

HOME DVR

MANUAL

CHANGHUNG TELEOCM LTD.

www.changhung.com

#3996, SUJIN-DONG, SUJUNG-KU, SUNGNAM-CITY,
KYUNGGI-DO, KOREA, 461-806

TEL : 031-757-5153

FAX : 031-753-3885

CONTENTS

CLAUSE 1 : H/W INSTALLATION

1. Specification of Home DVR Board
2. Specification of I/O Board
3. Requirements of System
4. Board Configuration

CLAUSE 2 : INSTALLATION OF DRIVER & PROGRAM

1. The information in Driver CD.
2. Driver Installation
3. Checkpoint of Installed Driver
4. Program Installation
5. Program Operating Manual
6. Q & A

CLAUSe 1 : H/W INSTALLATION

MODEL : CT-4L RCA V1.0

1. Specification of Home DVR Board

- Camera Input	.....	4CH
- Audio Input	.....	1CH
- TV Output	.....	1CH

2. Specification of I/O Board

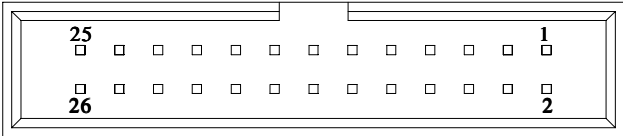
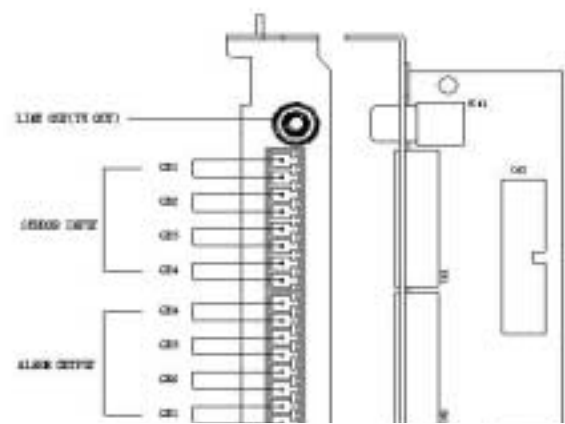
- Sensor Input	.....	4CH
- Alarm Output	.....	4CH

3. Requirements of System

- Os	.....	Windows98, 98SE
- Operating Circumstance	.....	CPU – MMX 200 & above RAM – 32MB & above VGA – AGP 4MB & above

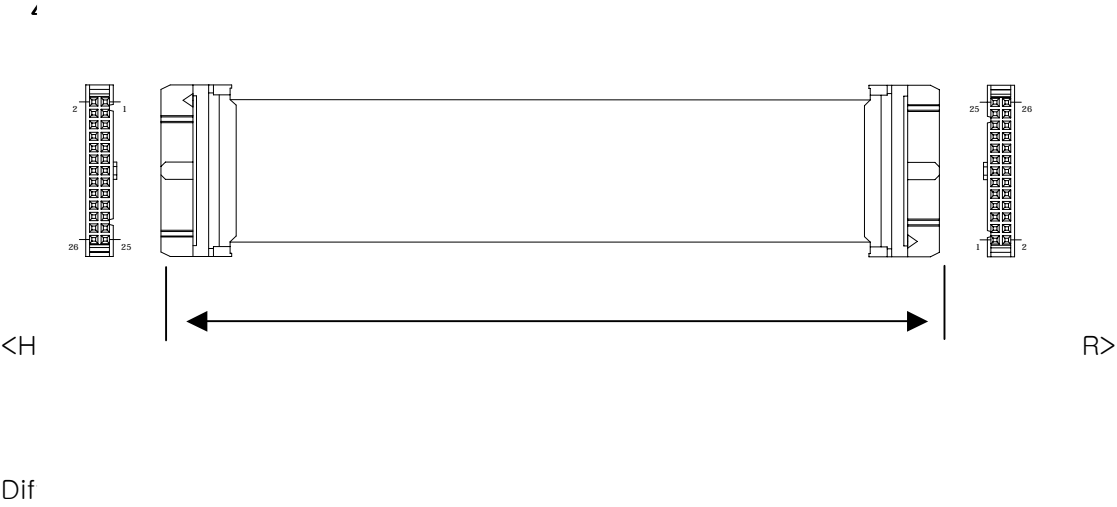
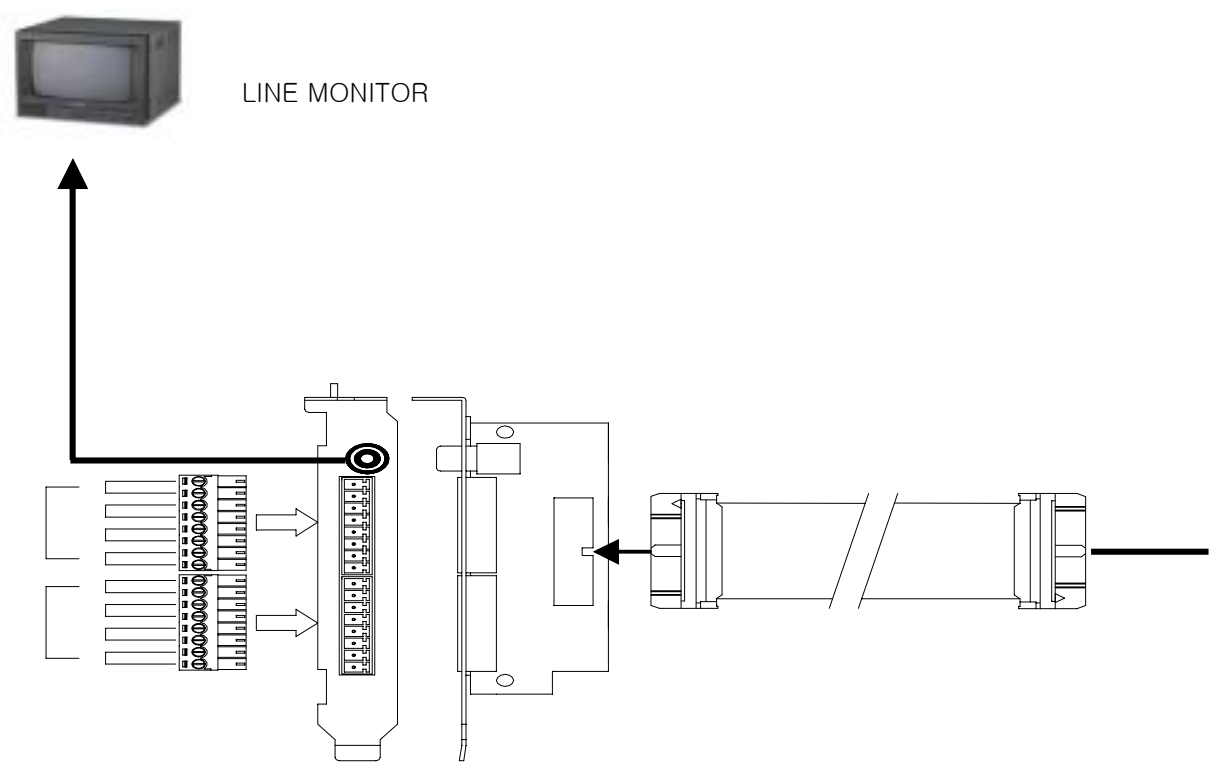
4. BOARD Configuration

- ◆ TV OUT (RCA1)
- ◆ SENSOR INPUT TERMINAL (CN1)
- ◆ ALARM OUT TERMINAL (CN2)



