October 1989

Volume 4 Issue 10

AMIGAzette

$1.75

The *AMIGAzette* is the official publication on the Sacramento Amiga Computer Club.

The General Meeting Will Be On September 27th.

Founded 1986

SACC meets at the Pac Bell building at 2700 Watt Avenue. The meeting starts at 7:00 P.M. sharp.

UltraCard!!

Michael Lehman from Intuitive Technologies will be at this month's meeting to demo UltraCard, a much talked about program which resembles HyperCard on the Macintoshs. He has also hinted that he will bring a couple of software packages for a door prize and/or raffle! Thanks Michael!!

Newsletter Contents

LINES OF COMMUNICATION

by Linda Marquess

Are you satisfied with "off the shelf" software, or would you prefer to have something tailor-made to suit your needs? Michael Lehman from Intuitive Technologies is coming to the next general meeting to show us how easy and flexible his new product UltraCard, is. He'll also bring a package or two to give away at the meeting! I've heard a lot of questions about this new HyperCard clone. Now we can get the answers.

Upcoming events

The September 23rd *Super Library outing* is not only a good time to pick up the newest PD disks. Most of the SIG leaders will be on hand to answer questions about each group's activities. Come out to the Roseville Library and enjoy the company of other users.

Sign-ups have begun for the *Beginner's Class*. Explore the Amiga with people who can give you valuable tips and shortcuts. The class is scheduled November 4th from 10:00 AM to 3:00 PM at the Fair Oaks Library. Cost is $5.00.

Media attention

Tim Baltad picked up an *Amiga Format* magazine (published in the U.K.) and found that the SACC monthly disk was listed in their "Top Ten Public Domain" (number 5 on the list).

Your help is welcome

Have you always wanted to become more involved with the club, but were never sure quite where you could help? Don't be shy. Our busy board members would love to have your help. We are looking for someone to contact vendors and market our mailing list. Contact me if you are interested in helping out.

Se habla Amiga? Help others to learn your favorite program or assist in your area of expertise. Remember, you were new once, too. If you'd like to add your name to our list, sign up at a general meeting or contact me at 991-0415

AMIGO	PHONE	HOURS	HELP AREA
Walker Ayres	487-3202	noon-10PM	BASIC
Greg Pringle	452-7381	5:30-10PM	Hardware
John Warren	662-8754	9AM-3PM	Games/Carpool
Jack Cannon	722-7404	reas. hrs.	Dr. T's/Music
Dave Bloch	441-6816	eves/wknds	Video
Lindsey Fong	AmigaLink BBS (modem)		Anything
Brian Cox	488-3964	reas. hrs.	BASIC
Fred Sakai	488-4343	reas. hrs.	Desktop Publ.
Linda Marquess	991-0415	7PM-Midnight	CLI, Anything
Steve Goodrich	361-7566	6PM-10PM	Beginners, Maxiplan, Word Perfect CLI
Dan Kelly	383-9417	reas. hrs.	Telecom
John Zacharias	363-9153	eves+wknds	Desktop Publ..,Video
Jan Zacharias	363-9153		Video, Graphics
Ken Free	292-3151	before 10 PM	CLI, Utilities, General

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* beyond the first meg

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The AMIGA club librarian will be here

SATURDAY OCTOBER 28th

We always enjoy these special days.
Hearty Thanks to Matt for his efforts!

Bring your blank disks, demos, jokes, tall tales, etc.

Candy Computer
9744 Elk Grove - Florin Rd
Elk Grove, Ca 95624

(916)685-7247
(916)447-4445

Now taking orders on the above mentioned hardware - delivery dependent on availability

Ram@Home
by
Rob Super

DEMO-GRAPHICS

VOLCANO, CA -- Last month PBS broadcast a *Nova* episode, "The Strange Science of Chaos", that I found especially interesting for two reasons. One, it was the first "live" demonstration I've seen of some techniques I've read about and mentioned here from time to time, as in the series on 3D graphing that concludes below. Two, an Amiga was used prominently during a segment on mapping and understanding the dynamics of heart arrythmia.

