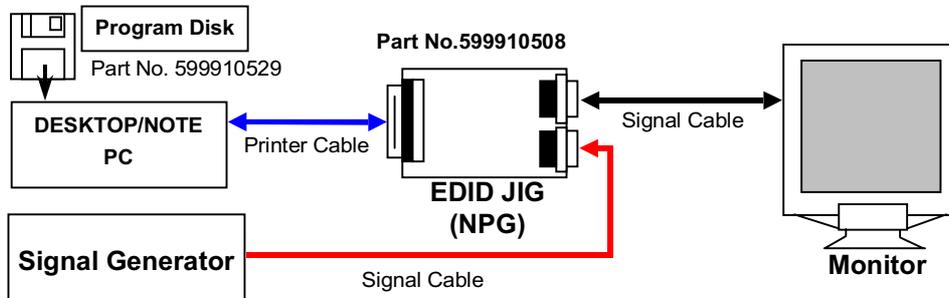


INSPECTION

1. Inspection of PLUG & PLAY communication and OSM "MONITOR INFORMATION" for model name/ serial number

1-1. A construction of System

This system should be connected as shown below.



1-2. Input signal

Horizontal sync frequency: Not specified.

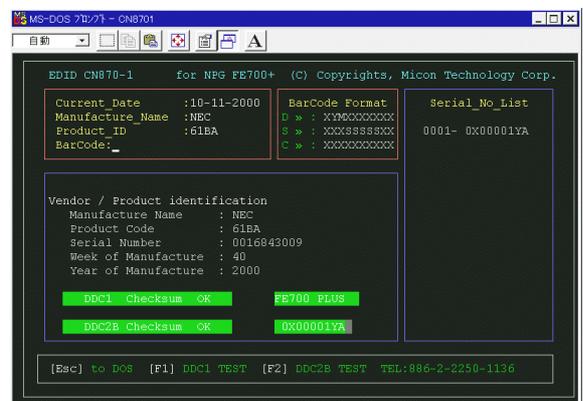
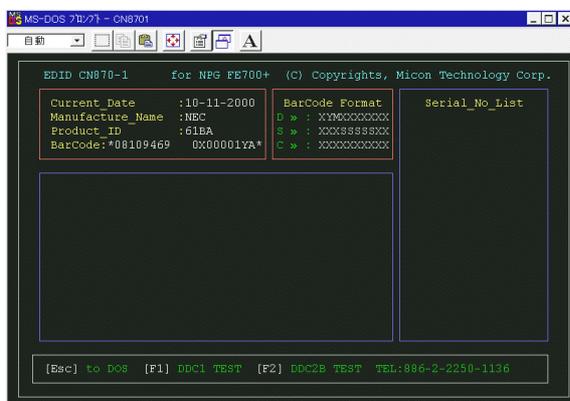
Vertical sync frequency: Not specified.

1-3. Programs required

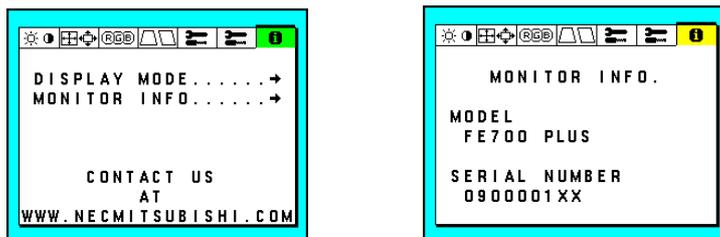
CN8701.EXE
FE700P.BAT
FE700P.TXT

1-4. Inspection procedures

- Copy the above-mentioned programs in an adequate directory.
- Set up the MO-DOS mode. (DOS Prompt of Windows95/98 is also acceptable.)
- Execute the FE700P.BAT from the command line.
- Check the serial number of the set and enter an input of the following code from the keyboard.
08109469 Serial Number (*+Model Code + 3 Spaces + Serial No. +*)
Example: *08109469...0X12345YA*
- Press the Enter key. Then, the EDID data, OSM model name, and the serial number begin to be written in.

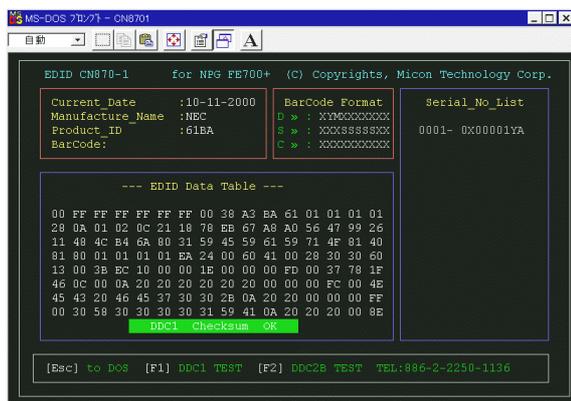


f. Display “MONITOR INFORMATION” of the OSM, and confirm that the model name and serial number have been correctly written.



