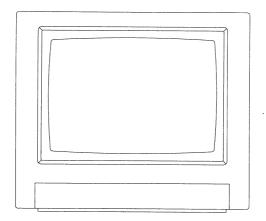
High Resolution Monitor



C Commodore

BEZIRKSREGIERUNG BRAUNSCHWEIG

Bauartzulassung Nds 603/88 Rö (1. Änderung)

Aufgrund von §§ 8, 9 und 10 der Verordnung über den Schutz vor Schäden durch Röntgenstrahlen (Röntgenverordnung - RöV) vom 08.01.87 (BGBl. I S. 114) wird nach Prüfung durch die Pysikalisch-Technische Bundesanstalt (Prüfungsschein Nr. 6.22 - S 677 vom 15.07.88 und Nachträgen vom 26.08.88 und vom 27.09.89 auf Antrag der

> Firma COMMODORE Büromaschinen GmbH, Frankfurt/M. vertreten durch COMMODORE Büromaschinen GmbH Werk Braunschweig Ernst-Amme-Str. 24-25 3300 Braunschweig

die Bauart folgenden Störstrahlers zugelassen:

Gegenstand:

Farbmonitor

Firmenbezeichnung:

Commodore Type: Amiga 1084

Bildröhre:

Philips Type: M34 EAQ 10X

oder alternativ

Bildröhre:

Philips

Betriebsbedingungen:

Type: M34 EAQ 01X Hochspannung: max. 25,0 kV

Hersteller:

Strahlstrom: 0,5 mA Philips Electronics Industrie C. E. Devision Ltd. (pei-ced)

5-tze Chiang 1st Road Chungli, Taoyuan hsien, Taiwan

Unterlagen zur

Bauart-Prüfung:

Schaltplan Nr. 4822 727 63731

vom 14.07.1989

Bedienungsanleitung Nr. 313810523721

Bauartzeichen:

Nds 603/88 Rö

Durch die Änderung sind betroffen: Eingangsschaltung, Schaltplan, Bedienungsanleitung.

Befristung der Bauartzulassung

Die Bauartzulassung gilt für die ihr entsprechenden Störstrahler, die bis zum

30.08.1998

in den Verkehr gebracht worden sind.

Braunschweig, den 05.10.89 - 204.3-22.93.27 Co -

Bezirksregierung Braunschweig

Mein Zeichen bitte bei Antwort Postfach 32 47

Mo., Mi., Fr. 9-12 Uhr

9 52 821 952821 nbs d

3300 Braun Besuche bitte möglichst vereinbaren

Konto-Nr. 811 703 Nordd. Landesbank Braunschweig (BLZ 250 Konto-Nr. 270 01506 Landeszentralbank Braunaci Konto-Nr. 21 50-306 PGiroA Han (BLZ 250 100 30)

1004S

High Resolution Monitor

Cx Commodore

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1. Introducing your Monitor

The Commodore 1084S is a full-color, 13 inch monitor for use with the Commodore 64, Commodore 128, Commodore PC and the Amiga family of computers. The monitor provides audio output in stereo for use with computer systems with stereo capabilities (like the Amiga computers). Your 1084S operates on the Phase Alteration Line Standard (PAL). This manual explains how to connect the 1084S monitor to your computer and how to use the various operating modes and picture controls.

The 1084S works in four different operating modes: Composite (PAL standard), Separated LCA (Luma-Chroma-Audio), Digital RGBI (Red/Green/Blue Intensity), and Analog RGB. It also allows both a 40-column screen display, for use in Composite and Separated modes, and an 80-column display for Digital and Analog RGB modes. The mode you choose will depend on the type of computer you are using.

Before you proceed any further, check to make sure you have received everything:

- One 1084S monitor
- Cables:
 - For connecting an Amiga Computer -- one cable with a 23-pin D (rectangular) connector on the computer end and a 9-pin D (rectangular) connector on the monitor end (provides an Analog RGB display).
 - For connecting an Amiga's audio capabilities -- one cable with two RCA plugs on each end.
 - Power cable for connecting the 1084S to an AC power source.
- Warranty card

NOTE: The following monitor cables are also available for use with the 1084S. These cables can be purchased from your Commodore dealer separately.