Last time we talked about using a 3D modeling program to graph (map) large amounts of data. We used a disk based list of prime numbers as the data. (While the primes, unlike heart arrythmia, aren't a dynamic system, they nevertheless constitute a convenient body of mysterious data to experiment with.) We looked at the basic principles involved, then constructed a two-dimensional graph by using AmigaBASIC to write a script file that controlled a 3D modeling program. Having done the hard work, we'll take one simple step to add the third dimension, then show a few of the many different ways we could examine the same data.

If you look at August's program listing, you'll remember that lines 170-270 made up a loop that retrieved data from the file, converted it into the coordinates of a point to be graphed, wrote (to a script file that the 3D modeling program could use later) a text line describing the point, and then looped back for more data. Line 230, "dp3$=STR$(0)", represented the Z-axis (the third dimension): "dp3$" was always zero, we got a two-dimensional graph. Moving into the third dimension is just a matter of changing that line to reflect some additional aspect of the data. Such as what?

Well, our original graph plotted the prime numbers themselves (along the "X", or horizontal, axis) against the interval to the next higher prime (along the "Y", or vertical, axis). Is the general relationship between primes and their *preceding* intervals similar to the relationship, already graphed, to the *following* intervals? We could find out by using the Z axis to plot the intervals to the next *lower* prime. The variable "p1" holds the current prime number from our list. If we save the preceding prime number in a variable "p0", then "p1-p0" is the interval that precedes the current prime: the interval to the next lower prime. The program line for the Z-coordinate of any given data point is then "dp3$=STR$(2*(p1-p0))". As the value of "dp3$" changes from prime to prime the graph will build up in 3D space. (Remember, that "2*" is just a scaling multiplier we used to get the data points to make best use of the available space on this particular graph.)

The results of this operation are shown in Figures 1 and 2. These are two different views of the same graph. Both graphs were actually drawn by the 3D program--only the text was added later.

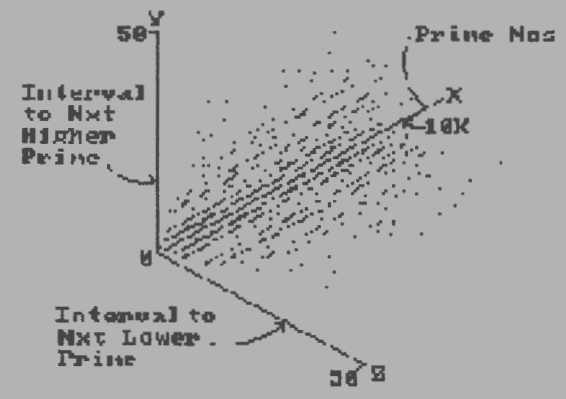


Fig. 1: Higher & Lower Intervals

Figure 1 is an isometric view showing all three axes enclosing the data points. There is obvious general symmetry about the X-axis. Since this is a three dimensional graph we can move around it.

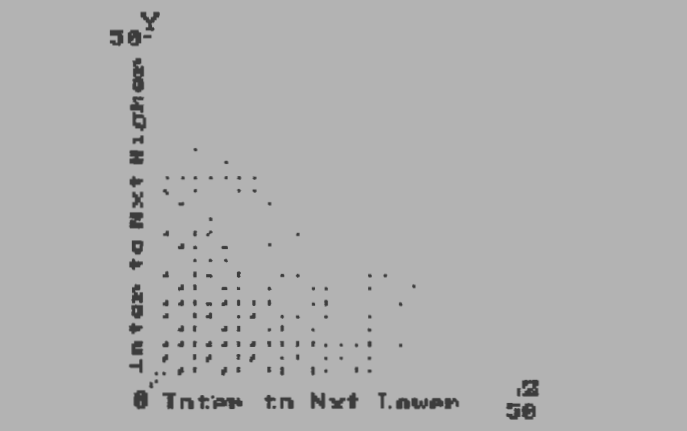


Fig. 2: Symmetry of Higher & Lower

Figure 2 is a straight-on shot of the Y-Z plane, looking right along the X-axis, and the symmetry of the upper and lower intervals is even more obvious here.

