

# SORD

## USER'S MANUAL

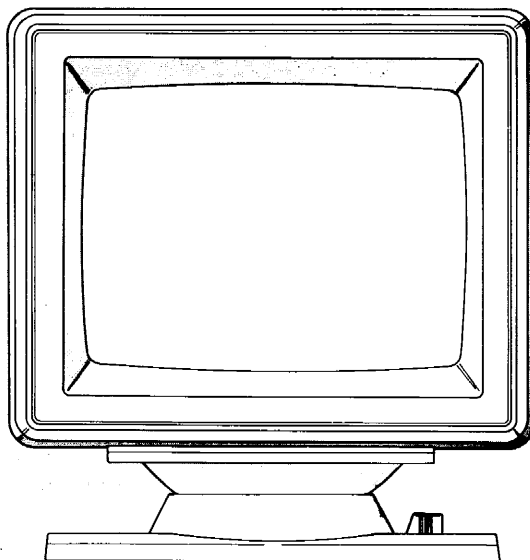
COLOR DISPLAY

# DP-148C

Proper Use and Installation

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# THANK YOU...

For purchasing a SORD DP-148C Color Display. Please read this manual well before using this unit so as to avoid any trouble or malfunctions that might occur due to improper usage or care. Keep this manual on hand, as it contains information that will be necessary in case the unit needs servicing.

## FEATURES

- R.G.B. Direct Drive, with a High Resolution CRT
- Non-Glare Screen
- 2,000 Character Display
- Multi-Color Display with Analogue Input
- Standard Tilt Stand Allows Up/Down, Left/Right Positioning

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# INSTALLATION

## ● THE WORKING AREA

Be sure to choose the working area carefully to avoid malfunctions and breakdowns.

The DP-148C is sensitive to heat

This unit contains integrated circuits. Such parts are sensitive to high temperatures, so be sure the area you choose to locate the DP-148C is not near any objects which give off heat, such as radiators or furnaces; and be sure to keep the unit out of direct sunlight.

Find a Clean Place

The Working area must also be clean, and dust free.

Do Not Place any Objects on the Unit

This might cause deformations. Magnets and magnetic fields will distort the display of the screen; so be sure there are none in the working area.

## ● POWER CORD AND PLUG

Be sure to hold the plug of the AC power cord firmly when pulling it out of an electrical socket. Do not pull the power cord. Also, be sure you turn the power of the main unit off before pulling the plug.

## ● LONG PERIODS OF DISUSE

Be sure to disconnect the DP-148C from the main unit, and from its power source, when you plan not to use it for a long period of time.

## ● TRANSPORTATION

When the unit is transported, be sure to avoid any rough handling, tilting, etc.; as such is likely to result in malfunctions or breakdowns. Also pay special attention to the handling of the tube.

## ● REAR COVER

Do not open the rear cover for any reason whatsoever. There are several areas within the unit which if touched may give a high voltage electrical shock.

## ● CLEANING

Use a soft dry cloth to clean the unit. Do not use volatile liquids such as alcohol, benzine, or paint thinner, or any wet cloth; such substances will damage the unit.

## ● STATIC ELECTRICITY

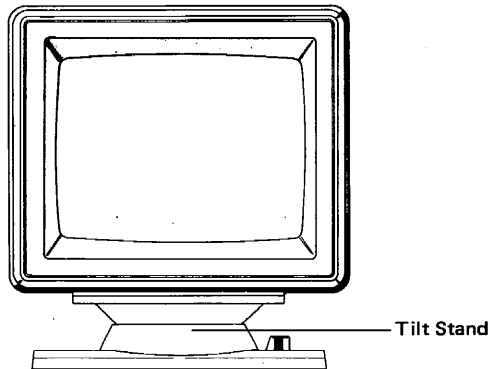
When you touch the surface of the screen you may feel a slight tingling. This is due to static electricity, and is harmless to the user.

## ● CONNECTION TO MAIN UNIT

Connect the DP-148C to the main unit of your computer with the special CRT connecting cable. This unit does not function on its own.

# INLETS AND OUTLETS

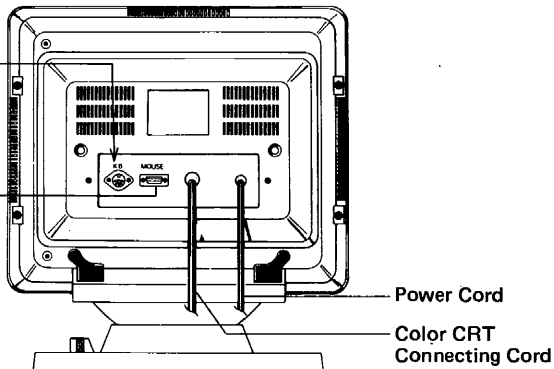
FRONT



REAR

"KB"  
This is the connector  
for the keyboard.

