17" Autoscan colour monitor

AKF80 Series
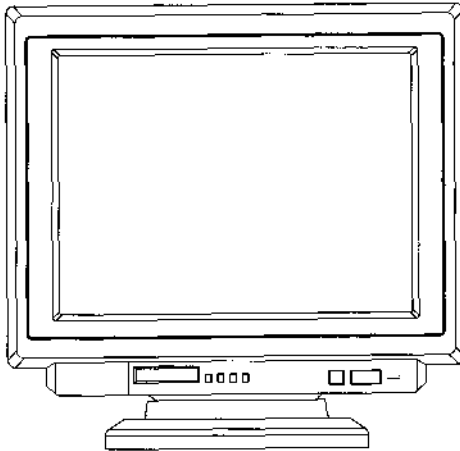
Acorn

A u t o S c a n
Professional Colour Monitor

Introduction

This digital controlled AutoScan colour monitor displays sharp and brilliant images of text and graphics with a maximum resolution up to 1280x1024 pixels. It is optimal for CAD/CAM/CAE, DTP, and any other application demanding a display with large screen-size and high resolution.

This monitor automatically scans horizontal frequencies between 30 KHz and 82 KHz, and vertical frequencies between 50 Hz and 120 Hz. With microprocessed based digital controlled multiple frequencies this colour monitor can operate at each mode with the precision of a fixed frequency monitor.

This Autoscan color monitor complies with Swedish MPRII's low emissions requirement.

CAD : Computer-aided Design
CAM : Computer-aided Manufacturing
CAE : Computer-aided Engineering
DTP : Desktop Pub/ishing

Safety precautions and maintenance

- ♦ Disconnect the monitor from the mains supply if the monitor is not to be used for an extended period of time.
- ♦ Do not attempt to remove the back cover, as you will be exposed to a shock hazard. The back cover should only be removed by qualified service personnel.
- ♦ Do not place objects on top of the monitor cabinet, which could fall into vents or which could cover them and prevent proper cooling of the monitor's electronics.
- ♦ Do not expose the monitor to rain or excessive moisture to avoid the risk of shock or permanent damage to the set.
- ♦ Do not use alcohol or ammonia based liquid to clean the monitor. If necessary, clean with a slightly damp cloth. Disconnect the monitor from the mains supply before cleaning.
- ♦ Consult a service technician if the monitor does not operate normally when the operating instructions are followed.

Package

After unpacking the shipping carton, check if you have received the following items:

1. The monitor.
2. Mains cord, for power connection.
3. 15 pin D-sub to 15 pin D~sub interface cable.

Installation

NOTE: **Before installing this monitor, please refer to the user's guides of your computer and video adapter to make sure if these equipments require any change of setting.**

## Positioning/Ventilation

WARNING:
WHEN POSITIONING THIS EQUIPMENT ENSURE THAT THE MAINS PLUG AND SOCKET ARE EASILY ACCESSIBLE.

Do not place the monitor near a heat source.
To prevent overheating, ensure that the ventilation openings of the monitor are not covered.

Pedestal

With the built-in pedestal you can tilt and/or swivel the monitor for a most comfortable viewing angle.
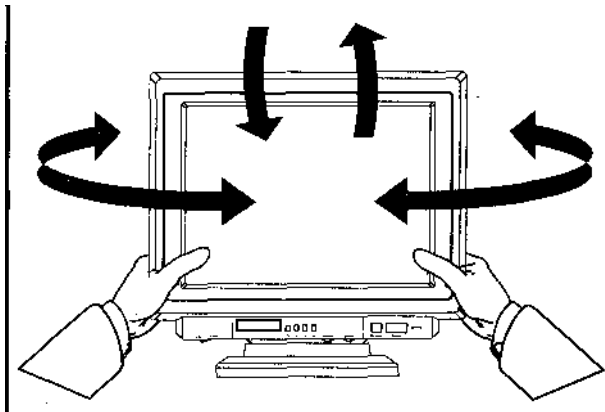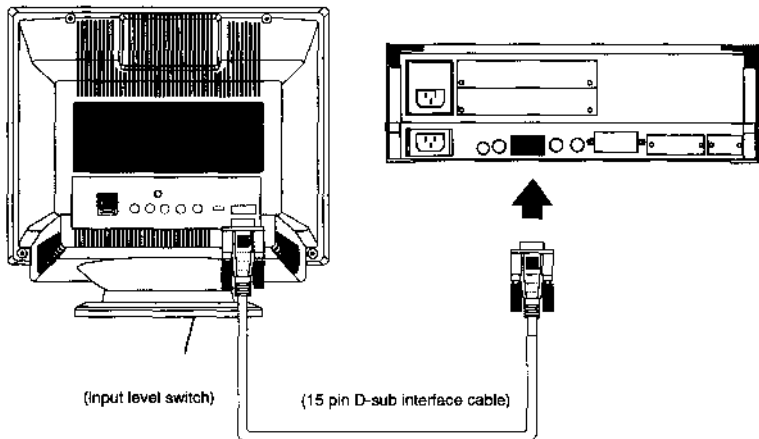
Connection to the computer

