

INTERNET GENERATION

KOCOM HOME NETWORK SYSTEM PROPOSAL

BY KOCOM OVERSEAS DEPT

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DIGITAL HOME NETWORK



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1-1. Home Network is?

DIGITAL HOME NETWORK



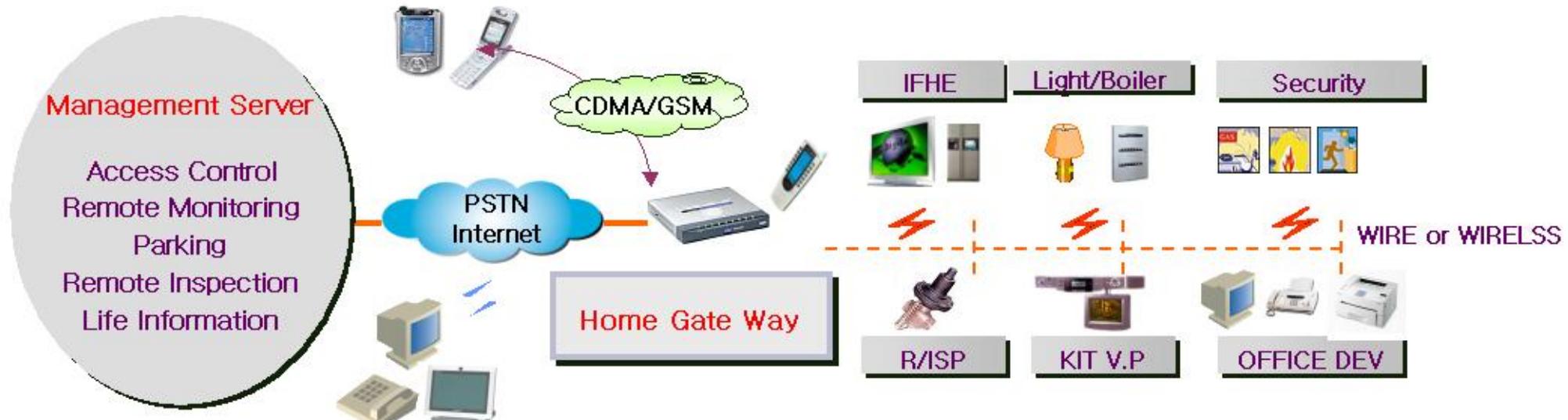
□ Home Network

Composition network of one what all device of the household, PC, remote controller in home and internet, wire/wireless in out door base on communication network.

□ Home Network System Outline

All device into one as same network solution.

Data network : PC & PRINTER . Entertainment Network : TV, AUDIO, DVD etc. Control network: Lighting, Door Lock, Gas, Boiler etc





