

**ATTACHMENT E.**  
**- USER'S MANUAL**

## U.S.A.

### U.S.FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT INFORMATION TO THE USER

**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.

This 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 cause harmful interference to radio 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 of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.  
Connecting of peripherals requires the use of grounded shielded signal cables.

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User Guide

- 1) This equipment has been designed for normal use. It is certified to comply with Electron Wave Suitable Registration. The user can use this equipment everywhere including residential areas.
  
- 2) Before using this equipment, the user should read and follow ' Safety Precautions' . It contains the 'Warranty Material' for this equipment.

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Notice

This equipment is of first class quality. The LCD Panel is composed of more than 2 Million pixels and may have some faulty pixels. LCD panels with a maximum of 10 faulty pixels are classified as products of good quality. This standard is accepted by other manufacturers of LCD panels. An LCD panel without any faulty pixels is too expensive for the average customer. Our "A" class panels have the least 10 faulty pixels. We guarantee that our panels will provide the user with high quality performance. Therefore, no product exchanges or refunds will be made in regards to this matter.

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## 1. Initial Preparations

### 1) Safety Precautions

\* Observe the following basic rules for installation, usage, and service in order not to defeat the safeguards incorporated into this monitor.

\* Safety precautions are divided into Warning and Attention.

Warning: Breaking the basic rules can cause serious injury or death.

Attention: Breaking the basic rules can cause minor injury to yourself or damage to this equipment.

Save the manual near to future users after you read it.

& Do not open the monitor. Contact your dealer if the monitor is not operating properly.

& Do not place the monitor in direct sunlight or close to heaters.

=> Product malfunction or fire hazard may result.

& Do not drop metal objects like coins or hairpins into the monitor.

=> Electrical shock or fire hazard may result.

& Provide a secure connection to the power supply and do not use damaged power cords or plugs.

=> Electrical shock or fire hazard may result.

& Do not place the monitor in exposed places and near water.

=> Electrical shock, fire hazard, or malfunction may result.

& Do not clean the monitor with water or touch it with wet hands.

=> Electrical shock or fire hazard may result.

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1) Safety Precautions (cont.)

& During lightening storms, unplug the monitor from the wall outlet and do not touch it.

=> Electrical shock or fire hazard may result.

& Not using the monitor for hours, unplug the monitor from the wall outlet.

=> Dust may cause heat, fire, shock or short circuit.

& Install the monitor at the specified position from the wall to be well ventilated.

⇒ A rise in temperature of monitor may cause fire.

& Install the monitor in a stable place.

=> An unstable monitor may crash or fall. Personal injury, damage, or malfunction may result.

& When moving the monitor, turn it off and disconnect all cables and the plug.

=> Product damage, electric shock, or fire hazard may result.

& When disconnecting from the wall outlet, grab the plug.

=> Grabbing the cord may result in heat generation or fire hazard.

& Keep your eyes 50 cm away from the screen and 0~15° down in relation to the screen.

=> Viewing at too close a position and wrong posture can weaken your eyes.

& Before cleaning the monitor and LCD screen, disconnect it. Wipe it with a soft, clean cloth.

Do not use liquid or aerosol cleaners.

=> Chemical cleaners may fade, dissolve, or crack the monitor surface.

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## 2) Part Names

### Front View

#### 1. LCD Panel

2. Select Buttons: Pushing them, causes the Screen Adjusting Menu to appear. Use them to select menu items.

3. Adjust Buttons: Control the adjustment of menu items.

4. Power Button: Powers ON/OFF the monitor.

5. Power Indicator: Shows monitor status.

=> Green: Monitor operating normally.

=> Flickering: Monitor signal cable isn't connected (flickering at 3-second intervals)

#### 6. Built-in Speaker

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### Rear View

1. Power Connector: For connecting the power supply adaptor.

2. D-SUB Unit: For connecting the D-SUB signal cable.

3. SPEAKER Unit: For connecting speakers to the PC sound card.

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## 3) Basic Accessories

\* Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

### Adaptor

### D-SUB Signal Cable

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LCD Monitor

Audio Cable

User Guide

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## 2. Connection

### Connecting to the PC

Attention: Power OFF both the monitor and the PC before making any connections to the PC.