Figures 3 and 4 are two views of another kind of graph, one that has sometimes proved useful in the study of chaotic systems. Without going into the

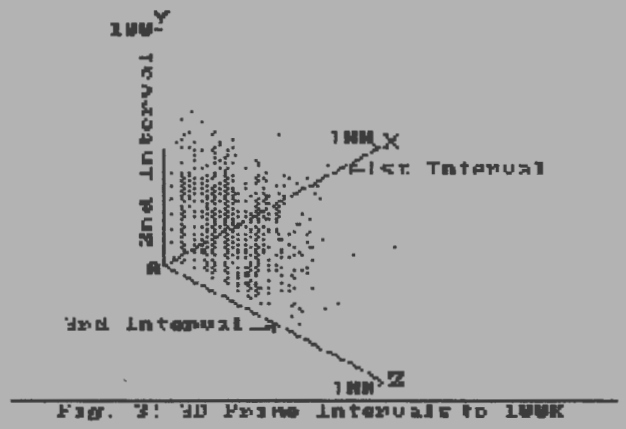


Fig. 3: 3D Prime Intervals to 100K

details, this graph uses the same data (the list of primes, this time up to 100,000), but creates a different kind of "space" by dealing with *only* the *intervals* between numbers. The first point is determined by using the interval between the first two primes as the x-coordinate, between the second and third primes as the Y-coordinate, and between the third and fourth primes as the Z-coordinate. The process is repeated, beginning with the next higher prime, for the next point, etc. Figure 3 is an isometric. The points fill the space between the axes in fairly regular fashion. Note that in this graph each

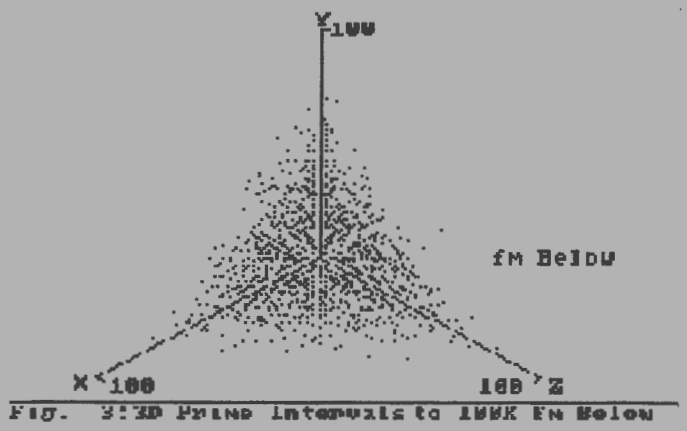


Fig. 3: 3D Prime Intervals to 100K fM Below

"point" may actually be several individual points in the same location: it is quite possible for the sequence of intervals "3,7,2", for example, to occur among any number of four-adjacent primes. Figure 4, taken from outside and below the same graph, gives a very different view of the distribution of points.

Finally, figure 5 is a much-enhanced version of the graph in Figures 3 and 4. The same general plotting technique was used, but this time primes up to only 10,000 were covered. A number of changes were made to hint at the variation possible when graphing with a modeling/rendering program. This version was rendered as solids rather than wireframe. To make the axes visible they were constructed as tubes, not lines, and, to simplify construction, were "joined" at the origin by a cube. The data points, too, have become cubes, and they have taken on some additional duties. Each cube is one of two colors, depending on whether or not the primes it relates to include "twin" primes--primes separated by only 2 (3 and 5, 17 and 19, etc.). Yellow cubes contain no twin primes, red ones do. (I hope this reads OK in gray scale: the original is in color.) Futhermore, the size of the red cubes varies according to whether they cover 1, 2 or 3 twin pairs. All of this was done automatically via a BASIC-constructed script that made all the decisions about placement, color and size. The only changes made to what popped out of the modeling program were the addition of text and palette changes to eliminate the color (sigh) and get a grayscale. I'll upload a color copy of this version to

the AmigaLink BBS as "PrimeSpace.arc" in the "Misfits" room. I'll also try animating a fly-by of the model, and if it works (and isn't too huge) I'll upload that to the "Animation" room at the same time.