NOTE: Please be sure the AC power to your computer is "OFF" before connecting or disconnecting any display peripheral. Failure to do so may cause serious personal injury as well as permanent damage to your computer equipments.

1.

- Make sure the **"D-SUB/BNC"** switch on the front of the monitor is on the 'D-sub' position.

- Connect one end of the 15-pin D-sub interface cable to the D-sub connector at the rear of monitor.

- Connect the other end to the computer at the video connector, and fix it firmly with the screws on the plug.

- Set the " **Input level** " switch to 0.7Vp-p position.

(input level switch)   (15 pin D-sub interface cable)

2. Computer with video adapter of BNC connector:

- Make sure the **"D-SUB/BNC"** on the front of the monitor is to the 'BNC' position.

- Connect your BNC cable according to the BNC connector assignment at the rear of the monitor.

- Connect the ground wire to the "grounding" connector at the rear of the monitor, and fix it firmly with screw driver.

- Set the **"input level "** switch to 1.0Vp-p position, when display is too bright.
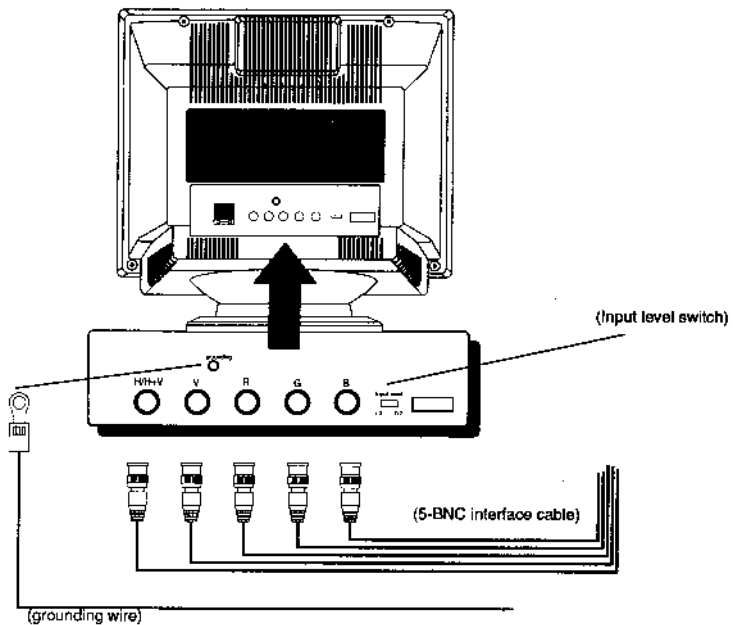
Connection to the mains

(Rear of the monitor)
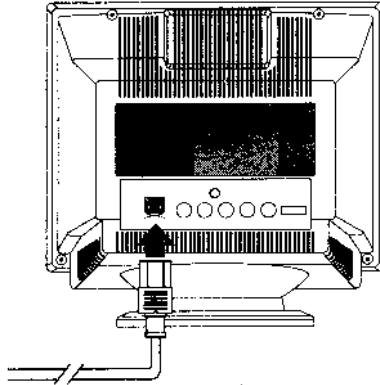
(Mains cord)

Connecting to the mains

This monitor is set to operate at a mains supply of 100-240 volts AC, ±10%, 50-60 Hz. If the mains voltage in your home is different from this, consult your dealer. Connect one end of the mains cord to the mains socket at the rear of monitor, and the other end to the mains supply.