Power Connection: Connect the power plug into either a 220V or 110V wall outlet. (Free voltage)

PC Connection: Connect the monitor D-SUB connector and the PC using the D-SUB Signal Cable.

Speaker Connection: Connect the speaker connection of the monitor and the PC sound card using the Audio Cable.

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## 3. Product Description

### Specifications

Resolution: 1280 X 1024 (SXGA)

Color: 16,777,216 colors, 8-bit

Pixel Pitch: 0.2805mm (H) X 0.2805mm (V)

Viewable Size: 18.1"

Viewing Angle: 85° (H) / 113° (V)

Contrast Ratio: 300:1

Screen Brightness: 200 cd/m<sup>2</sup>

Built-in Speaker: 3W X 2 Stereo Type

Power Input: DC 12V, 5A

Electric Energy Consumption: 60W

Weight: 6.65Kg (Net) / 6.9Kg (Packed)



Dimensions: 443mm X 200mm X 453mm

Security Standard: FCC(USA), VCCI(JAPAN), CE(EUROPE), MIC(KOREA)

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#### 4. Usage

##### Description of Monitor Functions

##### Basic Description - Front View

The function adjustment buttons of the NF-1800MA are divided into two on the left and two on the right. Additional adjustments are not required because they have been factory adjusted. If the user wants to change the default setup, follow the setting description below.

The two buttons on the left allow you to display the screen menu and to select items.

The two buttons on the right allow you to select individual items and adjust their levels.

##### 1) Description of Main Menu.

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#### ON-SCREEN DISPLAY

Select / / / icons to be adjusted on the On Screen Display (OSD) main screen. To exit the OSD main menu, the user can choose 'Save + Exit' or leave the buttons untouched for the set time (10 sec.).

The menu changes will then automatically be saved.

#### MAIN MENU

Main Menu options are as follows:

NOTE: Select 'LANGUAGE' on the OSD Main Menu to select your desired languages. Select using the / buttons.

#### OSD TO SUB MENU

Go to the 'To SUB Menu' using the / buttons, and choose one using the / buttons.

#### AUTO ADJUSTMENT

By selecting AUTO ADJUSTMENT using the / buttons, the monitor automatically adjust CLOCK, PHASE, H-POSITION, and V-POSITION to the optimum condition.

#### CLOCK

By selecting CLOCK using the / buttons, the user can adjust the horizontal position using the / buttons.

#### PHASE

By selecting PHASE using the / buttons, the user can adjust screen noise using the / buttons.

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#### H-POSITION

By selecting H-POSITION using the / buttons, the user can move the whole image to the left using the button, or the whole image to the right using the button.

#### V-POSITION

By selecting V-POSITION using the / buttons, the user can move the whole image down using the button, or the whole image up using the button.

#### OSD DISPLAY TIME

By selecting OSD DISPLAY TIME using the / buttons, the user can move the position of the Main Menu on the screen using the / buttons (Time setting: 5~ 60 sec.).

#### OSD WINDOW LOCATION

By selecting OSD WINDOW LOCATION using the / buttons, the user can move the position of the Main Menu on the screen using the / buttons. Main Menu is changeable 9 positions in the screen.

#### MODE SELECTION

By selecting MODE SELECTION using the / buttons, the user can select DOS mode using the / buttons. Using the / buttons, the following menu will appear.

#### LANGUAGE

By selecting LANGUAGE using the / buttons and pushing the / buttons, the following menu will appear. Select the desired language using the / buttons.

#### RESET

By selecting RESET using the / buttons and starting it using the / buttons. Starting erases all EEPROM settings and the system reverts to the default settings.

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#### 2) Description of Sub Menu

##### SUB MENU

The following diagram refers to the Sub Menu.