- For connecting a Commodore PC or Commodore 128 -- one cable with a 9-pin D connector on the computer end and a 9-pin D connector on the monitor end (provides RGBI display).
- For connecting a Commodore 128 or Commodore 64 -- one cable with an 8-pin DIN connector on the computer end and 3 phono plugs on the monitor end (provides Separated LCA display).

Except for the power supply cable, the cables included with your 1084S monitor are RF shielded cables. Be sure to use only RF shielded cables when connecting this monitor to a computer.

The chart below indicates the operating modes suitable to the type of computer you are using:

Recom	mended Operatir	ng Mode by Cor	nputer Model		
	40-Colum	40-Column display		80-column display	
	Composite	Separated LCA	Digital RGBI	Analog RGB	
Amiga				X	
Commodore PC			X		
Commodore 128		×	X		
Commodore 64	X	×			

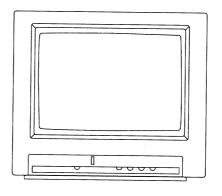
2. Control Locations and Functions

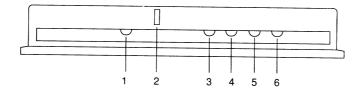
Before you connect your monitor to your computer, you should familiarize yourself with the location and function of the various control knobs, switches, and ports on both the front and rear of the 1084S. Because the 1084S is a universal monitor and can accommodate several types of computers, there are several ports and connectors on the monitor's cabinet. However, if you are only using your monitor with one type of computer, you will only need to use a few of the ports. (See diagram on next page.)

Front View

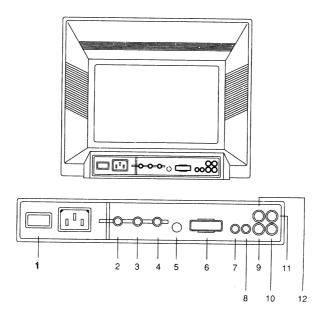
- 1. VOLUME -- Adjusts the speaker's loudness.
- GREEN -- Toggles between color display and monochrome green display (for text processing).
- 3. COLOR -- Adjusts the color levels of the display.
- 4. CONTRAST -- Adjusts the display's contrast.
- 5. BRIGHTNESS -- Adjusts the brightness of the screen.
- 6. H. PHASE -- Adjusts the horizontal position of the screen.

NOTE: The Color Control is inactive when the 1084S is configured either for Analog RGB or Digital RGBI display.





Front view



Rear view

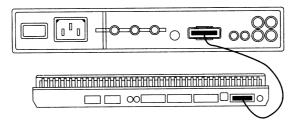
Rear View

- 1. POWER Switch
- 2. HORIZON. SIZE -- Adjusts the image width on the screen.
- 3. VERTICAL SIZE -- Adjusts the image height on the screen.
- 4. VERTICAL SHIFT -- Centers the image vertically, from top to bottom.
- ANALOGUE/TTL -- A switch used to alternate between an RGB analog and a Digital RGBI TTL type signal.
- 6. RGB -- 9-pin D connector for video/sync input signals.
- CVBS/RGB -- A switch used to alternate between an RGB (Red-Green-Blue) and CVBS (Composite Video Signal).
- CVBS/LCA -- A switch used to alternate between LCA (Luminance, Chroma, Audio) input and CVBS input.
- 9. CVBS/L -- A yellow phono jack used in two different ways. For a computer with CVBS output or other CVBS source, connect the computer to this jack with a phono plug cable. For a computer with LCA output (Commodore 64 and 128) connect to this jack for luminance signal input.
- 10. AUDIO-L -- A white phono jack used for connecting the left audio signal input.
- **11.** AUDIO-R -- A black phono jack used for connecting the right audio signal input for stereo sound reproduction (Amiga computers).
- **12.** CHROMA -- A red phono jack used for a computer with LCA output (Commodore 64 and 128) to connect for chroma signal input.