15	OUT2	16	"
17	OUT3	18	"
19		20	"
21	OUT4	22	"
23		24	"
25	TV OUT	26	TV OUT

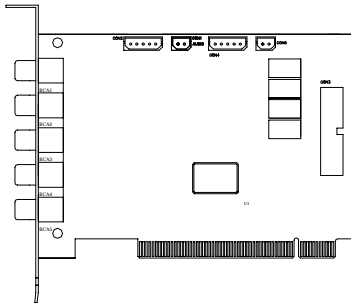
4-1 Configuration



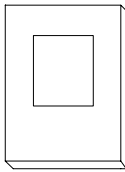
HERDER 26PIN (HIF3BA-26D-2.54R)		HERDER 26PIN (HIF3BA-26D-2.54R)
1	↔	1
2	↔	2
3	↔	3
4	↔	4
5	↔	5
↓		↓
21	↔	21
22	↔	22
23	↔	23
24	↔	24
25	↔	25
26	↔	26

4-3 RCA TYPE (MODEL : CT-4L RCA V1.0)

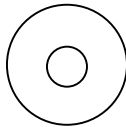
1) Constructing Unit



<CT-4L RCA B/D - 1EA>

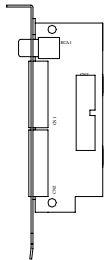


<MANUAL>

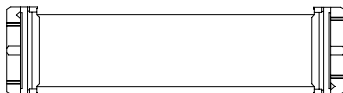


<DRIVER SETUP CD>

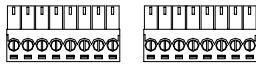
2) Option



<Ct-4L TER. B/D - 1EA>

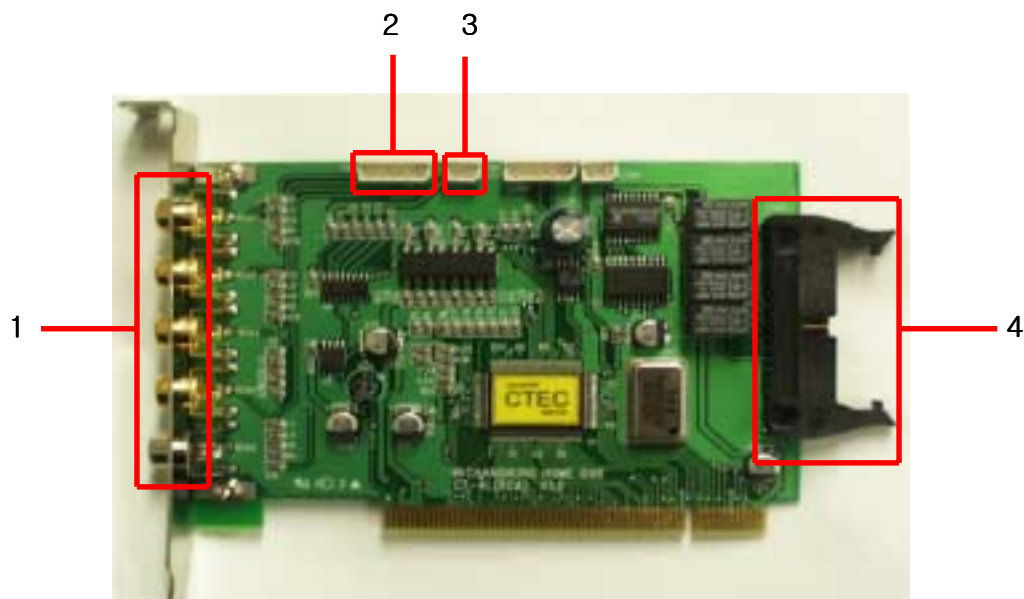


<I/O CABLE - 1EA>



<I/O TER. - 1SET(2EA)>

4-4 NAME OF EACH PART



<CT-4L RCA B/D>

1. CAMERA INPUT 1~4CH JACK (RCA1~RCA4) & TV OUT (RCA5)
2. CAMERA INPUT MOLEX (CON2)
3. AUDIO INPUT (CON1)
4. SENSOR INPUT&ALARM OUT PORT (CON3)

4-5 Specification of Connector Pin

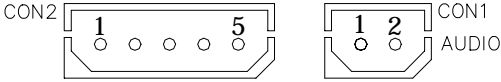
The others of Connector Pin Spec. is the same with BNC TYPE B/D(CT-4L BNC) except CAMERA INPUT BNC TYPE B/D(CT-4L BNC).

◆CAMERA INPUT (out) – RCA1~RCA4

BNC No.	CAMERA CH
RCA1	CH1
RCA2	CH2
RCA3	CH3
RCA4	CH4
RCA5	TV Out

◆CAMERA INPUT MOLEX (CON2)

Pin No.	Pin Spec
1	CH1
2	CH2
3	CH3
4	CH4
5	GND

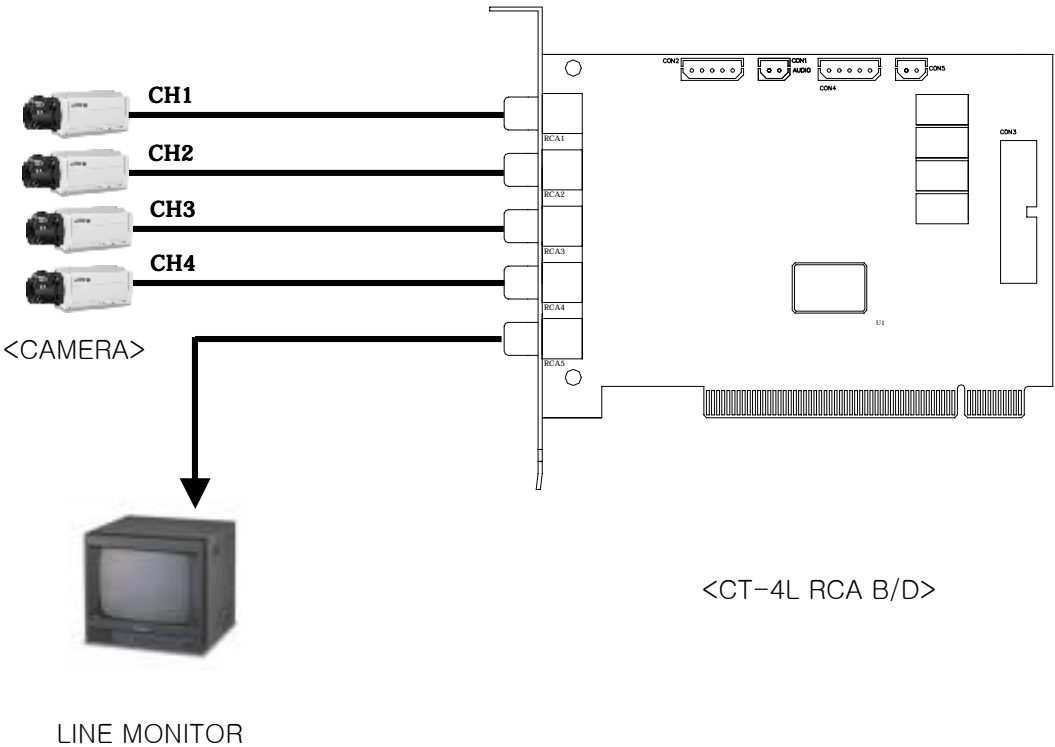


◆ AUDIO INPUT (CON1)

