

Colourdump 3

AMSTRAD 6128 DISC

Produced and distributed by:

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COLOURDUMP 3

ACKNOWLEDGEMENTS

Developed from a program by A. Aird & J.Walker.
Colourdump 2 written by Richard Moss.
Thanks to H.E. Haxwell for his coding.
Manual produced by M.J.C. Supplies using Protext
and a Panasonic KXP-4450 Laser Printer.

REQUIREMENTS FOR USING COLOURDUMP 3:

Amstrad CPC 6128/+ (will not work on an upgraded CPC 464)

Advanced Art Studio drawing package - or a package which
will create a "standard" 17k screen file - or Multiface 2
saved screens.

A Star LC10/LC200 9 pin epson standard colour printer -
or a compatible 9 pin colour (Swift 9 etc).

The program will work on a Star 24 pin colour print out
but because it uses 9 pin emulation the resulting picture
will be slightly compressed.

Patience! - colour printing is not quick and a full size,
double density, colour print could take around 1 hour to
complete.

Please Note: Colourdump 3 is protected and so
cannot be copied using Diskit. The disc is
supplied write-protected. Any discs that are
faulty due to disc or software error will be
replaced free of charge.

WHAT IS COLOURDUMP 3 ?

When the Amstrad CPC range was first launched, colour printers were very expensive and it could safely be assumed that virtually nobody would add one to their With relatively cheap Amstrad. No software 'printer drivers' were included in programs as the cost of development could not be justified for such a small market.

ColourDump 2 was originally written to allow previously unavailable colour screen dumps from the Amstrad CPC range, using a "standard" screen file and a Star 9 pin colour printer.

Many copies of this program were sold, as it offered excellent print quality and colour reproduction, although the print out was small and matching screen and page colours could be tricky. It also could only use the standard 17k screen file, which ruled out some screens.

After a lot of requests from customers, the program has now been revised to allow other files to be converted, and larger print outs to be obtained. Use with the Advanced Art Studio has also been improved, so that the program now reads in the palette file to match the picture, and automatically detects whether the picture is compressed.

The program for single screen dumps is still available but has been revised to allow other files to be converted, and larger print outs to be obtained. Use with the Advanced Art Studio has also been improved, so that the program now reads in the palette file to match the picture, and automatically detects whether the picture is compressed.

Please Note: ColourDump 3 is a registered trademark of the author. It cannot be copied or distributed. The disk is supplied with a program to convert any screen file to a standard 17k screen file. Any screen file which is not a standard 17k screen file will be converted to a standard 17k screen file. The program is not a printer driver and will not print directly to a printer. It will print to a file which can then be printed by a printer driver.

QUICK START - ADVANCED ART STUDIO FILES

The following 'quick way' is for the impatient types who are itching to see their masterpieces on paper. If you do not understand this, or would like more information, read the explanation which follows later.

1. Put ColourDump 3 disc into drive A:
2. Type RUN"DISC and press RETURN
3. Press A to run the printing program
4. Press Y to choose Advanced Art Studio picture.
5. Type in the filename of the picture you want to print and press return. The filename should only be the first part of the name (max 8 letters), with no extension.
6. Insert disc containing the picture you wish to print and press a key.
7. Place your ColourDump 3 disc back in the drive when prompted to do so and press any key.
8. Press 'L' if you require a large print, 'S' for small. If you selected large press 'D' for double density print out or 'S' for single density. Press Y when ok.
9. Make sure your printer is ready, i.e. it is switched on, connected to the computer, has a colour ribbon in it, and is On-Line.
10. Press the Space bar to start printing.

QUICK START - 'STANDARD' SCREEN FILES

The quick example shown below is basically print the demo file supplied. There are many options and points to note when using standard screen files, so reading the full explanation is recommended. But for the impatient:

1. Insert ColourDump 3 disc and type RUN"DISC [return]
2. Press A to RUN the printing routine.
3. Answer N when asked if using an Advanced Art file.
4. Select 0 or 1 when asked what mode the picture is in. Our example is in mode 0.
5. Select Large or Small print by pressing L or S. If you choose Large, select Single or Double Density.
6. Answer Yes when asked if settings are OK.
7. Answer No when asked if you wish to load previously saved links.
8. Set the palette. You really will need to read the full explanation, but for our picture set ink colours to those listed on page 10 i.e. set ink 0 to ed40026 by typing 26 and pressing return, set link 1 to 026026026.
9. Answer No when asked if you wish to repeat.
10. Answer No again when asked if you wish to save these combinations.
11. Answer No when asked for a test print.
12. Type in filename. Our example is called RAINBOW.SCR type the name in full including the .SCR part.
13. Check the printer is ready, then press the space bar.