That's it for this long, I hope not too windy, series. Something different next month. Thank you, Steve Riley, for the useful and interesting comments (August's newsletter) about the earlier prime-finding program. I knew "C" would be much faster, but that's ridiculous! (Though I suspect that eliminating the disk save was a major factor, so maybe we aren't comparing apples with apples.) AmigaBASIC has a *lot* of drawbacks (quite apart from the obvious fact that I have much to learn about such things as declaring variable types) but it's great advantage remains that all of us have it and many of us have at least some understanding of it!

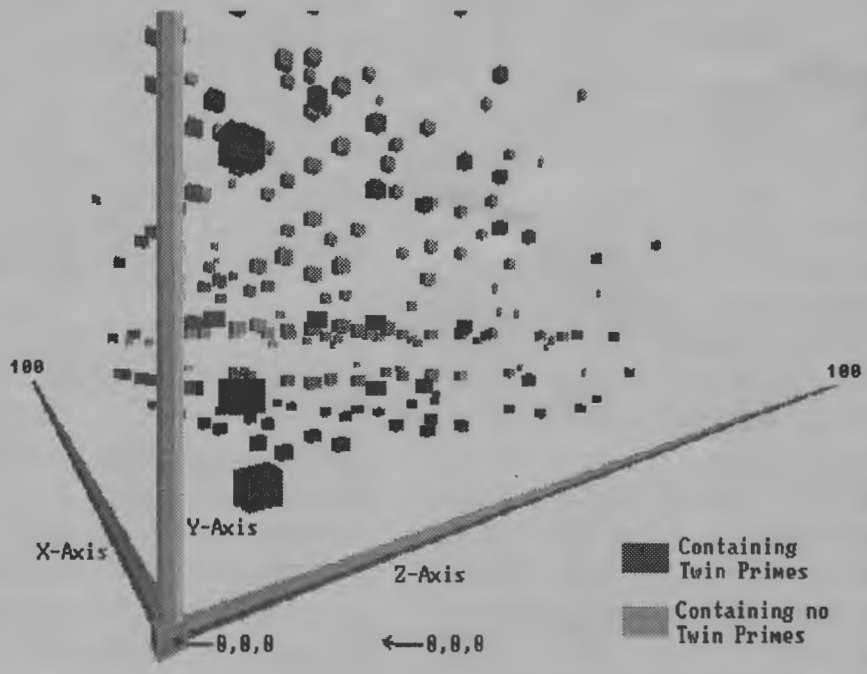
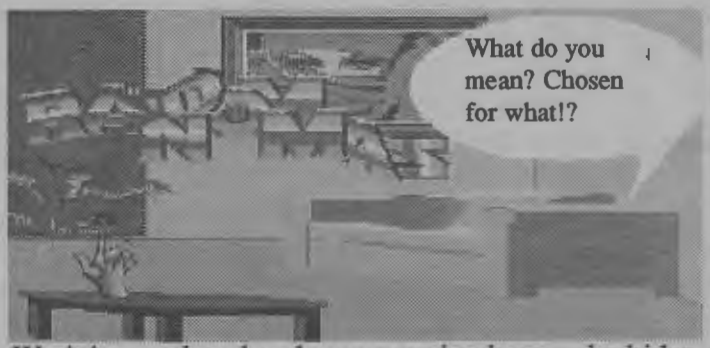
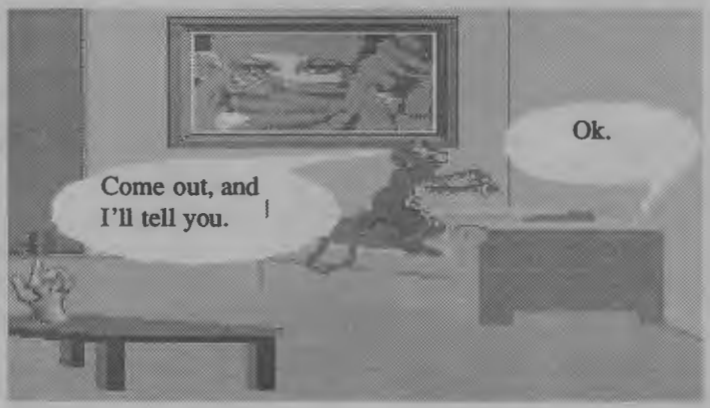
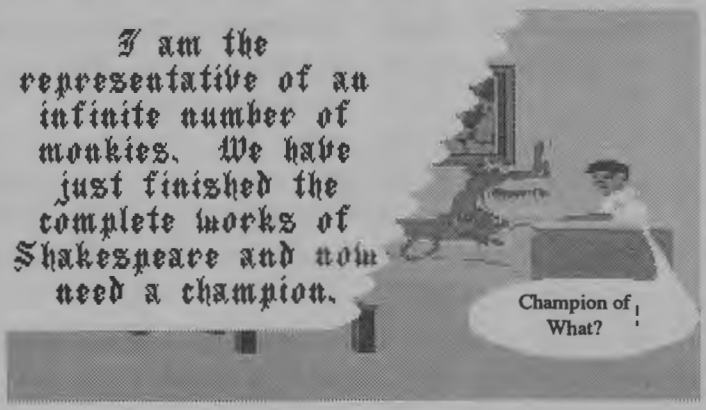