Pin No.	Pin Spec
1	Audio In
2	GND

4-6 Configuration

Excluded SENSOR INPUT&ALARM OUT



5. Others

5-1 GPIO ADDRESS MAP

GPIO Port	Bits	Signal Name	Remark
[23]	23	N.C	
[22]	22	N.C	
[21]	21	N.C	
[20]	20	N.C	
[19]	19	N.C	
[18]	18	N.C	
[17]	17	N.C	
[16]	16	N.C	
[15]	15	Line Out Enable	
[14]	14	Line Out	
[13]	13	Line Out	
[12]	12	Line Out	
[11]	11	Sensor1	
[10]	10	Sensor2	
[9]	9	Sensor3	
[8]	8	Sensor4	
[7]	7	N.C	
[6]	6	N.C	
[5]	5	Alarm Out Enable	
[4]	4	Alarm Out Enable	
[3]	3	Alarm Out4	
[2]	2	Alarm Out3	
[1]	1	Alarm Out2	
[0]	0	Alarm Out1	

◆ SENSOR INPUT

Signal Name	GPIO PORT	Remark
CH1 INPUT	GPIO11	Low Active
CH2 INPUT	GPIO10	Low Active
CH3 INPUT	GPIO9	Low Active
CH4 INPUT	GPIO8	Low Active

◆ ALARM OUTPUT

Signal Name	GPIO PORT	Remark
CH1 OUT	GPIO 0	High Active
CH2 OUT	GPIO 1	High Active
CH3 OUT	GPIO 2	High Active
CH4 OUT	GPIO 3	High Active
Output Enable	GPIO 4	Low Active
Output Enable	GPIO 5	High Active

◆ LINE OUTPUT

Signal Name	GPIO PORT	Remark
Address 00	GPIO 12	High Active
Address 01	GPIO 13	High Active
Address 02	GPIO 14	High Active
Output Enable	GPIO 15	High Active

Working Condition	GPIO PORT			
	GPIO15	GPIO 14	GPIO 13	GPIO 12
NOT USED	0	X	X	x
CH1 OUT	1	0	0	0
CH2 OUT	1	0	0	1
CH3 OUT	1	0	1	0
CH4 OUT	1	0	1	1

CLAUSE 2 INSTALLATION OF DRIVER & PROGRAM

Home DVR is operated on the condition of WIN98 perfectly. Before installing Home DVR, Please user check that operating system of Home DVR was installed on user' s PC system and no problem to operate the system in advance. In case of operating system normally without any problems, please complete the installation as following directions.

1. Please switch off the power of PC system completely.
2. Please open the PC Case.
3. After checking vacant PCI slot of 32 BIT on PC, Please put the card into the vacant PCI slot of 32 BIT on PC..
4. After lid case of PC, please connect with power supply

1. The information in Driver CD

- Home DVR Driver for WIN98
- Home DVR Setup Program
- User Manual
- WM-Tools 4.1
- DirectX 7.0a
- Acrobat 4.0

2. Driver Installation

1. please execute system and then operate O/S System of WIN98.
2. After operating WIN98 O/S, will be operated with the following message;
the message screen that found out “ Add New Hardware Wizard”
of new hardware” . Please click“ NEXT” .



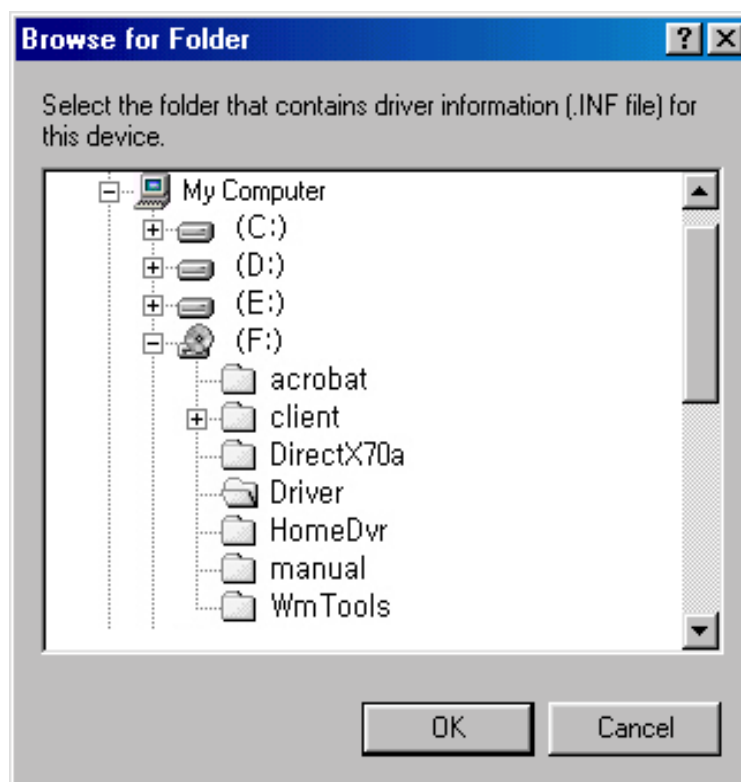
3. After selecting “ search for the best driver for your device(Recommended)” ,
Please click “ NEXT” .



4. Please check at “ Add New Hardware Wizard” . Then, please click “ Browse...” .



5. User can see the following several folder if it click the drive which is installed CD-ROM at “ Browse for Folder” . Among them, open the folder of “ Driver”
And then click “ OK” .



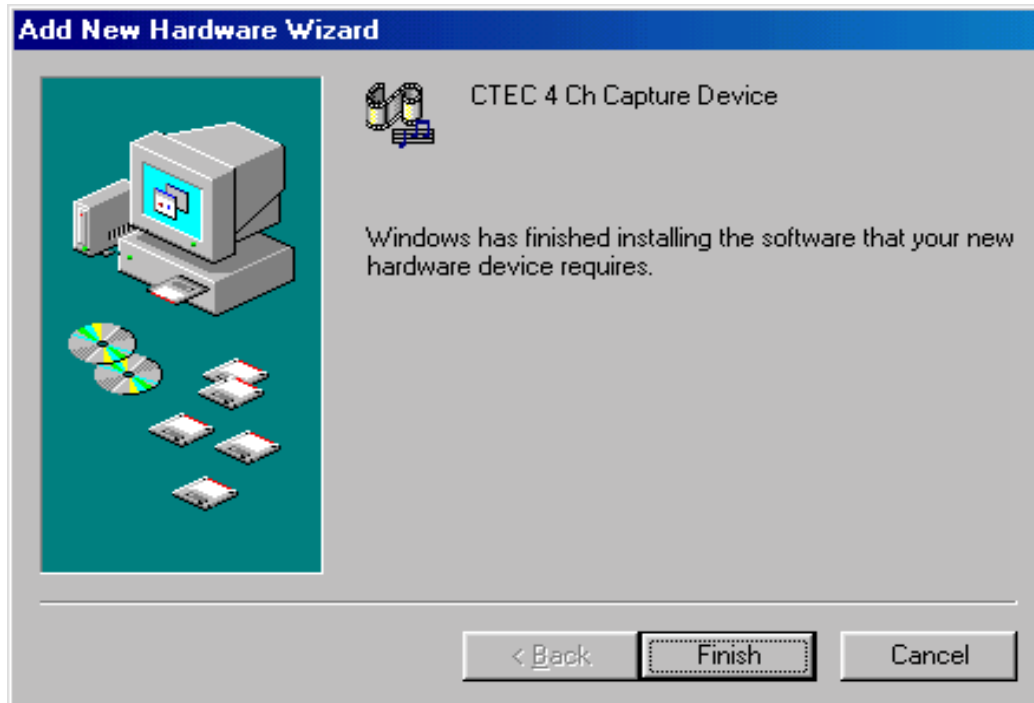
6. Please click “ NEXT” .



7. If it is all correct the device that seek for driver & the location of driver, Please click “ NEXT” .



8. If the installation of driver is completed, driver installation of Home DVR Board is finished completely. Please click “ FINISH ” .