Control locations and functions
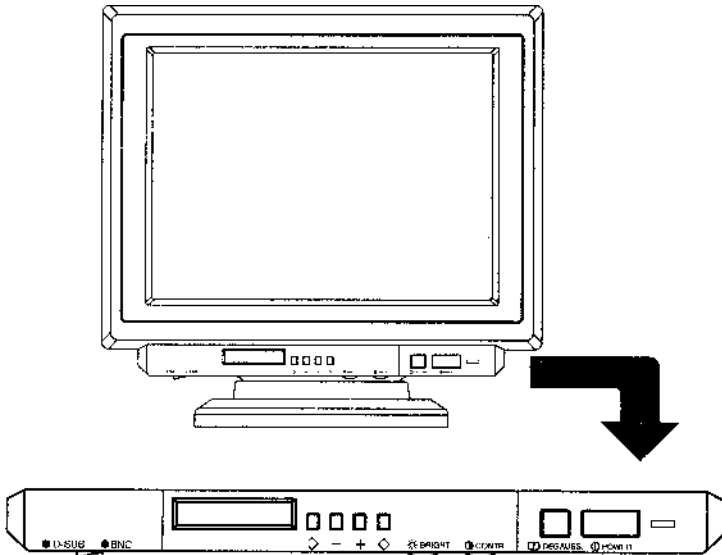
(descriptions are from right to /eft)

ⓘ POWER
- Press this knob, the green LED lights and the power is ON.
- Press this knob, the green LED disappears and the power is OFF.

▭ DEGAUSS.
- Press this knob to eliminate the colour impurity.

◑ CONTR.
- Used to adjust contrast.

☼ BRIGHT.
- Used to adjust brightness.

(Descriptions are from left to right)
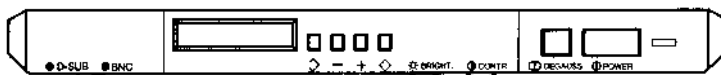
"D-SUB" f "BNC"
- Switch to "D-SUB" position, when the monitor is connected with a D-sub interface cable.
- Switch to "BNC" position, when the monitor is connected with a BNC interface cable.

⟳ SELECT
- Press this knob to select the adjustment item which is displayed on the LCD panel in the following order

    a) SET H-SHIFT   : to adjust the image position horizontally
    b) SET H-SIZE   : to adjust the image width
    c) SET V-SHIFT   : to adjust the image position vertically
    d) SET V-SIZE   : to adjust the image height
    e) SET PIN/BARREL: to adjust the image geometry
    f) SET TRAPEZOID: to adjust the image geometry
    g) ~(CURSOR)   : to access LCD display characters
                                   (for user-set mode only)

" + " and " - "
- (adjustment a-f)   : *Press " +" or " - " to adjust the respective magnitude.
- (adjustment g)   : *Press " + " to access characters (space 0,1,...9, A, B, ...Z)
                                  *Press " - " to access character , in backward order.
                                  *Press " + " and " - " simultaneously to move the cursor.

◇ SAVE
- Press this knob to save the result of the adjustment.

Adjustment

This monitor is pre-set with 12 modes as indicated in the following table:

<p align="center">(factory pre-set mode table)</p>

	Mode.	Resolution	Frequency		Sync Polarity	
			H(KHZ)	V(HZ)	H	V
M01	V G A	640x352	31.5	70	+	-
MO2	V G A	640x480	31.5	60	~	-
M03	S V G A	800x600	35.2	56	+/-	+/-
M04	S V G A	640x480	37.5	75	+/-	+/-
M05	S V G A	800x600	37.9	60	+/-	+/-
M06		800x600	46.9	75	+/-	+/-
M07	V E S A	800x600	48.0	72	+/-	+/-
M08		1024x768	48.4	60	+/-	+/-
M09		1024x768	56.5	70	+/-	+/~
M10		1024x768	60.0	75	+/-	+/-
M11		1280x1024	63.7	60	+/-	+/-
M12	V E S A	1280x1024	80.0	75	+/-	+/-

> For video adapter in line with factory preset mode <u>e. g 1024x768 56.5KHz/70Hz</u>

A) <u>MO1 - M12 (factory pre-set mode)</u>

" Press knob ⓘ to switch on the monitor.

