APPENDIX H

: USER'S MANUAL

Hanaro Plus User's Manual

Ⅰ. System requirements and installation

1. System requirements

System requirements for running HanaroPlus are as follows: minimum and recommended.
Encoding might have the temporary loss of some frames if HanaroPlus is running on a lower PC than minimum system requirements.

	Minimum	Recommended
Processor	P4 1Ghz	P4 2Ghz and higher
OS	Windows 98,2000,XP	
Memory	256 MB	512 MB and higher
HDD		

2. Installation

HanaroPlus program is to be installed in your PC before you using. The installation dialog boxes will guide you to install the program.

a. Insert HanaroPlus installation CD into your CD-ROM drive, and the dialog box will ask you to install HanaroPlus program. Enter "Next" button to proceed.

b. End User License Agreement asks to agree. "Agree"button lets you proceed.

c. Choose destination folder and the program will be installed into "C:₩ProgramFiles₩HanaroPlus" as default unless user requests.

d. Press "Next" button to install the program in your PC.

e. Wait until finish installing.

f. HanaroPlus program is successfully installed.

Ⅱ. Features

1. Front Function

- Power Switch : Main Power (Adaptor and USB Power) On/Off (Push-Pull Switch)
- Speaker Switch : On - Inner Speaker operates, Off - Speaker doesn't operates
- Microphone Switch : On - Inner MIC operates, Off - MIC doesn't operates
  (MICs doesn't operate when using Headset)
- Volume Up/Down : Tact Switch (2EA)

2. Back Function

- Memory Stick Slot (2EA) : CF/SD Memory Card Reader
- USB HUB (2 Ports, USB 2.0 interface) : Horizontal
- Jack Connection : Power Adaptor, Speaker, Microphone, Earphone(Headset)

Ⅲ. Details

1. How to work

- Please connect Jack (DC Power, Audio Jack, MIC Jack, USB Jack) to be supplied with main computer.
- All functions will be worked even only USB connection excluding speaker and for speaker function is required to DC power-on.
- In first, hanaroPlus is worked by push-on the main button.
- Mike function should be pushed on MIC button just one.
- As speaker function is required, just one-push-button and adjust volumn with up-down button.
- Headset and earphone is required, it's worked by earphone jack connection that be back on the product with inner speaker connection.
- It can be used with USB hub and Memory Card Reader by embedding with connection ports with same specification.

2. Details

Components	Spec
MIC Type : condenser	- Directional Pattern : Uni Directional 10db(180° ±45°) - Sensitivity : -47dB (±4dB) - Consuming Power : 0.75W below - S/N Ratio :60dB
Speaker Dimension : 2” 57¢	- Output : 5W Stereo - Impedance : 150ohm - Power : DC 5V - R.M.S : Satellite : 3W x 2 (THD10%/4Ohm) - S/N Ratio : 65dB - Frequency Response : 150Hz~ 20Khz
USB Hub	Port : A type USB port x 2 Interface : 2 port high-speed USB 2.0 Transmit Speed : 1.5 / 12 / 480Mbps Function : Computer Plug &Play Operational Temperature : 0~55 °c Operational Humidity : 10 ~ 90%
Flash Memory Port	Compatibleness : SD, CF Card

3. Directions for installation

- Keep it out of the humid place and direct ray of the sun, heat appliance such as stove.
- Optimal conditions : 5~35℃ 30~80% RH
- Keep it out of the dusty and water(rain)
- Keep it out of the electric sounder such as speaker and magnetic stuffs .(bad-influence in sound and video quality transmission)
- Keep it out of unsafe place.(it cause defects if falling off and be shocked.)

4. irections for safty

Below is for keeping user safty and property to make use it.

- keep it aside all electric cables when not use very long.
- No use the chemicals and water such as alcohol and benzene.
- No use for other ways such as disassembly and repair.
- If you want other information, always be welcomed to KBiT.

URL - http://www.kbit.co.kr

You're able to download through KBiT website in case of CD loss and program upgrade.

FCC Compliance Statement

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does not cause harmful interference to raio 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 or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Caution

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.