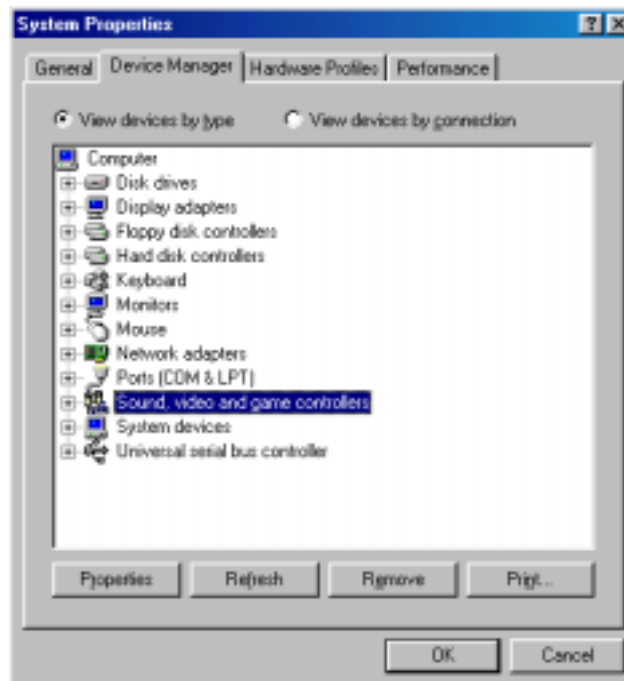
3. Checkpoint of Installed Driver

After installing driver, please check up whether the driver is activating with other hardware well without no conflict .

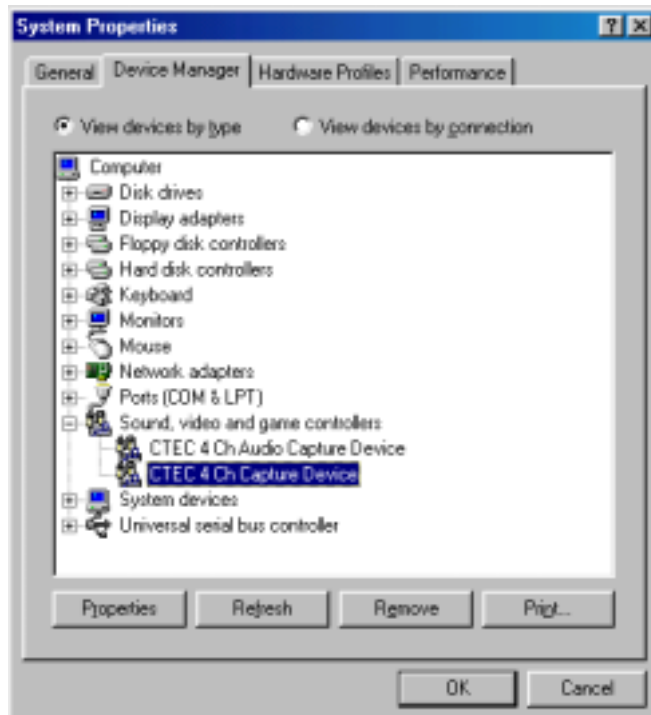
1. At the beginning program, please open [Control Panel], and execute [SYSTEM].



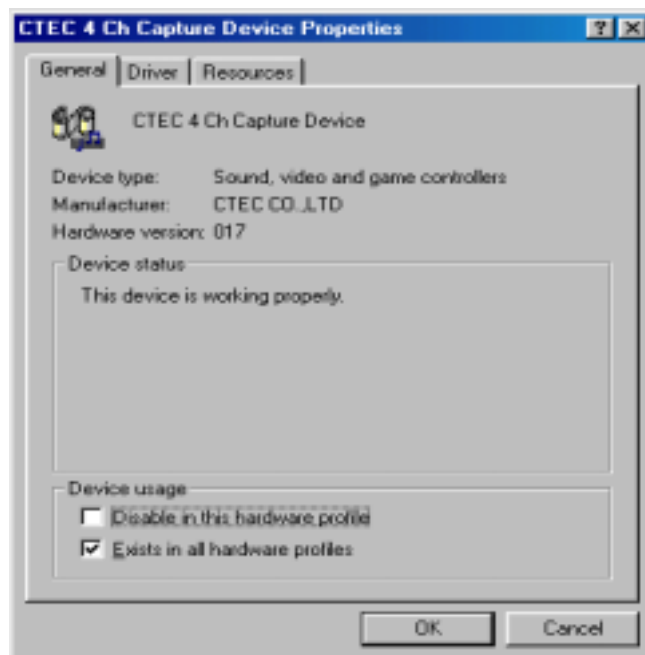
2. At [System Properties], please open [SOUND, VIDEO and GAME CONTROLLER].



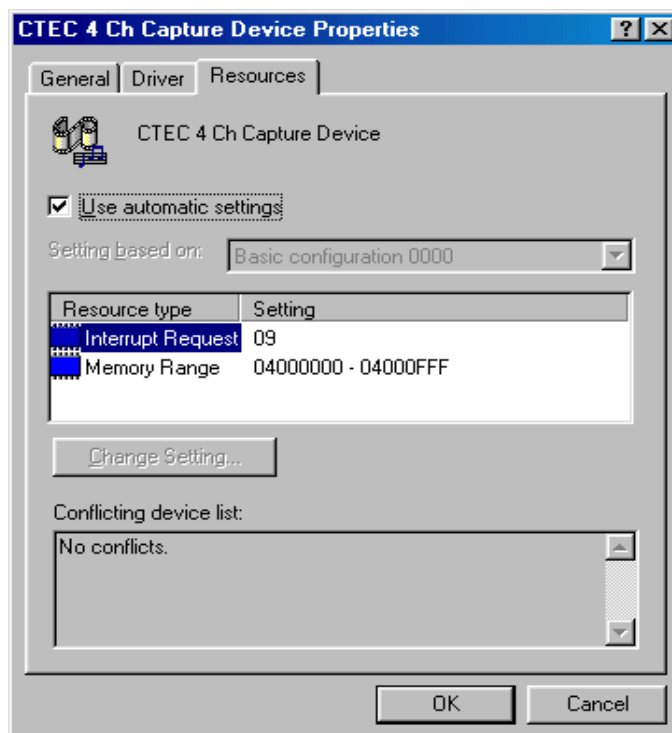
3. Please select [CTEC 4 Ch Capture Device],
and click [Properties] .



4. If appeared the following information, please check up the message that the device is operated correctly at the tap of [GERNERAL]. If you can see the message, it means that the driver is installed correctly.



5. Please check the conflicting reason of peripheral device which show at [CTEC 4ch Capture Device Properties] into the tap of [RESOURCES] ,And solve the conflict by taking adequate steps. In addition to that, user can check up IRQ NO. that Home DVR BOARD is using now at this tap.



Due to the incompleteness of WINDOW' s PnP(Plug & Play)function, it can be happened IRQ conflict with other peripheral device in case of installing by the way of PnP .

In case of short of IRQ of System, or When the IRQ does not divide onto Home DVR correctly, it does not operate PnP function normally.

If clicked computer list of system controller, your can see the condition of IRQ position .
At this moment, if IRQ is used commonly ,or IRQ is happened conflict, please switch off the power, then please put HomeDVR card into other PCI Slot, and reboot.

If it happen even the conflict of IRQ when the HomeDVR Board put into another slot,
User need to appoint IRQ manually which is not used at CMOS Setup of Main Board.