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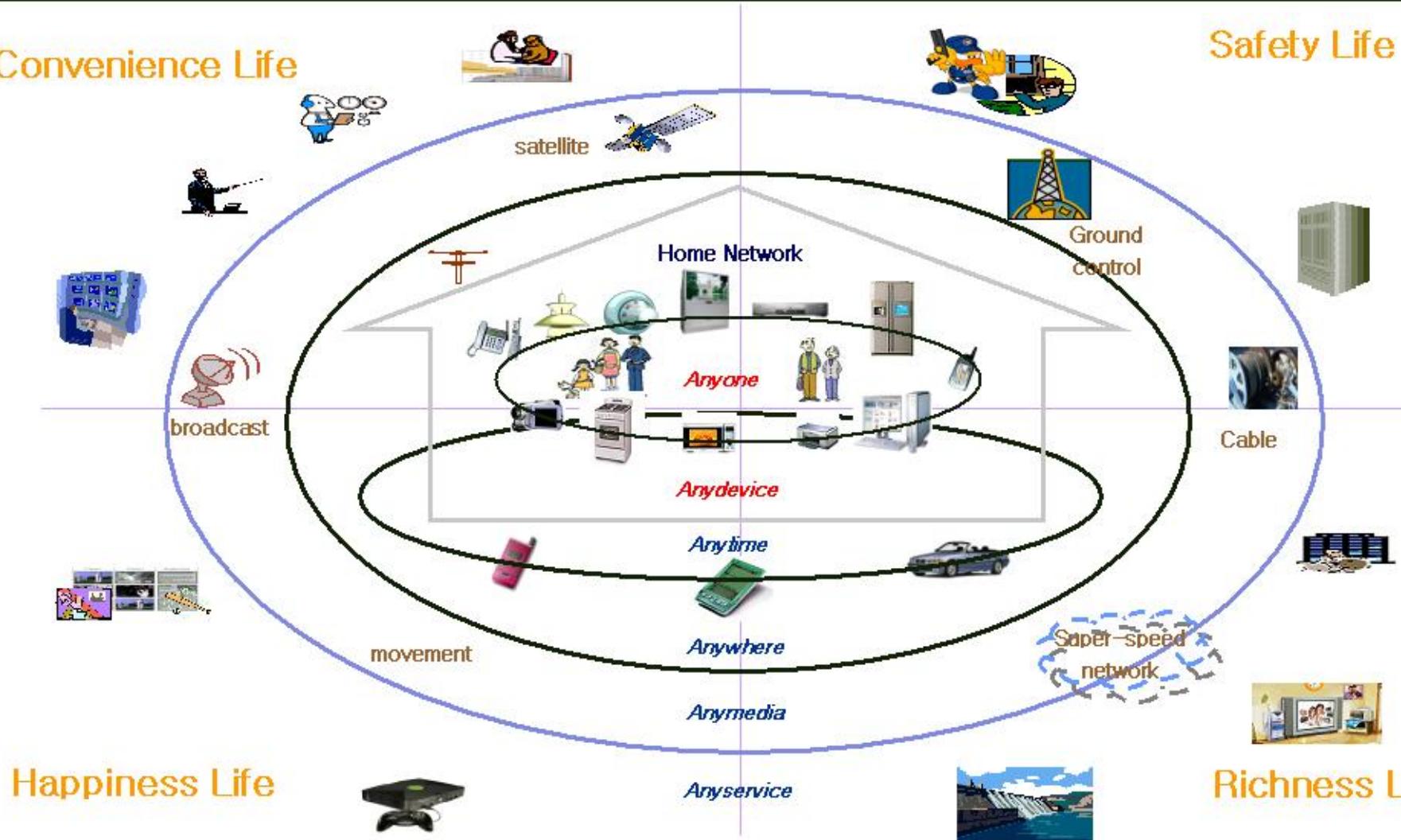
1-2. Home Network conception