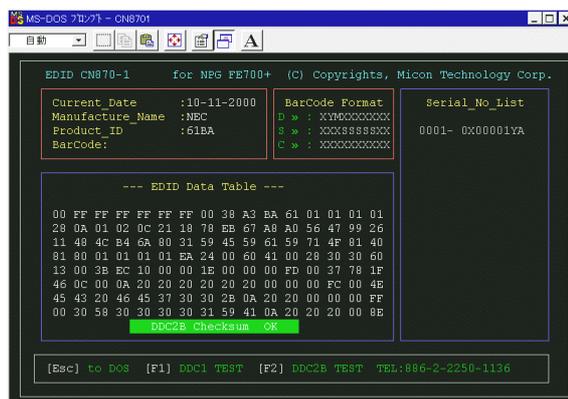
g. Press the F1 key to start the inspection of DDC1.

After the completion of inspection, the contents of EDID are displayed. If an error should occur, the related error message will be displayed in the bottom area of the screen. Refer to Paragraph 3.19.5 in regard to the meaning of this error message.



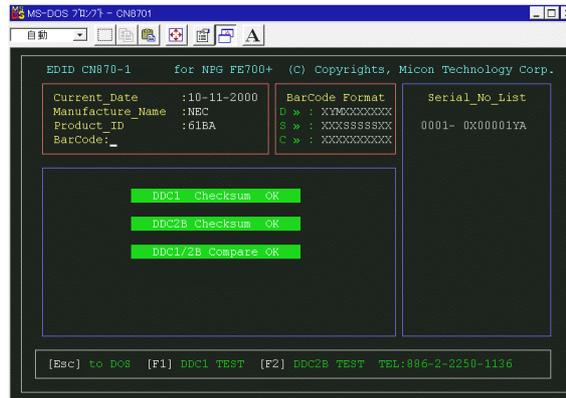
h. Press the F2 key to start the inspection of DDC2B.

After the completion of inspection, the contents of EDID are displayed. If an error should occur, the related error message will be displayed in the bottom area of the screen. Refer to Paragraph 3.19.5 in regard to the meaning of this error message.



i. Press the F3 key to start the writing and inspection of DDC1 and DDC2B.

Even after the completion of inspection, the contents of EDID are not displayed. If an error should occur, the related error message will be displayed in the bottom area of the screen. Refer to Paragraph 3.19.5 in regard to the meaning of this error message.



1-5. Error messages

- IIC Communication Error
Communication disabled
- EDID Check Sum Error
Entry of false EDID
- DDC1 Does Not Find Head Data
DDC1 Communication disabled
- DDC2 Does Not Find Head Data
DDC2 Communication disabled

1-6. EDID data file

The EDID data file text is shown below. When you write or inspect EDID for this monitor, the following table can be used.

File name : FE700P.TXT

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	00	FF	FF	FF	FF	FF	FF	00	38	A3	BA	61	01	01	01	01
10	23	0A	01	02	0C	21	18	78	EB	67	A8	A0	56	47	99	26
20	11	48	4C	B4	6A	80	31	59	45	59	61	59	71	4F	81	40
30	81	80	01	01	01	01	EA	24	00	60	41	00	28	30	30	60
40	13	00	3B	EC	10	00	00	1E	00	00	00	FD	00	37	78	1F
50	46	0C	00	0A	20	20	20	20	20	20	00	00	00	FC	00	4E
60	45	43	20	46	45	37	30	30	2B	0A	20	20	00	00	00	FF
70	00	0A	20	20	20	20	20	20	20	20	20	20	20	20	00	86

Table 1-6. Data list

- *1 : address 10h Manufactured month x 4
- *2 : address 11h Manufactured year - 1990
- *3 : address 71h ~ 7Dh Input serial number (ASCII code)
Add 0Ah after serial number.
Add 20th remaining address.
- *4 : address 7Fh Checksum. The sum of entire 128byte shall be equal to 00h.