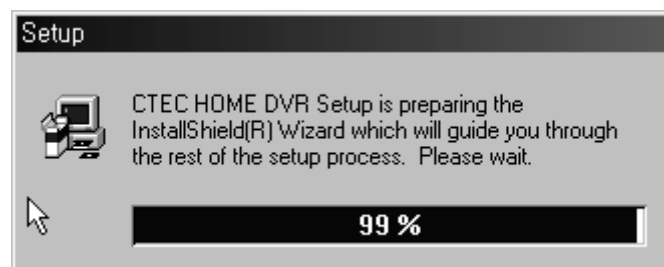
4. Program Installation

It should be installed DirectX and WMTTools of MS SOFTWARE in order to use HomeDVR correctly. If the newest version of DirectX and WMTTools is installed, it is ok not to select in option when setting up program.

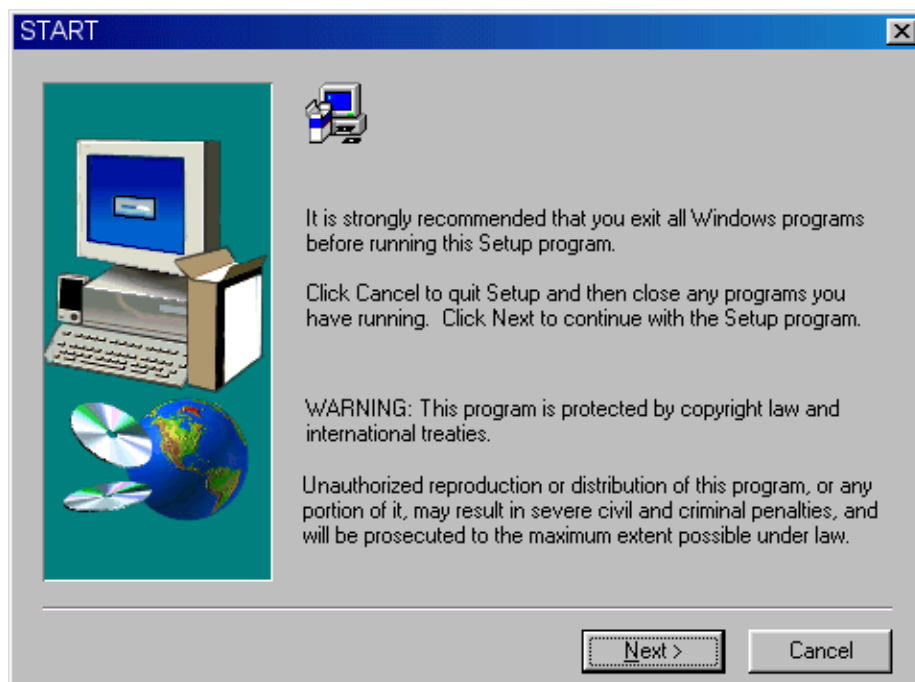
At this hereafter section, will explain to install DirectX 7.0a, WMTTools 4.1 with HomeDVR program automatically.

1. Please execute [SETUP] at HomeDvr Folder of Driver CD.

Then, you can see the below box and it will execute beginning operation.

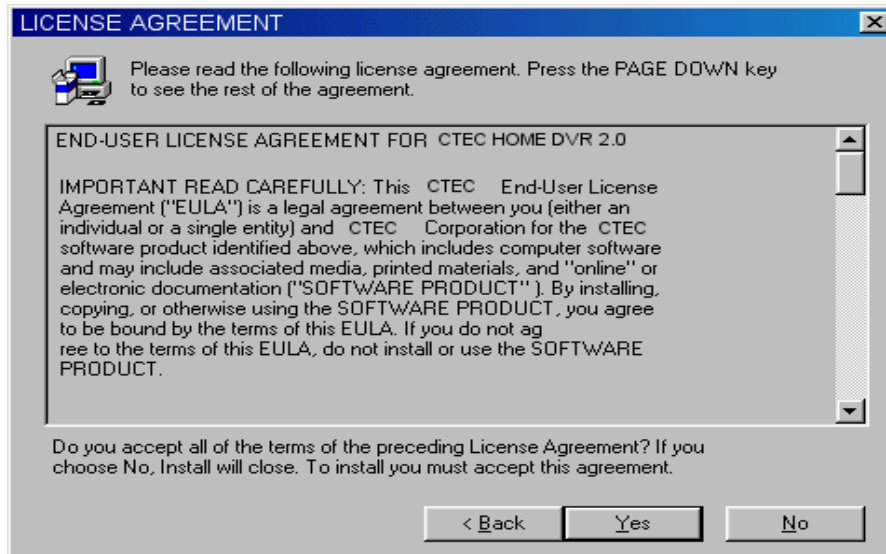


2. If appear the box to notify the [START] please operate " Next " button.



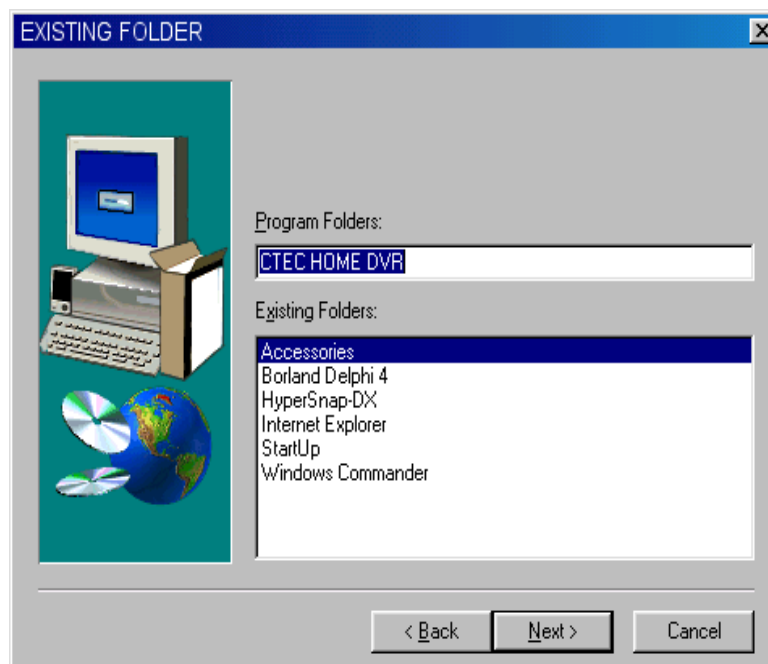
3. If user agreed to the contents of [LICENCE AGREEMENT]

Please click “ Yes” ,then proceed next stage.