DIGITAL HOME NETWORK



Convenience Life

Safety Life





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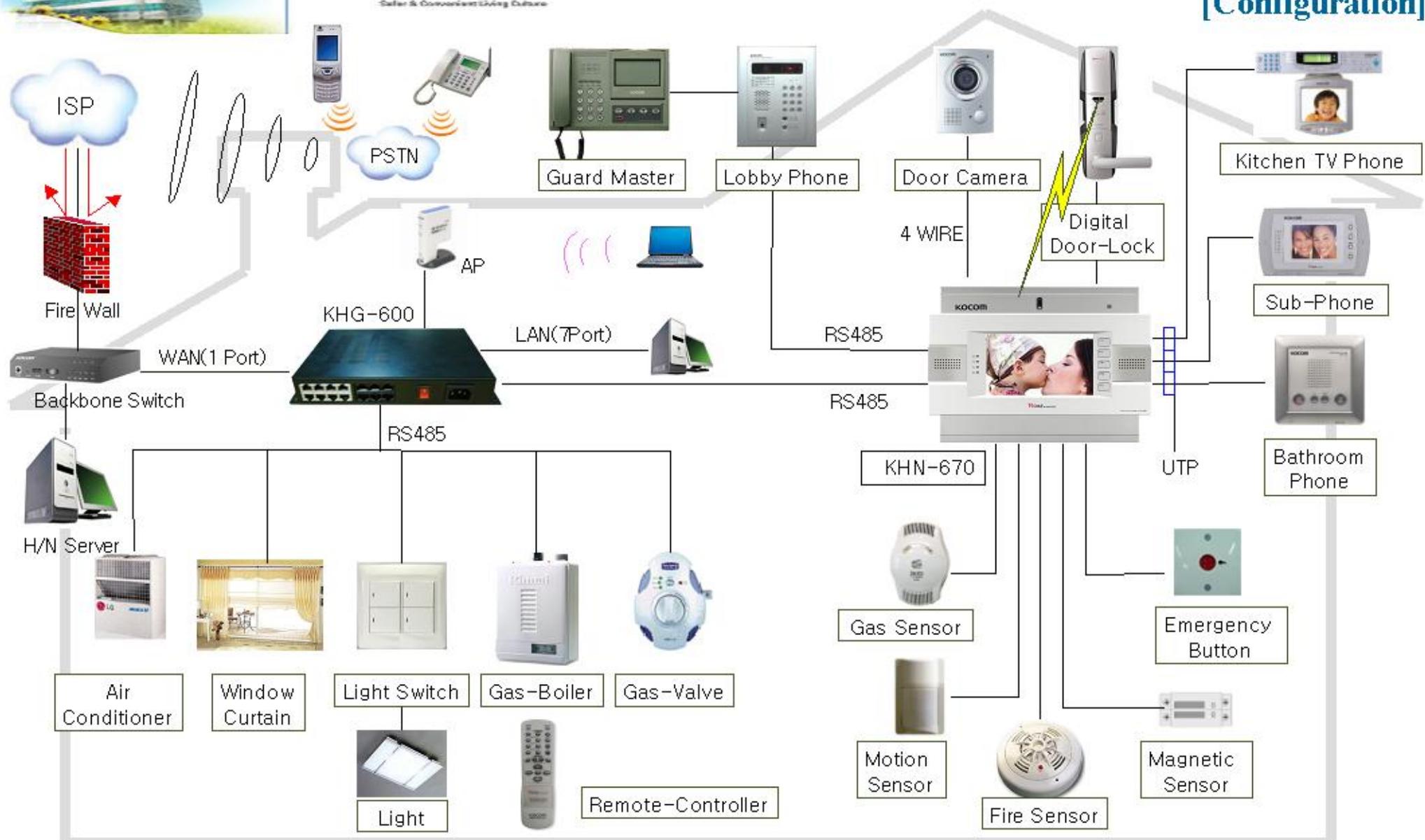
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1-3. Home Network System

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[Configuration]