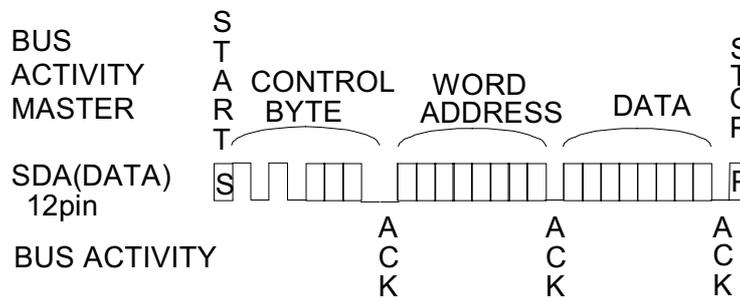


Diagram 1-6 Timing chart of DDC2B

2. CRT

2-1. CRT Face plate defect

2-1-1. Inspection condition

- 1) In the operating condition, observe the defect on the screen under following condition : 9,300K (x=0.283, y = 0.297) white raster or the element monochrome raster which its brightness is 34cd/m² (10ft•L) on the screen center surrounding light is about 10 Lux.
- 2) In the non-operating condition, observe the defect of the screen under light of about 200 Lux, measured at the faceplate.
- 3) Inspection shall be made more than 45 cm away from the screen.
- 4) Observe the screen on white raster and each monochrome color of red, green and blue.

2-1-2. Division of zone

A screen is divided into following 2 zones.

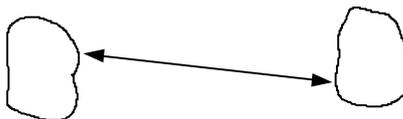
zone A : Area inside the rectangle that its size measures H : 300mm, V : 225mm in the center of screen.

zone B : Area outside the above rectangle

2-1-3. Limits

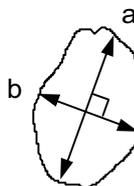
1) CRT face defect

a) Distance (minimum distance)



b) Average diameter

Turn of $\frac{a+b}{2}$ (a: length, b: width)



c) Limit

- Dark spot, Blocked aperture

Average diameter (mm)	A	B	A + B	Minimum distance
0.51 ~	0	0	0	-
0.31 ~ 0.50	0	0	0	-
0.15 ~ 0.30	6 (note 1)	6 (note 1)	10 (note 1)	10mm

- Discoloration, Stain, Missing phosphor, etc.

Average diameter(mm)	A	B	A + B	Minimum distance
0.51 ~ 0.75	0	1	-	20mm
0.15 ~ 0.50	2	3	-	20mm

Note 1: This criteria is applied to each color respectively.

Note 2: Ignore all defect regarding 1 trio of phosphor stripe corresponding to the last slit.

2) Face plate defect

a) Blisters, opaque spots and elongated closed blisters

Average diameter (*1) (mm)	Allowable number (pcs)			Minimum Separation (mm)
	Zone A	Zone B	Total	
0.76	0	0	0	30
0.51 ~ 0.75	0	1	1	
0.26 ~ 0.50	2	3	5	
0.11 ~ 0.25	-	-	-	(*2)

Note (*1) Mean diameter shall be either one of the following values, which is smaller.

$$(a + b) / 2 \text{ or } a / 20 + 2b \text{ (a: length, b: width)}$$

Note (*2) Maximum 5pcs. In area of $\Phi 10\text{mm}$.

b) Scratch

Width(mm)	Allowable Length(mm)
0.16~	rejected
0.11 ~ 0.15	3
0.06 ~ 0.10	26
~ 0.05	unlimited

c) Other glass defect

Flaw, crack and lack cannot be distinguish easily by naked eye.

Iron rust conforms to limited sample.

2-2. AR-film's surface defect

2-2-1. Inspection condition

- 1) Put a valve on an inspective stand and illuminate it from the top with white fluorescent light.
- 2) Valve surface illuminance is more than 1500Lux and less than 1000Lux.
- 3) Observe from distance of 40cm from surface, disregard flaws which can not be distinguished from this distance.

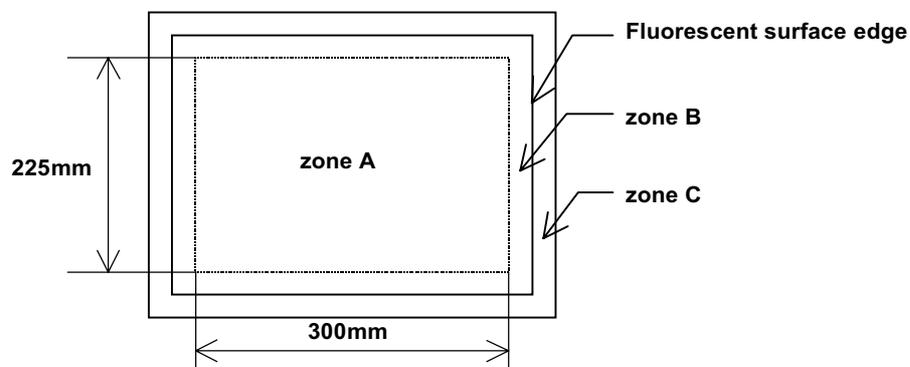
2-2-2. Division of zone

A screen is divided into following 3 zones.