Fig. 5: 3D Prime Intervals with Twins Picked Out



We join our dazed and unsuspecting hero as he hides behind his couch.





By Ashley Greywolf

October

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4 Board Meeting	5 Newsletter Deadline	6	7
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15	16	17	18 GENERAL MEETING	19 3D SIG	20	21 Graphics SIG
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29	30	31				

Final Assault

Review
By
Steve Goodrich

Are you tired of all the shoot-em-up, violence oriented games? Final Assault, by Epyx, was suggested by my wife who is definitely not into the shoot-em-up scene and is equally turned-off by the Flying Simulations, Sports, and Adventure games. Being a full-time student and Mother does not allow her the luxury of spending the vast amounts of time required to master these types of programs and still maintain her GPA.

About the Game: The objective of this game is to climb to the top of any one of six European Mountains, within a set time limit and without getting killed. Sound easy? Lets throw in some variables. The mountains are the Alps and the routes are rated from easy to expert. You may climb as many as three mountains consecutively and may choose the season and the time of day you will begin climbing. You are allowed to choose the equipment you will carry with you, but if you take too much you will tire easily and may fall. Conversely, if you don't take something you need, you may die anyway.

If you are a complete novice to mountain climbing and unfamiliar with the equipment used, it is highly recommended you read the manual thoroughly before climbing. The manual explains what each piece of equipment is used for and when to use it. Also explained are the methods for scaling an ice wall and a sheer rock cliff as well as methods for resting and eating while situated in precarious locations.

During your climb, you will be faced with crevasses, collapsing ice bridges, ice cliffs, and sheer rock faces. You will also need to rest, eat, change from ice crampons to soft soled climbing shoes and back again, and perhaps even sleep while suspended on a sheer rock face or ice cliff. By the way, did I mention the easiest climb takes 8 hours. Fortunately, the program does not use a real-time clock.

Things I like: The manual is very good at explaining what everything does and how to traverse different situations. You can also actually learn a lot by utilizing a training mode which allows you to practice climbing and displays a message telling you what you did wrong after each mistake. The first time you experience beginners luck in what should have been a fatal fall, you receive this message: "You were lucky this time. Keep trying." As a beginner you get three chances before it's for keeps. On the intermediate course, you'll get two, and on a hard course, just one.

Things I don't like: In order to walk, you must move the joystick back and forth (right to left) and establish a rhythm. In order to climb, you must utilize both the joystick and the spacebar in a rhythmic sequence. Although possible to establish a rhythmic sequence, it is awkward and takes some getting used to. Climbing the rock cliff faces is also difficult and very repetitive. It is hard to find the proper cracks to place his hands and feet into; which makes for slow, tedious climbing. I personally just don't have the required patience for a long climb and it seems like the rock faces go on forever. Last, but not least in the repetitious category are the seemingly endless changes of climbing gear and the endless retrieval of your safety rope. As boring as the changes and retrievals are, I definitely would not recommend climbing without the proper gear or the safety rope. I might also add that the manual forgot to explain how you score points, although it is fairly obvious it is tied into how fast you accomplish your climb.