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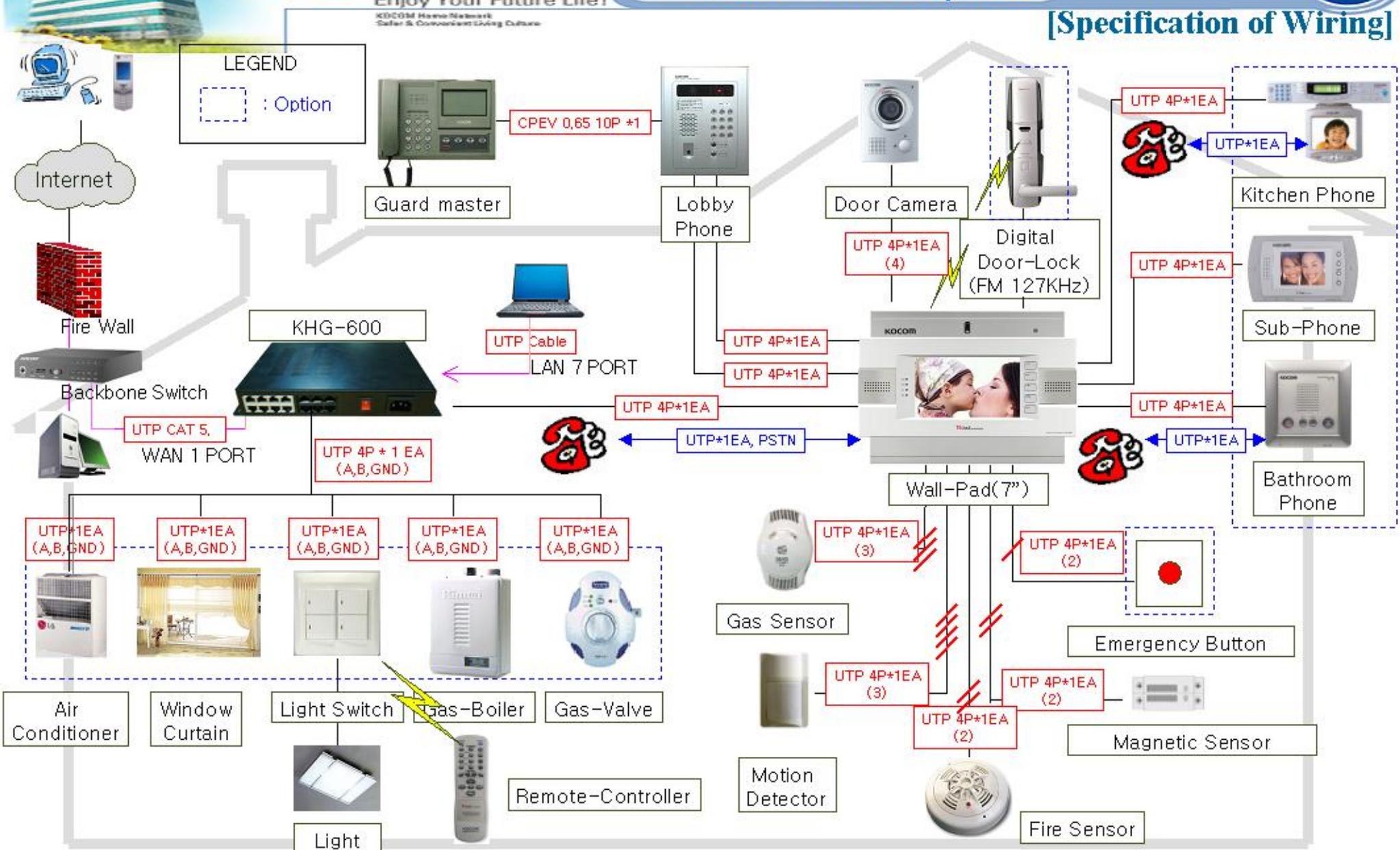
KODOM History Timeline
Sister & Companion Sister Culture

1-3.Home Network System

DIGITAL HOME NETWORK



[Specification of Wiring]





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1-4. Home-Network System

DIGITAL HOME NETWORK



[Specification]

1. General Spec

- 1) Ethernet Ports : WAN : 1-Port, LAN : 7-Ports
- 2) Serial Ports : RS-485 (3-Ports), RS-232(2-Ports)
- 3) DI/DO Ports : Data In 4-Ports, Data Out 4-Ports
- 4) CPU : 16/32-bit ARM7TDMI RISC
- 5) Memory : 16MB SDRAM, 4MB NOR FLASH
- 6) Operating System : uCLinux2.4.22



**Home-Gateway
(KHG-600)**

2. Key Function

- 1) Check the Current Gas Valve Status & Close Function
; Remote-Controller, ARS(PSTN, Mobile-Phone), Wall-Pad
- 2) Boiler Control Function (Monitoring Status & Control)
; Remote-Controller, ARS(PSTN, Mobile-Phone), Wall-Pad
- 3) Lighting Check and Control using private line
; ON/OFF 4 port (1KW / each port)
- 4) Network Device Function
; IP Sharing Function
; NAT Function
; DHCP Function
- 5) Software Remote Upgrade Function
- 6) Web Server Function