3. Connecting the Monitor to a Computer

Turn off the power to both the monitor and the computer to prevent damage by shorting. Unplug the Computer and the 1084S monitor before installation. Installing the 1084S with the power on could cause injury to the installer and damage to the equipment. Commodore will not be responsible for any damages caused by improper installation of the 1084S. Such improper installation will void the warranties on both the Computer and the 1084S.

3.1. Connecting the Analog RGB display (Amiga Computers)



Locate the video cable with a 23-pin D connector on one end and a 9-pin D connector on the other end. To connect the video cable, insert the 9-pin D connector into the port labeled **RGB** on the back of your 1084S. Then insert the other end of the cable with the large, 23-pin D connector into the video port on the back of your Amiga. Tighten the screws on each side of the connector.

Set the **ANALOG/TTL** switch to analog mode. Set the **CVBS/RGB** switch to RGB mode.

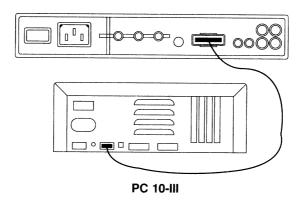
To connect the audio, locate the audio cable with one pair of phono plugs at each end of the cable. One pair of phono plugs are plugged into the **AUDIO R** and **AUDIO L** jacks on the back of your monitor, and the other pair of plugs are inserted into the Amiga's left and right audio jacks.

3.1.1. Using Headphones

You can connect headphones to your 1084S so that the stereo sounds generated by your Amiga computer can only be heard through the headset. To do this, simply insert the plug on the end of a standard headphone cable into the small, silver port on the left side (as you face the front) of the monitor's cabinet. The port is towards the front of the monitor. A headphone cable is not included with your monitor but should be readily available at most computer and electronics stores.

3.2. Connecting the Digital RGBI Display

With a Commodore PC or Commodore 128 -- Take a video cable with a 9-pin D connector on one end and a 9-pin D connector on the other end. To connect the video cable, insert the 9-pin D connector into the port labeled **RGB** on the back of your 1084S. Then insert the other end of the cable into the video port on the back of your Commodore PC or 128. Tighten the screws on each side of the connector.

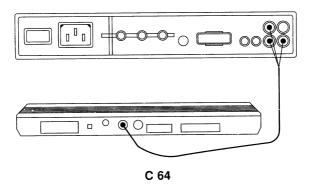


Set the **ANALOG/TTL** switch to TTL mode. Set the **CVBS/RGB** switch to RGB mode.

WARNING: When connecting the 1084S monitor to a PC please note that the PC must be set to provide CGA video output. Such setting is possible with PC10/20-II, PC10/20-III, PC30-III, PC40-40 and PC60-40. It is not possible with PC40-III, PC50-III or PC60-III. Any other video output settings like Hercules, EGA or VGA may result in damage of your 1084S monitor. In order to select CGA please check the appropriate user documentation.

3.3. Connecting the Separated Luma-Chroma-Audio Display (C128, C64)

With a Commodore 128 or Commodore 64 -- Take a video cable with three phono plugs on one end and an 8-pin DIN connector on the other end. To connect the video cable, insert the yellow phono plug into the jack labelled CVBS/L, the red phono plug into the jack labelled CHROMA, and the white phono plug into the jack labelled AUDIO/L on the back of your 1084S. Then insert the other end of the cable with the 8-pin DIN connector into the video port on the back of your Commodore 128 or 64. Set the CVBS/LCA switch to LCA mode.



3.4. Connecting the Composite Display

Some older C64's have a 5-pin DIN video connector which outputs composite video. To attach your 1084S to this older style C64, a 5-pin DIN video cable is required (not included, but commonly available at many stores that carry the C64 line). Set the **CVBS/RGB** switch on the rear of the monitor to CVBS mode. Insert the 5-pin DIN connector into the Video port on your Commodore 64, and insert the phono jack into the port labeled **CVBS/L** on your 1084S. Set the **CVBS/LCA** switch on the rear of the monitor to the **CVBS** position.