The user can adjust Brightness and Contrast by changing the Sub Menu Settings.

##### TO MAIN MENU

Move and select using the / buttons, and push the / buttons to come back to the main menu.

##### AUTO BALANCE

Move and select using the / buttons, and push the / buttons to adjust color balance and color contrast automatically.

##### COLOR

Move and select using the / buttons, and push the / buttons to select 262K (262,000 colors) or 16M (16,000,000 colors).

**BRIGHTNESS**

Move and select using the / buttons, and push the / buttons for the brightness of RGB color pattern. Their changeable range is 0 to 100. The user can also adjust the Red, Green, or Blue color balance. Their changeable range is 0 to 100.

**CONTRAST**

Move and select using the / buttons, and push the / buttons to adjust color contrast of RGB color patterns.

Trouble	Suggested Action	Remedy
Screen is blank and power indicator is off.	Check power cable connection. Check power button.	Secure the connection. Push the power button.
Screen is blank but power indicator is in green mode.	Check the monitor signal cable (D-SUB) connection.	Secure the connection of monitor signal cable (D-SUB)
Display position and size is incorrect.	Check for correct adjustment of display position and size.	Start Auto adjustment in main menu.
Screen color isn't uniform and stable.	Check video card resolution.	Change the video card settings or resolution. Adjust color in SUB menu.
Display is too bright or too dark.	Check monitor brightness.	Adjust the brightness and contrast in SUB menu.
Any noise appearing in images or characters are not clearly portrayed.	Check PHASE icon	Decrease the noise using the PHASE icon in main menu.

The user can also adjust the RED, GREEN and BLUE settings.

**5. Others**

**1) Troubleshooting**

In case of trouble, check these items before calling the service center.

**2) Warranty Materials**

BTC Korea warrants to customers that this product is free from defects in workmanship and materials according to Compensatory Regulations for Consumers.

This warranty is required for product service.

Product Name			Model	
Date of Purchase (yyyy/mm/dd)			Serial No.	
Consumer	Address			
	Name		Phone No.	
Dealer Purchased from		Dealer Phone No.		Dealer Name

Warranty benefit is only in accordance with this material.

The user should immediately write down the date of purchase as the warranty period starts from the date of purchase.

In cases where we cannot check the exact date, the date of purchase is calculated as 6 months from the manufacturing date.

This material is for domestic use only.

The user should keep this material because it may not be published again.

### 3) Service

#### Free Service

The user can get servicing from qualified service personnel within the warranty period.

- Warranty period is six months in cases where the user uses the product for business or unusual circumstances or the product is industrial product.(including key component)

Warranty Type of Service		Warranty Details	
		Within the warranty period	After the warranty period
In usual circumstances where troubles appear within 10 days after product purchase.		Product Replacement	
Repair	Product does not operate due to the same trouble up to three times	Free Repair	Repair Charges
	Product does not operate due to the same trouble up to four times	Product Replacement	Repair Charges
No Repair	Product can't be repaired even though there are repair parts	Product Replacement	Product replacement after deducting Depreciation Cost
	Product can't be repaired because there aren't any repair parts	Product Replacement	Product replacement after adding 10% of Depreciation Cost

Service Charges

For the following, the user should pay for services within the warranty period:

When the product does not operate because of consumer fault.

- Product does not operate because the user attempted service by someone other than qualified service personnel.

In case of trouble caused by modification by anyone other than qualified service personnel such as:

- Using the wrong voltage or a damaged power cord or plug.
- Monitor has been dropped.
- Improper adjustment of monitor options
- Liquid has been spilled on or into the monitor housing.
- Unauthorized product modification

For simple problems

- Where the service personnel can repair the product without opening the covers.
- Where the outside cables or option cards are reset.
- Where software is reinstalled.
- Where network or another company's product usage is explained.

Other

- Where troubles are caused by accident, fire, lightening, other hazards, or acts of God.
- Where expendable supplies (like lamps) are used up.