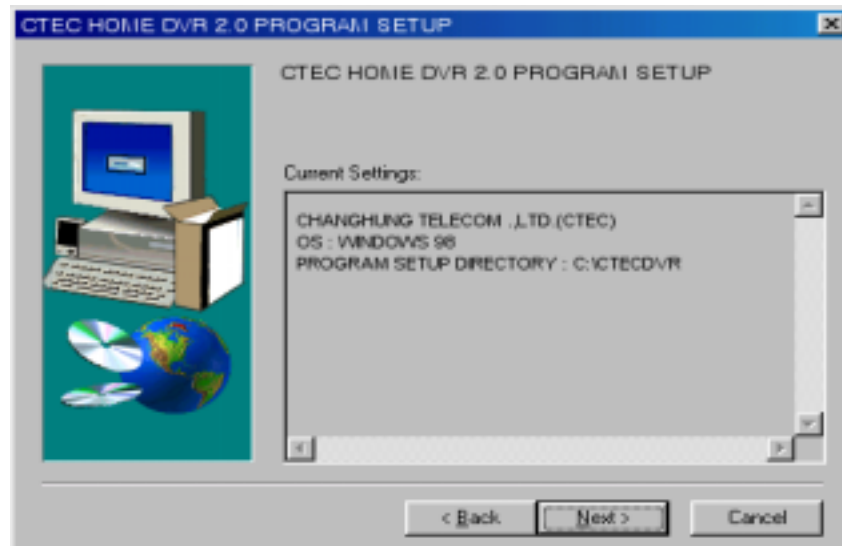


4. After checking the screen of [EXISTING FOLDER] to appoint program group,

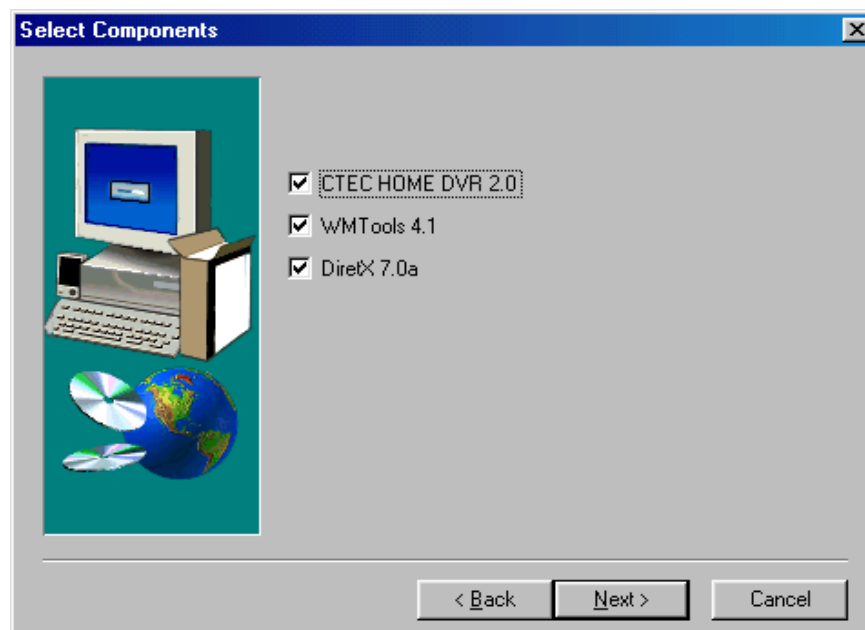
Please click “ Next” button.



5. After checking information of the box which show [CTEC DVR 2.0 PROGRAM SETUP] Please click “ Next” Button. (Basically, Program of HomeDVR is using Directory of C:\WCtecdvr and also need to have capacity of 30MB.)



6. If appeared the box that show [Select Components] after selecting the needed components, please click “ Next” button. And if [WMToos]&[DirestX] at existing system has already been installed, just need to check at [CTEC HOME DVR 2.0].If user do not know about the contents & version of program which was installed in system, we would like to recommend to select the whole components such like the above.



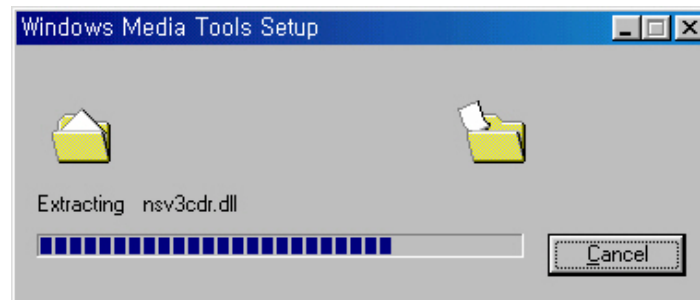
7. Now, it begin with Program Installation.



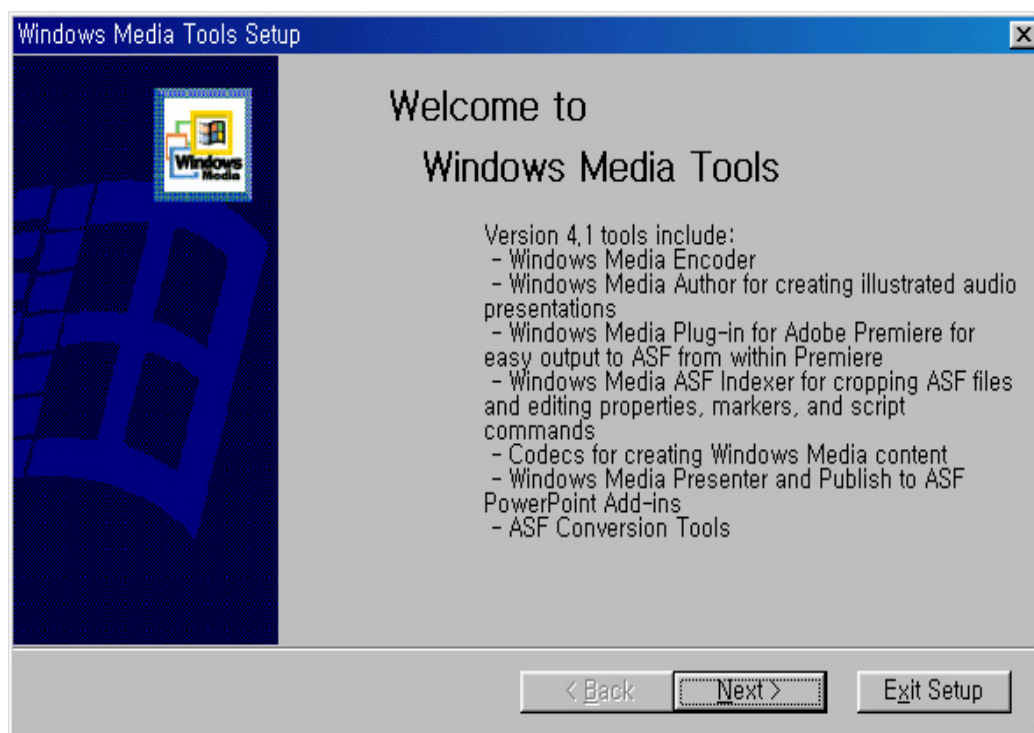
8. If user has selected the installation of DirectX & WMTTools at NO. 6 which is Needed except the program of CTEC HOME DVR , it install right after installing . First, user can see the box which show License Agreement about the Installation of WMTTools. After selecting “ Yes” ,please execute next stage.



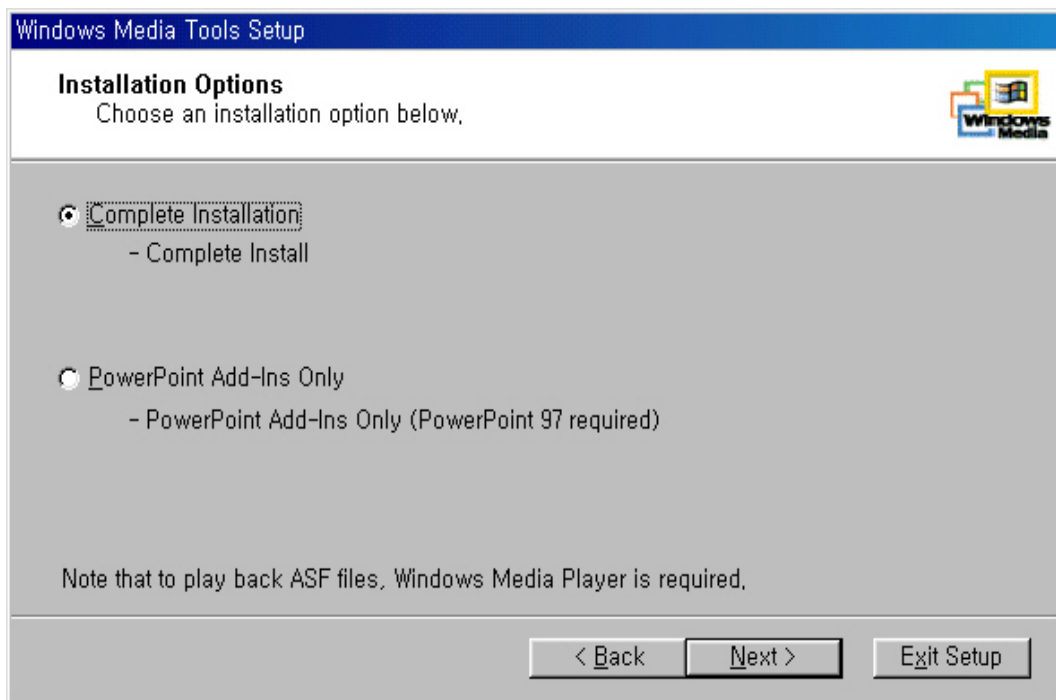
9. Now, it begin with execute [SETUP].