"MOUSE"  
This is the connector  
for the mouse.

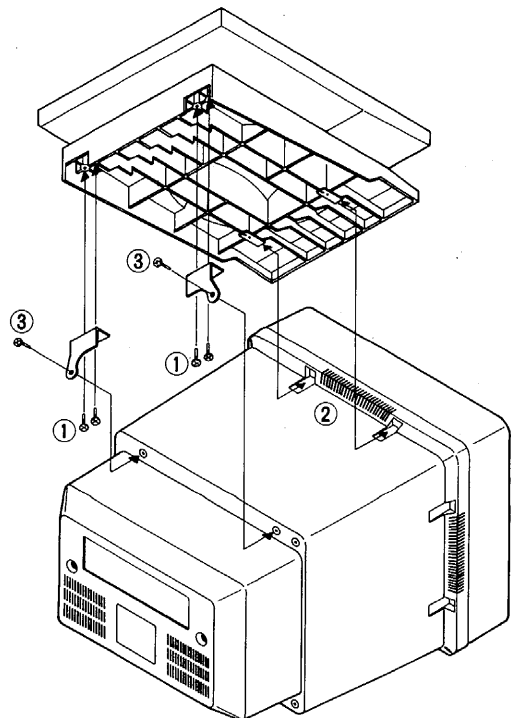


Power Cord

Color CRT  
Connecting Cord

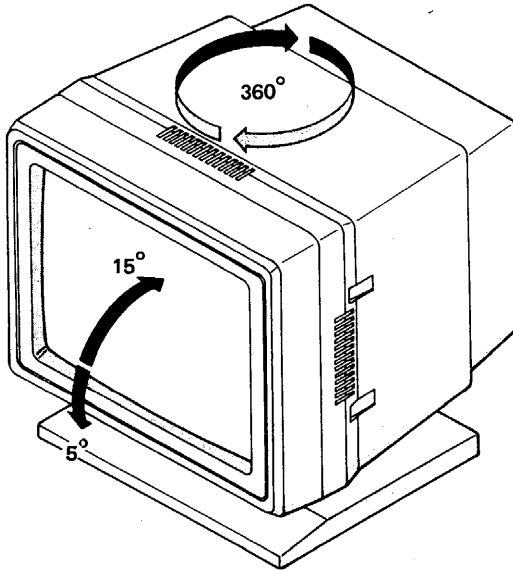
## TILT STAND INSTALLATION

1. Screw the metal braces shown in the diagram to the tilt stand.
2. Turn the display upside down. Slide the tilt stand onto the unit as shown in the diagram.
3. Tighten the screws in the rear of the stand.



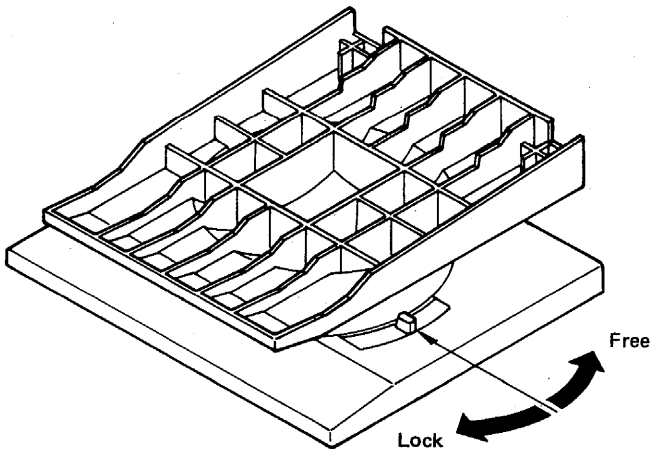
# HOW TO USE THE TILT STAND

## 1. Angles of Movement



- The stand allows 360° movement from left to right.
- 5° down and 15° up.

## 2. Lock



- Use the lever as shown in the diagram to lock the stand, or free it for movement.
- To turn the display to the up or down, free it first; and when it is in the desired position, lock it again.
- Hold the display with one hand before locking or unlocking.