Overall, this program is better than I expected. But, since I was not expecting anything great, it almost had to be. The $32 price tag is a little hefty for this program, but if you can find it in the $15-$20 range, you might want to give it a try. It is a refreshing break from the shoot-em-ups.

AmigaLink Help!!
by
Lindsey Fong

This month I'll discuss downloading and uploading files and some of the more esoteric commands of Acropolis BBS software.

SELECTING FILES

In only after 6 months, we now have close to 90 megabytes of files so there are many files to choose from.
File transfers are only allowed in selected rooms on AmigaLink. The <K>nown-rooms command will list all of the rooms available to you. Those rooms which has a ']' at the end of it's name is capable of uploading and downloading files. Once you are in a directory room, the commands avaliable for viewing file listings are:

<.R>ead <D>irectory - To view the list of files by name and byte size.
<.R>ead <E>xtended -To view the list of files by name, byte size, and also a short description

When you ask for a directory listing of a room's files, Acropolis will ask you for the file specifications. All this is is a wild card in the MSDOS / CP/M format. If you don't know what a "wild card" is just press RETURN and all of the files will be displayed for you. With the use of wild cards you can shorten the number of files that the system displays for you. If you respond with:

File spec: *.TXT - You will only see the files that have an extension of TXT
File spec: A*.* - You will only see the files that begin with the letter A
File spec: SHOW*.* - You will only see files that begin with SHOW.

When viewing file listings, the <P>ause and <S>top commands are active.

DOWNLOADING/READING FILES

Once you have selected a file(s), you can:

<.R>ead <T>extfile <Filename> - To have the system type a text (ASCII) file to the screen. Those files typically have a .TXT extension.
<D>ownload <Filename> - To have the system send you a file using your default transfer protocol

If you would like to override your default download protocol without permanently changing it, with the <.E>nter <C>onfiguration command, use the extended version of the <D>ownload command:

<.D>ownload <X>modem <Filename>
<.D>ownload <1>K-Xmodem <Filename>
<.D>ownload <Y>modem <Filename>
<.D>ownload <W>Xmodem <Filename>
<.D>ownload <Z>modem <Filename>

The system will select either the Checksum or CRC method of XModem as your computer requests of it.
Note that you must enter the filename with exactly the same spelling as displayed to you, otherwise you will get "File not found". Once you enter a filename to download, tell your terminal program to start receiving the file using the selected protocol.
If for some reason you wish to abort the download, press the <Ctrl> and <X> keys for a while and you will get the room> prompt back. You will receive a *DOWNLOAD COMPLETED* from the system after the file has been successfully transferred.
If your terminal supports Ymodem or Zmodem, you can also perform batch downloads. When asked for the desired file to download, just enter the filenames separated with a semi-colon. By the time you read this, you should be able to enter up to 256 characters for batch downloads.

Uploading Files

If you wish to add a new file to AmigaLink to share with other members:
<U>pload <Filename> will receive a file using your default transfer protocol. Acropolis will not ask for a filename when uploading with Zmodem. Just send the file!
Since AmigaLink is running on an IBM compatible, you are restriced to a maximum of an 8 character filename and a 3 character file extension. This is especially important with Zmodem uploads, since Zmodem will extract the filename from the file that is being sent.
You can use other protocols by using the <.U>pload command:

<.U>pload <X>Modem <Filename>
<.U>pload <1>K-XModem <Filename>
<.U>pload <W>XModem <Filename>
<.U>pload <Y>Modem <Filename>
<.U>pload <Z>Modem <sendfile>

Zmodem and YModem also supports batch uploading. After the file is successfully uploaded, you will be prompted to enter a 40 character file description. Please enter a description that will be helpful to others. And thank you for uploading!