10. Please click “ NEXT” .

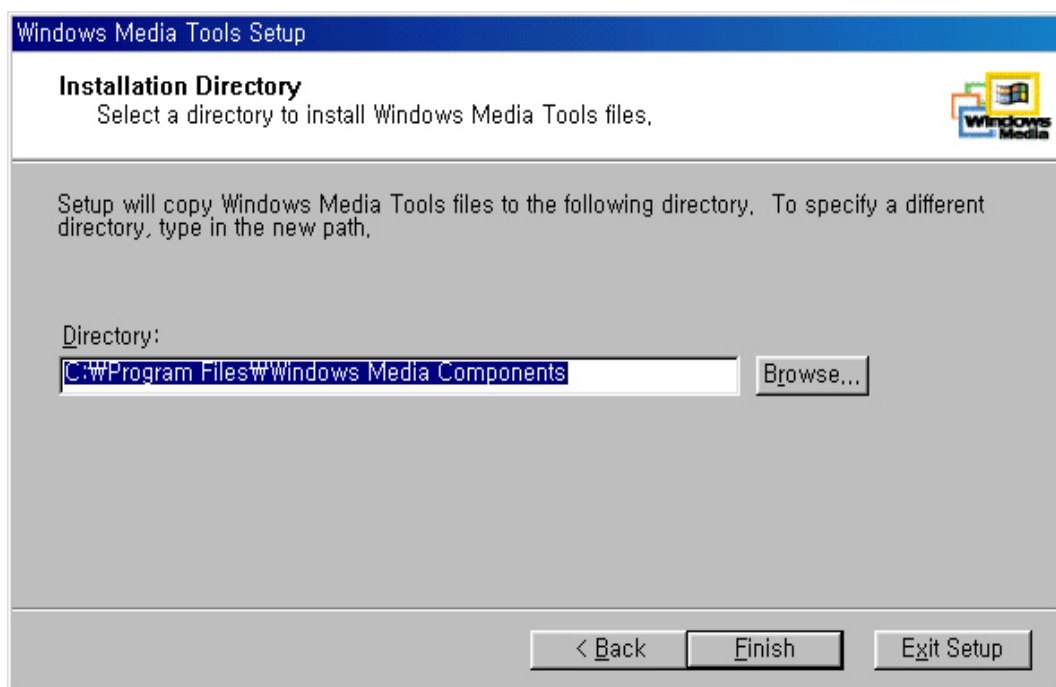


11. Please click “ NEXT” .



12. This screen show to select program of installation directory.

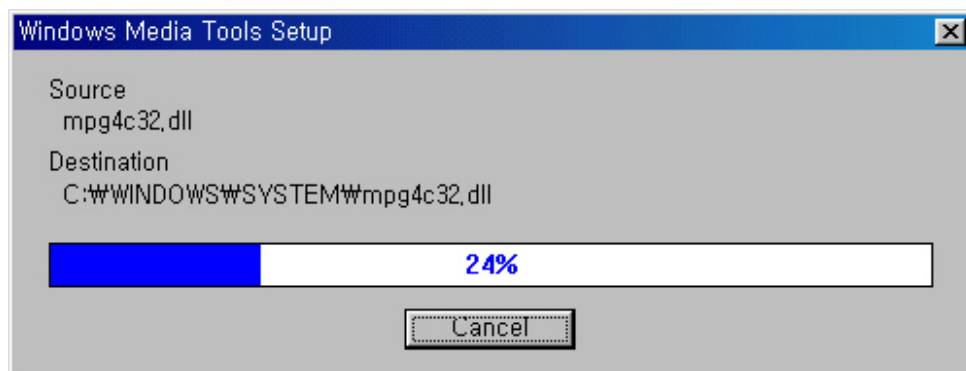
Please click “ Finish” . (it is installed at “ C:\Program Files\Windows Media Components” .)



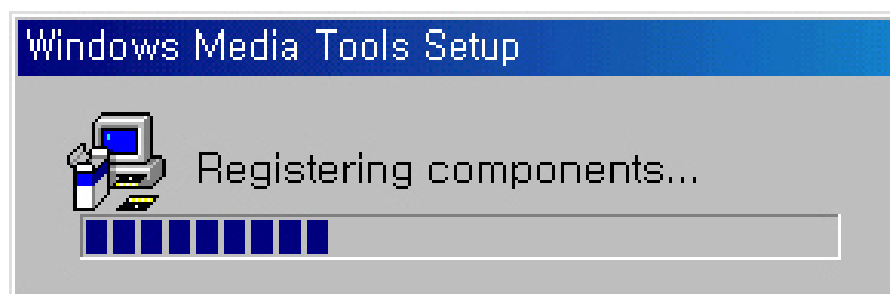
13. Please click “ YES” .



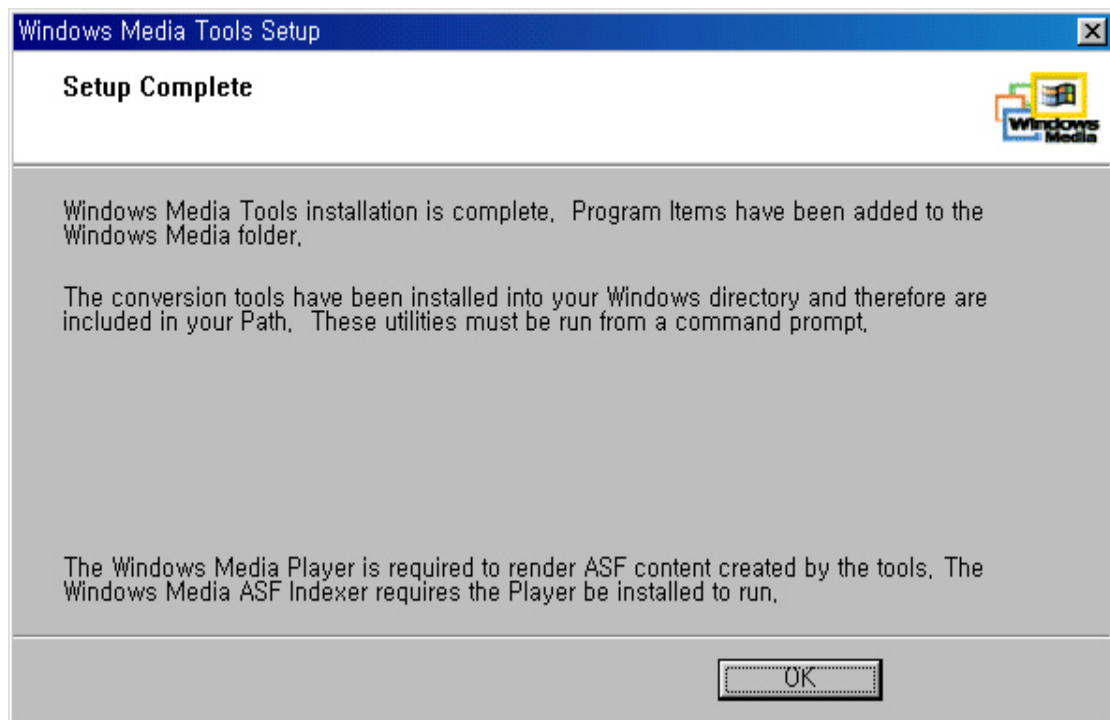
14. It is executed [SETUP].



