time display
Day/Night service
Disable Outgoing Access
ICM Box Music Selection
Station Feature Cancel
DSS/DLS Consoles
TRAFFIC ANALYSIS
Traffic Analysis - Attendant
Traffic Analysis - Calls
Traffic Analysis - CO
Traffic Analysis - H/W Unit

SOFTWARE UPGRADE

USB
LAN
SERIAL(COM port)
MODEM