FILE SEARCHING

The <.F>ind-file command is very helpful for looking for a particular file(s). It is a very handy and powerful command to become familiar with. Note that you MUST be in a directory room, so if your current room> prompt is not a directory room, just <.G>oto a directory room before issuing the command.
You have the option for searching for files by either date or a text string (located in the filename AND file description), and the choice of searching in the current room only or in all directory rooms.
It's kinda difficult to describe, but very easy to master after you try it a couple of times. The system will prompt you for responses which are indicated in brackets < >.
<P>ause and <S>top are also active during the file search if you wish pause or abort the search.

ANSI COLOR

Acropolis BBS software now supports ANSI color without a noticable decrease in the speed.
To setup the system to use color, <.E>nter <D>isplay-configuration. The BBS will ask if you want to use a color display. Tell it <Y>es and if will tell you what graphics driver you are currently using and ask if you want to change it. If the name of the driver displayed isn't the one you want, reply <N>o when asked if that is the driver you wish to use.
You will be displayed a list of all the currently supported drivers. Select the one that you wish to use. You should be able to use the ANSI Color Driver or the Amiga Access ANSI Color Driver with the majority of ANSI supported Amiga terminal programs.
Assuming that you have selected the driver for your terminal, you will be shown the various color options available to you. The list includes the following:

[1] PROMPT color;
[2] DATE on messages color;
[3] Message MISC color;
[4] Message FROM color;
[5] Message TO color (E-Mail);
[6] Message TEXT color;
[7] MENU color (menu mode;
[8] YAK/LOGON alerts;
[9] Default (Y/N) color;
[10] Message COUNT color;
[11] Room HEADER (disclaimer);
[12] DIRECTORY ROOM color;
[13] Non-public room color;

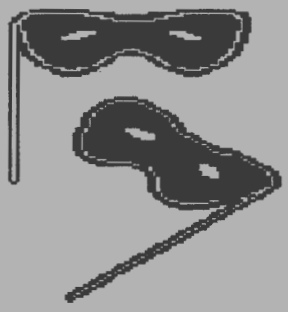
Each item on the list will be displayed in the color you have it set to currently. Type in the number of the item you wish to change, or simply press the RETURN key if you do not wish to change any of the colors. After selecting an item to color you will be shown a list of attributes that the driver you have selected will support. The following is an example for the ANSI color driver:

[1] Black
[2] Red
[3] Green
[4] Yellow
[5] Blue
[6] Magenta
[7] Cyan
[8] White

If one of the selections is blank that is because it is the color of your background. Select the number for the color that you want and press the RETURN key. For terminal programs which support user definable colors, such as Access!, you can simply change the colors to your own preferences. If you decide that you do not want to change the color simply press the RETURN key and no change will be made.
The system will loop through these two menus until you simply enter a RETURN when prompted to change color option. You will get your current room> prompt back.
If you later decide that you do not want color graphics, just use <.E>nter <D>isplay-configuration command and respond <N>o when asked if you want color graphics.

More in next month's issue.

Library News by Matthew Monsoor



I hope by now everyone is aware of the Super Library Outing taking place the 23rd of September at the Roseville Public Library, 225 Taylor Street starting at 11am and ending at 4pm. The telephone number of the library is 781-0221.

I call it a Super Outing in that I have invited all the SIG leaders (or chosen alternates) to perpetuate each individual SIG's goals and purpose; by presenting to members waiting for disks to be copied, what the SIG is all about.

It's now your chance to check out what each SIG is all about at one location! I also hope to have completed an update to the SACC Library Data Disk by the outing. This in no way will be an complete Data base since "Amazing Computing" has such a complete listing, but you will know what disks we do have in OUR Library!

Some notes about some new additions to the library:

1) We have Fred Fish disks up to 234.
2) We have added to the ClubLib collection demos of SimCity, M2Sprint and Elan Performer(2 disks).
3) We have FAUG disks 1-88, 93, 98, 99 and 102.
4) We have AMUSE 40-44.

Also an animation by Marc Baggs and animal pictures taken by Lindsey Fong.