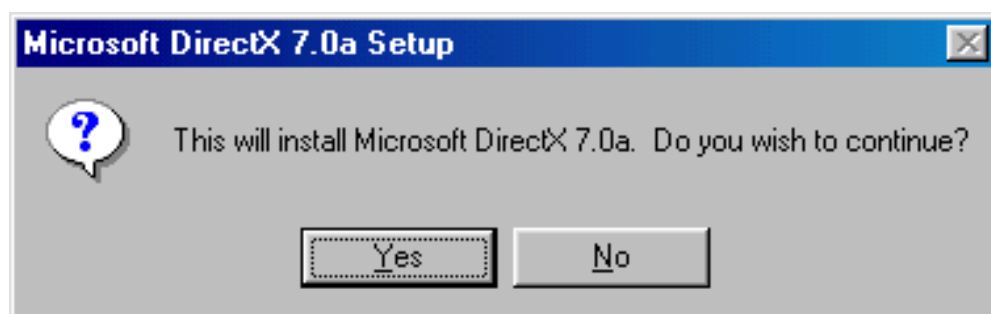
15. If [SETUP] is finished, it become[Registering] automatically .



16. It was finished [SETUP] successfully. Please click “ OK” .

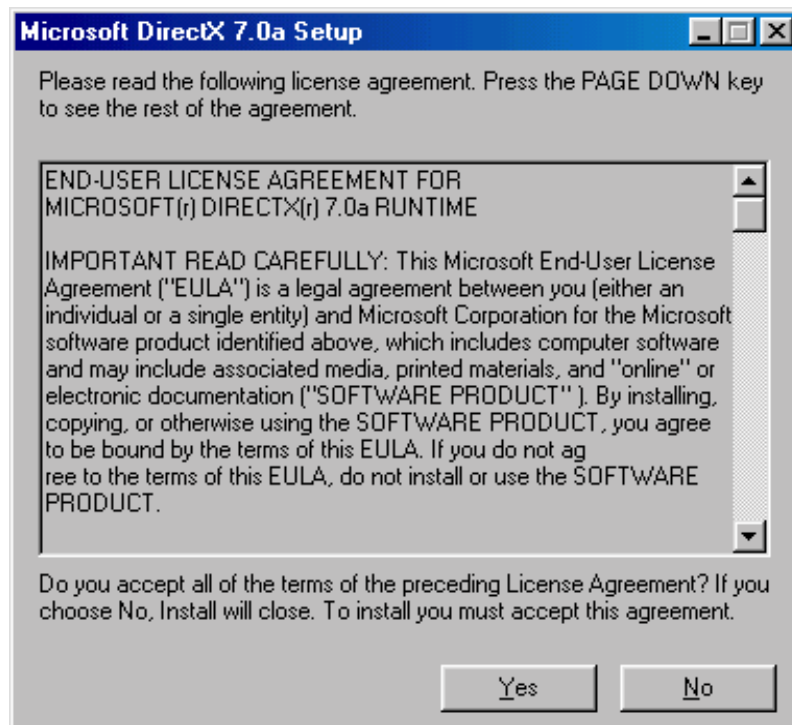


17. If [SETUP] of WMTTools is finished, it will begin installation of DirectX automatically. Please click “ YES” .

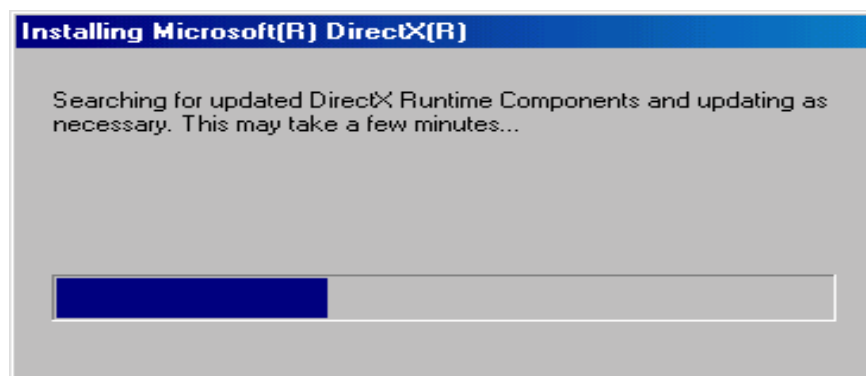
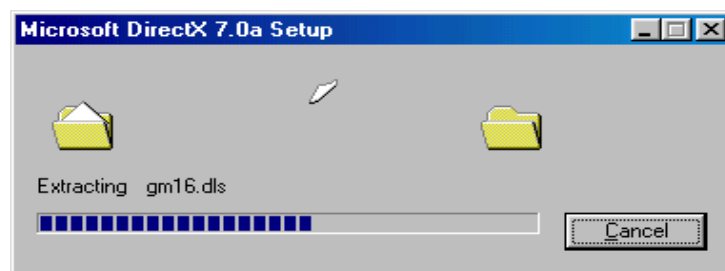


18. If user agree to the contents of [END-USER LICENCE AGREEMENT],

Please click “ YES” .

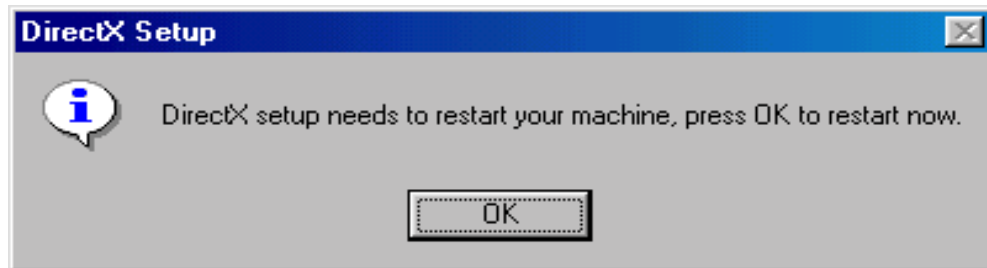


19 It will execute continuously the procedures which is needed at [SETUP].



20. Every installation is finished . Please restart system.

Please click “ CONFIRM” .



21. Hereafter, Setup of ALL programs is finished successfully..

5. Program Operating Manual.

*Please refer to [HELP(H)] in Home DVR Program regarding the functionality.



6. Q & A

Q. It does not work out computer booting after installing DVR .

A. That is wrongly made the installation of card. Please put the card into PCI slot accurately.

Q. After installing program, it executed program, but it did not show any video image on Monitor.

A. 1. Please check up whether the driver is installed correctly or not. If not installed correctly, User need to install driver again.

2. If video image of the screen is black, Setup -> Please go to Color Control, Then, change the color to the basic default color. But, if the video image of the screen did not show black color completely, please checkup whether the camera input is done correctly or not.

3. If TV card was installed, User cannot use with HomeDVR together.

Q. It did not work out the function of PnP(Plug & Play).

A. It can be installed with the same way such like “ NEW HARDWARE ADDITIONAL WIZZARD” .

Q. How many capacity does it need to take in HDD in case of full recording per day ?

A. Calculation : $3600(1\text{hr.}) \times 24\text{Hours} \times 12(\text{Frame}) \times 5\text{KB}(\text{Compressed size per video Image}) = 5\text{GB}$

◆ NOTICE- Minimum compressed size – 4KB, MAX.-5KB,
the compressed size can be changed depend upon size of video
image between 4KB and 5KB .

Based upon above calculation, it is possible to record about five hours with one GB in case of Full Recording.