MULTIFACE CONVERSION

To convert a Multiface screen from Romantic Robot's own file format to a standard screen, you need to run the conversion program offered on ColourDump 3's first menu.

1. Insert ColourDump 3 disc and type RUN"DISC and press RETURN
2. Select B from first menu.
3. Enter the filename of your Multiface Screen (no . ext)
4. Insert your Picture disc with your file on it in drive A and press any key.
5. The screen will now show the Mode and respective ink numbers for your Screen - make a note of them.
6. If the message "THIS IS A SPECTRUM SCREEN" appears then the screen will NOT be able to be printed by Colourdump 3. you can save the screen if you wish. If not just replace the Master disc and press N to return to the menu.
7. Insert the disc you want the converted file to be saved on to. The program will save the same filename but with an SCR extension.
8. You now have a converted screen which can be used by Colourdump 3.

PLEASE NOTE: due to the way Multiface saves its screens the conversion may not be 100% successful.

THE EXPLANATION - ADVANCED ART STUDIO FILES

Before you start to use ColourDump 3 to print your Advanced Art Studio files, you need to be aware of a couple of points. When saving pictures you should ensure that the PALETTE option on the FILE MENU is selected.

This is because ColourDump 3 automatically reads in the palette file and the screen file, which makes the whole printing process much more straightforward for you. It assumes that the filename will be the same except for the suffixes, which must be .PAL and .SCR. As these are the suffixes automatically used by the Advanced Art Studio when the PALETTE option on the file menu is used, this should provide no problems.

If you are unsure if you have used this, insert your data disc and catalogue it by typing CAT and pressing RETURN. If you have saved a file called PICTURE there should be two files on your disc, one called PICTURE.SCR, the other called PICTURE.PAL. If you only have the .SCR file, you will need to refer to the part of manual covering use with 'standard' screens.

You can use the compressed option on Advanced Art Studio if you wish to save disc space. Colourdump 3 will automatically detect the compressed file and will decompress it (in memory) before printing.

THE EXPLANATION - STANDARD SCREEN FILES

WHAT IS A STANDARD SCREEN FILE?

A standard screen file is a binary file, containing raw data pixel by pixel, identifying which INK each pixel was set to. For the technically minded, this raw data is stored in memory at location &C000(hex), and is &4000(hex) bytes long. The file is therefore 17k in size.

ColourDump 3 will take any standard screen file and allow you to print it out in colour. The first problem is that the 'standard' file does not include details of which colours were used when the file was saved. Each ink can be set to any one of the Amstrad's 27 colours, but the standard file does not tell you what they were at the time the file was saved, so it is a bit like 'painting by numbers' without the colour guide, or palette. The next problem is where to obtain these 'standard' screens.

If you use the BASIC programming language to draw your own screens, whether it is for graphs or anything else, you can add a line to your program to save the screen. The line should read;

```
SAVE "FILENAME",B,&C000,4000
```

where filename is the name you wish to use. As you wrote the program (you did, didn't you?), you will know what colours you set the palette to and can read these off.

They can be saved from The Advanced Art Studio, by ensuring the COMPRESSED option from the file menu is NOT used. To match the colours to be printed with those used on the screen, you need to go to the Palette screen on the Art Studio program, and write down the colours in each box from left to right. The colour guide on the disc drive of the CPC6128 has a list of colour numbers, and it is in the manual for other models. The leftmost box shows ink 0, and if this is red, the colour chart gives colour number 3, so Ink 0 is set to colour 3.

The next box is ink 1 and so it continues. What you need to end up with is a list showing ink 0, colour 3, ink 1 colour 14 etc. As you can see, this is very long-winded, so your best bet is to use the specific Advanced Art Studio routines!

The AMX Art program, originally distributed by AMS but now handled by Database Software, does not use 'standard' screen files, but has a utility program which will convert one of its own format files to a 'standard' screen file which is compatible.

A conversion routine is also included for screens saved with Romantic Robot's Multiface 'back-up' device. This saves the palette information within the file and is therefore not a standard screen format file until it is converted. One point to note is that many games screens nowadays are not in a 'proper' screen mode, as programmers have found ways of combining two modes on one screen. Whilst this is very useful for games, ColourDump 3 may not print these non-standard screens, even after conversion.

Some games, especially the older ones not so heavily protected, actually store their loading screen on disc in a standard format. The loader is sometimes an unprotected basic program, and information can be obtained from this as to the ink/colour combinations used so that you can print these out. If you can load and list the program, look for INK statements along the lines of INK 0,4 , INK 1,16 etc., which tell you ink 1 is set to colour 4, ink 1 to colour 16 and so on. The screen filename can be found by examining the LOAD statements. A screen is loaded in under basic by adding ,&C000 to the end of a LOAD "FILENAME" statement. The name in quotes is the screen file it will load. Cataloguing the disc by typing CAT and pressing RETURN will show the size of the files, so if FILENAME is 17k, it is very likely to be a standard screen file.