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1-4. Home-Network System

DIGITAL HOME NETWORK



[Specification]



KHN-A670
(7inch Touch screen)



KC-C70
Door Camera

1. General Spec

- 1) Display : 7inch TFT-LCD
- 2) Input way : Easy touch input way using Gui

2. Key Function

- 1) Checking visitor & conversation function from private door camera
- 2) Checking visitor & conversation function from common gate camera
- 3) Door open (private door camera & common gate camera)
- 4) Mutual call & conversation between house & guardroom
- 5) Mutual call & conversation between other house in same complex
- 6) Telephone function
- 7) Call diversion function from common gate camera to house
(when absence mode is on)
- 8) Inter-working function with digital door lock (RF & contact type)
- 9) Set & Release function for fire & gas sensor
- 10) Set & Release function for burglar : Magnetic sensor & Motion detector
- 11) Automatic call function in emergency like fire, gas, burglar
(Up to 2 telephone no. available)
- 12) Gas valve checking and closing function
- 13) Boiler checking & control function
- 14) Lighting checking & control function
- 15) Gas valve, Boiler & Lighting Control function using wireless remote controller.
- 16) Door open function (private door camera & common gate camera) using
wireless remote controller.
- 17) Visitor from common gate & private door camera image capture function
(up to 32cuts)

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1-4. Home-Network System

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**[Specification]**

KSP-230
Sub-Phone



KBP-105
Bathroom phone

1.General Spec

- 1) Display : 4" TFT-LCD
- 2) Communication system : RS-485 communication
- 3) Conversation system : Hands-Free type

2.Key Function

- 1) Emergency function
- 2) Telephone function
- 3) Door open function (private door & common gate camera)
- 4) Checking visitor & conversation from private door & common gate camera
- 5) Mutual call & conversation between house & guardroom

1.General Spec

- 1) Communication system : RS-485 communication
- 2) Conversation system : Hands-Free type
- 3) Water & Moisture proof

2.Key Function

- 1) Emergency function
- 2) Telephone receiving function
- 3) Door open function (private door & common gate camera)
- 4) Conversation function with private door & common gate camera and guardroom
- 5) Volume control

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1-4. Home Network System

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**[Specification]**

KTD-505
KETICHEN TV



Remote controller

1. General Spec

- 1) Display : 5" TFT-LCD
- 2) Communication system : RS-485 communication
- 3) Conversation system : Hands-Free type

2. Key Function

- 1) Emergency function
- 2) Telephone function
- 3) Door open function (private door & common gate camera)
- 4) Checking visitor & conversation from private door & common gate camera
- 5) Mutual call & conversation between house & guardroom
- 6) Radio (AM & FM) channel selection and listen function
- 7) TV channel selection & watch function

1. Key Function

- 1) System : Infrared rays (IrDA) system
- 2) Lighting ON/OFF & incandescent lights Dimming function
- 3) Boiler ON/OFF function
- 4) Air condition On/OFF function
- 5) Security mode Set and Release function
- 6) Mode control function
- 7) Curtain ON/OFF function
- 8) Button function modification & enlarge available. (Min. 23 ~ Max 35))



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1-4. Home Network System

DIGITAL HOME NETWORK



[Specification - Unman Guard]

Unmanned Security

Common Gate Lobby Phone



- Input Voltage : AC 110V, AC 220V / DC +24V / 50Hz, 60Hz
- Temperature : -20°C ~ +50 °C
- Image element : 1/3" COLOR
- Horizontal Resolution : 380 LINE
- Minimum Intensity of Illumination : 1LUX

Guard Master in
Guard office



- Calling and communicating with residents.
- Displaying the house number of the unit being called.
- Opening the common gate, when calling from the common gate.
- Displaying the house number and details, if there is an emergency situation at the residence.
- Storing emergency information.
- Printing emergency information.