zone A : Area inside the rectangle that measures H : 300mm, V : 225mm at the center of screen.

zone B : Area outside zone A and inside the fluorescent surface edge.

zone C : Area outside the fluorescent surface edge.



2-2-3. Limits

1) Scratch

Width(mm)	Allowable Length(mm)(Zone A + Zone B)
0.16 ~	Reject
0.11 ~ 0.15	13
0.06 ~ 0.10	26
~ 0.05	unlimited

Note 1) Even though width of scratch is more than 0.16mm, regard scratch whose contrast is weak extremely as stain and apply standard of 2.2.3 2).

Note 2) Do not recognize flaws which injures goods prices though it is not especially stipulated as for zone C.

2) Opaque flaws (ex. Stain) and coating peeling

Do not apply the following standard to zone C.

Classify flaws by contrast and judge it by size every the contrast.

Definition of a contrast

High contrast : The foreign substance which shuts off light from fluorescence surface

Middle contrast : A semitransparent foreign substance and stain
(ex. coating material which has been changed)

Low contrast : stain and dust which do not reflect light from fluorescence surface and can be distinguished by its appearance

Note : Ignore the light spot with no interference color.

(However, Non of them with its size in excess of 3.75mm is acceptable, that damages the product quality.)

Standard

Average diameter classified by a contrast (Note 1) (mm)			Allowable number		Allowable Length (mm)
High contrast	Middle contrast	Low contrast	zone A	zone B	
~ 0.10	~ 0.20	~ 0.50	Ignore	Ignore	-
0.11 ~ 0.25	0.21 ~ 0.50	0.51 ~ 1.25	2 [4]	4 [5]	20
0.26 ~ 0.50	0.51 ~ 1.00	1.26 ~ 2.50	1 [4]	2 [4]	40
0.51 ~ 0.75	1.01 ~ 1.50	2.51 ~ 3.75	0 [4]	1 [4]	80

Values inside [] represent acceptable number in low contrast.

See the table in the next page for total defect number, which is acceptable in low contrast.

NOTE 1 : Convert $(a+b)/2$ or $a/20 + 2b$ small value into average diameter. (a: length, b: width)

total number of a low contrast flaws	zone A	zone B
Standard classified by zones	6	8
Total (zone A + zone B)	10	

NOTE 1 : Acceptable interval shall be larger one in the case that defects have different interval.

NOTE 2 : There is no standard regarding zone C. Therefore, no defect is accepted that may deteriorate the value of products. Defect level by consultation. Discuss is necessary.

NOTE 3 : Tolerance of defect size is approx. 10%.

3) Reflectance

Less than 0.7% (at the screen center)

4) Reflected color unevenness

The reflected color unevenness which can be confirmed easily in visual check must not exist.

5) Strength

Wear and abrasion resistance : Coating should withstand 30 minute scrubbing with a #50 eraser. (load; 500g)

Pencil resistance : Coating should withstand 3H pencil. (according to conformed item of Coating Strength JIS - 5400)

[Supplementary explanation]

Definition of striped coating (tear) and flaw (rubbed coating). (according to JIS)

Striped coating (tear) : Tear that reaches to the glass surface.

Flaw (rubbed coating) : Scratches that slightly dig into the surface of the coating.

6) Dirt, cloudiness, color irregularity, streaks and other defects

No defects should not be detected when white or green raster are on the screen.

Set the new boundary sample if necessary.

2-2-4. Notice for cleaning up the surface of faceplate filmed over by the AR - film

1) Do not rub CRT surface with hard objects or hit CRT surface.

2) Wipe off the dust softly with a dry soft cloth.

Do not use acid cleaner, alkaline cleaner, solution such as detergent or thinner, etc.

If dust can not be wiped off with a dry soft cloth, use the water, ethyl alcohol neutral glass cleaner or detergent.

3) If and when necessary to touch CRT surface with a tool, perform it with care.

4) Be careful not to damage or scratch CRT surface with a hard foreign object, etc. while cleaning.