And now for October!!!! The next Library Outing will be the Saturday after the AmiEXPO in Santa Clara...YES the AmiEXPO will be October 20-22 at the Santa Clara Convention Center (Pre-Registration deadline is October 6th). That makes our next Library outing the 28th of October at Candy Computers 9744 Elk Grove-Florin Rd in Elk Grove. (phones 685-7247, 447-4445).

I need support for the Library Outings by everyone, come and join us and support the stores in the Sacramento area that support you and the club by allowing us space in their Stores. Presently I rotate between four stores ComputerTime, The Computer Shop, Put's Electronics and Candy Computers!

Lastly, I plan to not have a Library Outing this December so you have three more outings before the end of the year!

BBS Numbers

AMIGALink, SACC Official Bullentin Board
(916)447-3842 or (916)447-3843 or (916)991-8553 or (916)682-8872 or (916)682-8874
Sysop: Lindsey Fong

AMIGALINK II, Genisis
(916)689-2705
Sysop: Dan Kelly

Other Local Bulletin Boards:

AMIGA Express
(916)635-5749 6PM - 11PM ONLY

Another BBS
(916)725-2639 1200/2400 24Hrs.
Sysop: Andy Wood

Another AMIGA BBS
(916)682-1740 3/12/2400 24 Hrs.

The Computer Chapel
(916)641-2400 1200/2400 24Hrs.
Sysop: Pete Howard

Bear's Byte
(916)722-7423 300/1200 24 Hrs.
Sysop: Woodie Bear

Nebula-2
(916)351-6482 1200/2400
5PM - 8PM Weekdays 24Hrs. WeekendsOnly
Sysop: Bob Parwee

The Out of
(916)369-7560 300/1200 24Hrs.
Sysop: Shetani

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Deadlines

All commercial ads and user articles can be uploaded to **SACC BBS** at **447-3842** or **991-8553.** The deadline for articles and space reservations for the November edition of ***AMIGAzette*** is

October 5th.

Commercial Ad Sizes/Prices

1/4 Page	3.5"x 5"	$15.00
1/2 Page Vertical	3.5"x 10"	$25.00
1/2 Page Horizontal	7.5"x 5"	$25.00
Full Page	7.5"x 10"	$45.00
3/4 Page on Back	7.5"x 8"	$45.00

If you have any questions about placing an ad; please call the Editor. Full payment should accompany your order made payable to **SACC.** Unless otherwise arranged, your ad and payment should be sent to:

Amigazette Editor
Sacramento Amiga Computer Club
P.O. Box 19784
Sacramento, Ca 95819-0784

This newsletter is printed as a service to members of the Sacramento Amiga Computer Club and is paid for using the dues of each member. Several stores are given copies of the Amigazette to be given to prospective and new Amiga owners in hopes of enlisting a new member to SACC. In addition SACC is now selling a combination pack of the club's Disk-of-the-month and this newsletter for non-members that may be interested in the club.

SACC Elected Officials

President:	Linda Marquess	991-0415
Vice President:	Robert Du Gaue	383-7966
Secretary:	Brian Cox	488-3964
Treasurer:	Mark Palmer	781-2604

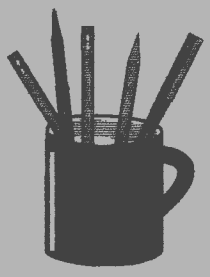
Board of Directors

Dave Wingfield	349-2231
Lindsey Fong	682-8872
Fred Sakai	488-4343
Dave Bandimere	292-3769

Appointed Chairpersons

AMIGAzette Editor	Robert Du Gaue	383-7966
SIG Coordinator	Pete Marquess	991-0415
Asst. SIG Coord.	Brian Cox	488-3964
Librarian	Matthew Monsoor	983-6054
Advertising Coord.	Mark Baggs	923-0124
New Member Coord.	Brian Cox	488-3964
Sargent of Arms	Kevin Sparks	

AMIGAzette Contributers



Photographer	Fred Sakai
Advertising:	Mark Baggs
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Contributing Writers:	Linda Marquess Rob Super Pete Marquess Steve Goodrich Lindsey Fong Matthew Monsoor

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