3.5. Connecting the Monitor to the Mains (for U.K. only)

Your 1084S monitor is designed to operate from an a.c. mains supply of 220-240 volts, 50 Hz. If the mains voltage in your home is different from this, consult your dealer. Stabilising circuits ensure satisfactory performance within normal supply variations.

IMPORTANT: This aparatus must be earthed. This can be achieved by fitting a 3-pin plug. The wires in the earthed mains lead are coloured according to the following code:

BLUE = Neutral BROWN = Live GREEN/YELLOW = Earth

If the mains plug (or adaptor) contains a fuse, the value of this fuse should be 3 Amp. Alternatively, if another type of plug (not fused) is used, the fuse at the distribution board should not be greater than 5 Amp. If the colors of the wires in the mains lead do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The BLUE wire should be connected to the terminal marked "N" or coloured black. The BROWN wire should be connected to the terminal marked "L" or coloured red. The GREEN/YELLOW wire should be connected to the terminal marked "E" or earth symbol, or coloured green and yellow.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead -- not simply over the three wires.

4. Safety Precautions

This monitor has been engineered and manufactured to assure your personal safety. However, improper use can result in potential electrical shock or fire hazards. Please observe the following basic rules when using your monitor. Also, heed all warnings and instructions marked on the monitor's cabinet.

DO NOT ATTEMPT TO SERVICE THE MONITOR YOURSELF. OPENING OR REMOVING COVERS MAY EXPOSE YOU TO DANGEROUS VOLTAGES OR OTHER HAZARDS. DANGEROUS HIGH VOLTAGE IS PRESENT EVEN WHEN THE MONITOR IS UNPLUGGED. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

Do Not overload AC outlets or extension cords. This may result in a shock or fire hazard.

Do Not use more than one plug adaptor in one power outlet.

Do Not use the monitor near water or excessive moisture.

Do Not block the monitor's ventilation slots by placing objects on top or underneath the monitor.

Do Not place the monitor

- in a "built-in" enclosure unless proper ventilation is provided
- near or over a radiator or heat register
- where sunlight or bright room light will fall directly on the screen
- on a sloping shelf or try to mount it on a wall.

Do Not use alcohol, ammonia-based products, or an aerosol spray to clean the monitor screen. To clean the screen, unplug the monitor and wipe with a slightly damp cloth.

Do Not bring magnetic devices near the screen. They may damage the color purity of the picture.

Unplug the Monitor

- if you will not be using it for an extended period.
- · during an electrical storm.
- · before cleaning it.

5. Technical Specifications

Picture Tube: 14 inch (13 inch viewing area)

slotted triplet pitch .42mm

Deflection: 90 degrees

Resolution: 640 x 256, 640 x 512 (interlaced)

Raster frequency: 50 Hz Line frequency: 15625 Hz

Character field: RGB, RGBI mode --

2,000 characters 80 x 25 rows Composite, Separated LCA --1000 characters 40 x 25 rows

VIDEO (Composite Video): 0.7V P-P, 75 ohm plus sync. 0.3V P

VIDEO (Luminance Signal): 1.0V P-P, 75 ohm CHROMA (Chroma Signal): 1.0V P-P, 75 ohm 1.0V P-P, 75 ohm

9-pin D -- RGB Analog 0.7V P-P, 75 ohm RGBI Digital TTL levels, positive or negative sync.

		PIN ASSIGNMENT	
Pin No.	TTL RGB	Analog RGB	
1	Ground	Ground	
2	Ground	Ground	5 4 3 2 1
3	Red	Red	J 7 J 2 1
4	Green	Green	
5	Blue	Blue	(••••)
6	Intensity	Not used	
7	Not used	Composite Sync.	
8	H.Sync.	H.Sync.	9876
9	V.Sýnc.	V.Sync.	

Sound output:

1.0 W RMS/channel, 5% distortion

Audio input signal:

177 mV, 10K ohm

Mains voltage:

220-240V AC ± 10%, 50Hz

Power consumption:

75W typical

Dimensions:

(H x W x D) 326 x 352 x 376 mm

Weight: 11 Kgs

^{*} In support of our policy of continuous product improvement, the above specifications are subject to change without notice.