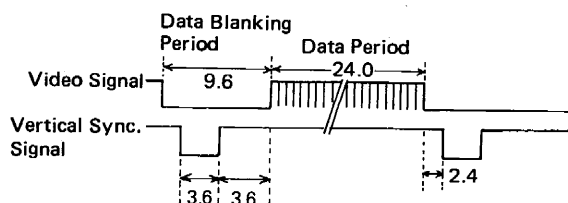
# INPUT SIGNALS

## 1. Input Signal Types

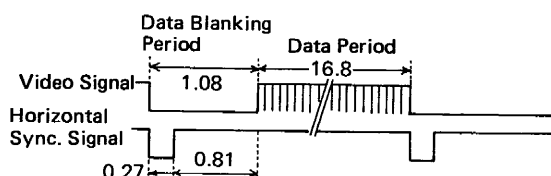
- a. Video Signal 0 to 2.5V (positive analogue signal)
- b. Horizontal Sync. Signal (negative TTL level)
- c. Vertical Sync. Signal (negative TTL level)

## 2. Time Chart of Video Signal (standard example)

- a. Relationship between the video signal and the horizontal sync. signal (unit – micro sec.):



- b. Relationship between the video signal and the vertical sync. signal (unit – ms):



## 3. Color CRT Connecting Cable

Connect the color CRT connecting cable to the CRT connector of the main unit of the compatible SORD computer. Be sure that the model you wish to use this display with is compatible. Use of another model of computer may result in malfunctions or breakdowns.

**Note:** Be sure to turn off the power of the main computer unit before connecting the cable of the DP-148C.

# SPECIFICATIONS

**Model Name:** DP-148C

**Type of Unit:** Color Display

**Tube:** Type 14, 90° Deflection, High Resolution, Non-Glare, High Contrast CRT

### Input Signals:

Video Signal: R.G.B. Split Type, Positive Analogue (2.5V p-p)

Horizontal Sync. Signal: Negative TTL level

Vertical Sync. Signal: Negative TTL level

### Signal Frequencies:

Horizontal: 29.76 kHz

Vertical: 55.94 kHz

### Display Time:

Horizontal: 24.0 micro sec.

Vertical: 16.8 ms

### Resolution:

Horizontal: 720 dots

Vertical: 500 lines (non-interlace)

### Input Terminals:

CRT DSUB

Mouse DSUB

Key Board DIN

25 Pin Connector

9 Pin Connector

8 Pin Connector

**Color:** Multicolor Display

**Characters:** 2,000 (80 char. x 25 lines)

### Electrical Characteristics:

100W AC	115V	1.3A
	220V	0.7A
	240V	0.65A

### Dimensions:

Width: 402 mm

Depth: 380mm

Height: 405 mm

**Weight:** 20Kg

**Accessory:** 1 User's Manual

*\* Due to constant efforts to improve and adapt SORD products, Specifications may change without prior notice.*

# CONNECTOR PIN ASSIGNMENT LISTS

## 1. Pin Assignments for Color CRT Connector

Pin Number	Signal	Details
1	FG	Frame Ground
2	R	Red Signal
3	G	Green Signal
4	B	Blue Signal
5	NC	Not Connected
6	VS <sub>Y</sub> NC	Vertical Sync. Signal
7	HS <sub>Y</sub> NC	Horizontal Sync. Signal
8	NC	Not Connected
9	KTD	Transmitted Data to Keyboard
10	KRD	Received Data from Keyboard
11	+12V	+12V (for mouse)
12	-12V	-12V (for mouse)
13	MTD	Transmitted Data from Mouse
14	GND	Keyboard Ground
15	R-RET	Red Signal Return
16	G-RET	Green Signal Return
17	B-RET	Blue Signal Return
18	NC	Not Connected
19	VS-RET	Vertical Sync. Return
20	HS-RET	Horizontal Sync. Return
21	NC	Not Connected
22	KDTR	Data Terminal Ready to Keyboard
23	KCTS	Clear to Send From Keyboard
24	GND	Mouse Ground
25	MRD	Received Data to Mouse

## 2. Pin Assignments for KB Connector

Pin Number	Signal	Details
1	NC	Not Connected
2	KRD	Received Data From Keyboard
3	KTD	Transmitted Data to Keyboard
4	KCTS	Clear to Send From Keyboard
5	+12V	+12V Line
6	KDTR	Data Terminal Ready to Keyboard
7	GND	Ground
8	-12V	-12V Line

## 3. Pin Assignments for Mouse Connector

Pin Number	Signal	Details
1	NC	Not Connected
2	MTD	Transmitted Data From Mouse
3	MRD	Received Data to Mouse
4	-12V	12V Line
5	NC	Not Connected
6	+12V	+12V Line
7	GND	Ground
8	NC	Not Connected
9	NC	Not Connected

# SORD

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