One example is Database Software's Fun School 1 programs. If you load and list the loading program called DISC.BAS you will be able to read off the colour combinations from the INK and look for a LOAD statement, which contains the loading screen filename BALLOONS.BIN.

Colour Dump 3 also has an unprotected loader from which you can see how the palette is set using the INK command, so that you can match the screen colours from the RAINBOW loading screen picture with their colour numbers on paper. If you load the file DISC.BAS and list it, you will see the INK statements setting the palette.

It is a good idea to do this now, as we will use this example in the next part and you can familiarise yourself with the way the inks are listed.

PRINTING THE STANDARD SCREEN FILES

To load the program simply type RUN"DISC and hit the return or enter key. After the loading screen appears, press A to run ColourDump 3 and after a few seconds you will be asked what mode the picture is in. The response here is either 0 for mode 0 or 1 for mode 1. We have included on your disc an example file called RAINBOW.SCR, which is in mode 0. To get you underway we will print this out, so answer 0.

You will be asked if you require a Large or Small print out. The small print out is about 13cm x 9cm, the large is about 22 x 15, and is printed sideways down the page. Press 'L' for large or 'S'.

If you have selected Large, you will also be given the option of Single or Double density. Double density gives a more 'solid' print quality but takes somewhat longer and uses more ribbon. Press 'S' for single or 'D' for double density.

cont.

After this you are given the chance to change these settings should you change your mind.

The next question asks if you wish to load previously saved INK combinations. More on this later, but for our example, answer N for no.

You are now confronted by a list of ink numbers and a column headed Colour Number. It is here that you enter details of which colours on screen should appear as which on paper.

Under AMSDOS it is possible to define up to sixteen inks with any one of the 27 colours available. To replicate the same colours on paper you should enter the Colour Number you used on screen, but should you wish to change to a completely different set of colours, now is the time to do it.

The list of colours used for our example file - Rainbow are as follows:

| | |
|---------|-----------|
| ink 0, | colour 26 |
| ink 1, | colour 0 |
| ink 2, | colour 6 |
| ink 3, | colour 2 |
| ink 4, | colour 1 |
| ink 5, | colour 24 |
| ink 6, | colour 20 |
| ink 7, | colour 8 |
| ink 8, | colour 10 |
| ink 9, | colour 12 |
| ink 10, | colour 15 |
| ink 11, | colour 16 |
| ink 12, | colour 18 |
| ink 13, | colour 7 |
| ink 14, | colour 11 |
| ink 15, | colour 3 |

After entering all the colour numbers, you will be asked if you wish to repeat the selections, and again you should answer yes or no. If you say yes, you will be able to go back through changing the ink/colour combinations. This time pressing return without entering a colour number leaves it unaltered, rather than replacing it with white.

Once you answer no, you will be asked if you want to save the INK combinations. This is useful if you would be printing this picture again later and is covered explained in the HINTS AND HELP section.

The next option is for a test print, which will show on screen 16 blocks of colour using the colours you have selected in the same order. They will then be printed out.

Now you are asked for the filename. This needs to be the full name, complete with any suffix, such as .BIN, .SCR etc. You will be prompted to insert the disc with your picture on it, and press any key to continue.

HINTS AND HELP

ADVANCED ART STUDIO

When saving files from the Advanced Art Studio, always ensure the PALETTE option on the FILE MENU is used, as this will mean you can always match the screen colours on paper. It also means you will be able to re-load and edit the picture at a later date without spending a long time trying to remember what colour everything was!

It is not important whether your picture is COMPRESSED or not, as the Advanced Art Studio routines automatically detect this and what screen mode was used when reading in the palette.

If you do not wish to print the picture using the saved palette, you will need to use the standard screen routines, so you must ensure that the COMPRESSED option is NOT used.

STANDARD SCREEN FILES

If you are going to be doing a lot of colour printing, we highly recommend buying the Advanced Art Studio. It is by far the best screen design program for the 6128s, but more importantly getting the results printed is much simpler. If you already have a number of screen files, these can be loaded into the Advanced Art Studio, where you can recreate the palette and save again complete and ready to load into ColourDump 3.

Should you decide against buying the Advanced Art Studio, you will need to become familiar with loading and saving INK/COLOUR combinations. Without this, each time you want to print your picture you will need to type in the full list of colours. We suggest that each time you load a new screen for printing, you set the colours and use the save option. The next time you come to print it, the combinations can be read in, simplifying the procedure somewhat.