" The LCD panel will display the default mode e.g.

<p align="center">┌─────────────────────┐
│ M09 1024x768 70 │
└─────────────────────┘</p>

* The image will be in right size (H+V) , centering and geometry.

B) <u>M13 - M24</u>

* M13-M24 is preserved for any **adjustment** of factory pre-set mode (M01-M12).

If you are not satisfied with the image result of factory pre-set mode, you may adjust it according to the following procedure :

* Press knob ① to switch on the monitor.
* The LCD panel will display the default mode e.g.

```
M09    1024x768    70
```

* Press knob ◇ to select the adjustment item.
* Press " + " or " - " to adjust the magnitude.
* Press knob ◇ to save the result of adjustment.
* The LCD panel will display immediately e.g.

```
M21    1024x768    70
```

For non-standard video adapter e.g. 1024x768 72 Hz:

M25-M27

* Press power knob ① to switch on the monitor.
* The LCD panel will display :

```
New Mode
```

* Press knob ◇ to select the adjustment item.
* Press " + " or " - " to adjust the magnitude.
* Press " + " or " - " to access LCD display character.
* Press knob ◇ to save all adjustments, the LCD will display immediately e.g.

```
M25  1024x768    72
```
or

```
M25
```
(resolution and refresh rate will not display if not registered by CURSOR adjustment)

✳ You may save by press knob ◇ after each adjustment, or you may do it after all the adjustments are completed; however the latter is recommended.

✳ The LCD display will revert to default if the user does not press ◇ to save the adjustment result after 30 seconds. However the adjusted configuration will remain exist until power off, but not be memorized.

✳ The **RECALL** function :
You may erase the current-used user mode by pressing and holding the knobs " ◇ " and " - " simultaneously for 2 seconds. The letter RECALL will display on the LCD.

Technical information

(I) General:

Picture tube : 17 inch, 90° deflection,
neck diameter 29.1 mm,
Tinted screen glass, black matrix,
with AGRAS coating, light
transmission 52%, phosphor
EBU medium short,
dotted pitch 0.27 mm.DAF gun.

Display area : 315 mm (H) x 232 mm (V)
Line (Horizontal) frequency : 30 - 82 KHz (automatically)
Raster (Vertical) frequency : 50 - 120 Hz (automatically)
Mains voltage : 100-240 VAC ±10%, 50 - 60 Hz
Power consumption : 110 watt normal, 125 watt max.
Dot rate : 135 MHz
Input signal : Video :0-0.7 or 1.0Vp-p linear / 75
Ohm positive switchable
Sync :Seperate sync. TTL level
composite sync. TTL level
composite sync. on green
Pedestal : Tilt - 5° forward, 15° backward;
swivel - 90° left or right.
Unit dimension (W x H x D) : 422 x 425x 440 mm
Net weight : 21 Kg
Operating condition
Temperature : 0° C to 40° C
Humidity : 20% to 80%
Storage condition
Temperature : -25° C to 70° C
Humidity : 10% to 95%

*AGRAS coating means Anti-Glare, anti-Reflection, AntiStatic coating.

(II) Pin assignment:
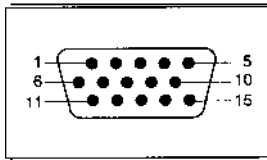
The 15-pin D-sub connector (male) of the signal cable:

Pin No.	Assignment	Pin No.	Assignment
1	Red video input	9	No pin
2	Green video input	10	Logic ground
3	Blue video input	11	Identical output
4	Identical output		- connected to pin 10
	- Connected to pin 10	12	No pin
5	Ground	13	H. Sync / H+V
6	Red video ground	14	V. Sync
7	Green video ground	15	No pin
8	Blue video ground		

* Because of a policy of continuous product improvement, the above
   specifications are subject to change without notice.