Digital Door Lock



- RF CARD and password—Double opening and shutting.
- Voice guard service.
- Wireless remote controller.
- Automatic opening and closing.
- Burglar- and tamper-proof design.



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1-4. Home Network System

DIGITAL HOME NETWORK



[Specification - Home server]

Server System



Specification

- 1) CPU : 2.4GHz, 400MHz 512KB L2 Cache Xeon Processor
- 2) Memory : 1GB
- 3) HDD : 120GB
- 4) LAN : 10/100Mbps LAN Controller
- 5) OS : Windows 2000 Server DSP
- 6) DBMS : SQL Server 2000 Standard Edition

Main functions and features

- Home Portal/WAP Server
 - News at the Apartment Complex / User's control / Hobby and Simple remote
 - Product control / communication and Setup / Energy management
 - Remote Diagnosis / Mode-setup and control
- Monitoring Server
 - G/W UI / Power line Communication Equipment UI / Outside equipment UI
 - Security service UI / trouble shooting service
 - Remote meter-reading service UI / network monitoring
- Management Server
 - Manage G/W, Power line communications equipment, outside equipment.
 - Security service / trouble shooting service / remote meter-reading service.
- Application Server
 - Manage the common gate & parking gate
- Firewall Server
 - Protection of illegal invasion from outside.

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Sensor



Motion Sensor

- Input Voltage : DC 12V
- Rated Current Consumption : 25mA
- Temperature : -15°C ~ +55 °C
- Installed location : ceiling, wall
- Size : 70(W) x 110(H) x 45(D)

(Bracket Size -separate)



Gas Leakage Sensor

- Input Voltage : DC 12V
- Consumption of electricity : 1.3W
- temperature : -20°C ~ +40 °C
- Power signal : LED Green light
- Alarm signal : LED Yellow blinking
- Installed location : ceiling, wall
- Size : 68(W) x 95(H) x 34(D)



Burglar sensor

- Input Voltage : None
- Movement principle : Normal Close style
- Temperature : -10°C ~ +60 °C
- Size : 50(W) x 11(H) x 14(D)





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1-4. Home Network System

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[Specification – Light/Boiler]

Indoor Control Device



Light S/W

- ON/OFF kind of switch
 - : 1circuit/2circuit(1 input 2 s/w type,inter), 3circuit/4 circuit (2 input type,inter)
- Kind of Light : Fluorescent, Halogen, Incandescent, etc.
- Kind of Dimming S/W
 - : 1circuit(1 input type,inter), 2 circuit (2 input type, inter)
- Control Capacity : 1KW per 1 circuit
- Communication via Home Gate & RS-485
- Control for wireless remote controller
- Remote control by remote PC



Gas Boiler

- Communication via Home Gate & RS-485
- Control for wireless remote controller
- Control by Cell Phone
- Remote control by remote PC



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1-4. Home Network System

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[Specification – Remote Controller]

Remote Controller



- Mode : IrDA
- Light ON/OFF
- Boiler ON/OFF
- Gas Valve Close
- Guard mode armed & un armed



- Mode : IrDA
- Light ON/OFF & Dimming
- Boiler ON/OFF
- Air conditioner On/OFF
- Guard mode armed & un armed
- Mode Control : OUT Mode
TV Mode
Wait Mode

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1-4. Home Network System

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Control Specifications

Classification	Automatic Control functions		
	System	Main functions	Features
Light Control		Light ON-OFF Adjusting the degree of brightness(lights) Pattern Adjustment Setting the schedule	- Gearing with Pattern Switch(485communication) - Adjusting the degree of brightness, - Setting various modes, - Scheduling for each hour, - Controlling from outside (mobile-phone, PDA) - Gearing with Home Pad and Home Auto
Gas Valve Control		Opening the Valve Closing the Valve Outside closing	- Automatically closing when going out - Automatically closing when the gas leakage sensor is acted
Digital Door Control		Opening the common entrance (only during communication) Opening the house private door (only during communication)	- RF Control Type - Security through Home server and Home Auto - A certified password
Air-Con control		Air-Conditioner ON/OFF Controlling the temperature in each rooms. Reservation function	- Power line(LonWorks) and TCP/IP(Ethernet) Control Type - Extending the functions by Built-In equipments. - Controlling from outside
Boiler Control		Boiler ON/OFF	- Power Line Control Type (Ethernet) - Extending the functions by Built-In equipments. - Controlling from outside



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2. Home Network System

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[Main GUI]



Main GUI of Home Manager



- Main GUI of Home Manager
- Designed icon of Home Control/Home Security/Communication/Telephone/Inform Life/SI



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2-1. Home GUI scenario

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Communication



If you touch the of main menu

Change as communication menu Home Door / Home to Home /Home to Guard Master
when touch the button your want change running display



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2-2. Home GUI scenario

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Telephone Main GUI



Touch the icon



Of main display

Display is change for use the telephone (talk, revise, redial button)



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2-2. Home GUI scenario

DIGITAL HOME NETWORK



Home security Main GUI



Touch the icon



of main display



Display is changed as home security GUI.

There are out /indoor /input password /cancel emergency.

If you touch the indoor button, so magnetic sensor of home door and IR sensor is armed, and motion detector is setting as non armed.



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2-2. Home GUI scenario

DIGITAL HOME NETWORK



Communication >> Home to Home GUI



In communication main display
Touch the button for
communication to home
Direct connect home to home



Communication >> Visitor REC GUI



In communication main display
Touch the button for recording
visitor(32 still image)
You'll see the visitor when return
home





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2-2. Home GUI scenario

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Home Control Main GUI



Touch the icon



of main display

Display is changed as home control main GUI.
(heating control / lights control / gas valve control)



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2-2. Home GUI scenario

DIGITAL HOME NETWORK



Home control>>Lighting control main GUI



If you touch light control button, so display is changed for control all lighting in home.
(Living Room/Room/Kitchen Room, etc)



Home control >>Lighting control >>Living ROOM



If you touch living room button, so you control the lights max 8 (ON/OFF)





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2-2. Home GUI scenario

DIGITAL HOME NETWORK



Home control >> Heating control GUI



If you touch the heating control button
Display is changed for heating control
of each room in home.



Home control >> Heating control >> Room



If you touch room button which into
heating control display, so display is
changed for control indoor temp.
(Temp control button is Up/Down)





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2-2. Home GUI scenario

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SET UP GUI



If you touch the set up icon of main GUI

Display is changed for set up in web pad.

User could set up for melody ,voice volume ,bright adjust , and shadow adjust.

use the control bar





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3. Home Network Reference site

DIGITAL HOME NETWORK



01. D-Project .157 home



- **Supply Service**
 - APT Homepage & internet connect
 - VOIP in APT
 - Access Control(Common gate, Auto Door)
 - Emergency/Fire
 - Light Control / Remote Check

Model : 15 inch LCD Wall Pad

Touch screen type

KHM-150T





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3. Home Network Reference site

DIGITAL HOME NETWORK



02. Y - Project .75 Home



• Supply Service

- Guard/Remote Gas Control/Electric Home Control
- Light Control / Curtain Control
- Cool-Heating Control/ Remote Check
- Access Control(Common Gate,Auto Door)
- Parking/ VOIP /Remote Care/FMS

Model : 7 inch LCD Wall Pad
Touch Screen Type
KHN-670





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3. Home Network Reference site

DIGITAL HOME NETWORK



03. H – Project.2600 Home

Model : 7 inch LCD Wall Pad

Touch Screen Type

KHN-670



- Supply Service

Guard/Remote Gas Control/Electric Home Control

Light Control / Curtain Control

Cool-Heating Control/ Remote Check

Access Control(Common Gate, Auto Door)

Parking/ VOIP





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Greeting

DIGITAL HOME NETWORK



Thank You

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