

NEWS DIGEST

Focusing on the TI99/4A Home Computer

Volume 15, Number 1

January/February, 1996

PRINT POST Approved - PP244099/00016



Sydney, New South Wales, Australia

\$3

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TiSHUG News Digest

ISSN 0819-1984

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Membership and Subscriptions

Annual Family Dues \$35.00
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Overseas Surface Dues A\$50.00

TiSHUG Sydney Meeting

The February Meeting will start at 2.0 pm on the 3rd February 1996 at Meadowbank Primary School, Thistle Street, Meadowbank.

Printed by

Kwik Kopy West Ryde

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OBITUARY NOTICE

It is with great sadness we report the loss of Gordon Smith, one of our long standing dedicated TI member. Our deepest sympathy is extended to his wife, family and friends at this sad times. He will also be sadly missed by his close friends from the TI club.

EDITORS COMMENTS

Welcome to 1996, we at the Editorial wish you all a very prosperous and adventurous year. Now mark your calendar for our next meeting, you never know what exciting event may happen.

Christmas 1995 has gone, the new year has bounced, in place of the old. But now comes the recovery, repaying bankcard and other timepaying schemes. Trying to lose these extra few pounds, why do we try and out do ourselves?

Buying these exquisite presents for our loved ones, buying so much food and eating leftovers for days. But this is the one time of the year that our imagination's run rampant.

How many of us have received something for our computers?

The world of computers is advancing at a very fast rate. For computers not only just do record keeping, calculating, etc. You can actually watch Television via a computer. You can listen to your favourite CD's with the same quality that would put our old HI FI to shame. The other day I read in a radio magazine that you can now dial a card into your computer to receive Radio Signals (5MHz - 1.3GHz) AM, FM, NFM, WFM, and SSB. How that is good! If you're interested in radio, you could listen to Shortwave, Aircraft, Police, Military, Amateur radio operators and of course your normal radio stations. These things are being done from the humble Computer. I envisage that in the near future the computer will be used as our family entertainment centre. Imagine when instead of watching TV. You don a special visor and you could be sparring with a computer generated image, or sitting on a kitchen chair, racing a super motorcycle around one of the world's famous tracks.

All members I'm proud to say that we are a part of this exciting new era in computer technology.

We will see you all at the next meeting.

END OF ARTICLE 

MAIL TO : EDITOR

MAIL FROM : ADVANCED

SENT ON Monday 27/11/95 at 12:23:39

It was just telling Ross the club should dedicate a working Texas Instruments computer to the Touch Type package and encourage people to learn to type as there are not enough users on TEXPAC. Those worried about getting hold of MODEMS with the Austel number might like to know that I got this AVTEK at the price of \$99. One has to shop at various POs. One ought to let Exhibition Services of Australia know that TISHUG is a User Group and might want to buy IBM compatible's and software and then see if we can all get

free admission to PC shows. It works for the PCUG group, the thing is worth looking into. Some sort of deal with PCUG might enable us to share a stand at an EXPO. So having launched off about both systems, let me add some points for the users of both systems.

I only use 5 inch diskettes and incidentally these will fit both computer drive systems, I don't know about the formatting, but scratch diskettes can be reformatted and recycled. Monitors are monitors and printers are printers but not all parameters are the same. If you use an IBM and you only have 5 inch drives the thing to do is to put the working programs into boot disks and use support disks to load utilities, and it is possible to put half of CONFIG.SYS and all of the AUTOEXEC.BAT onto a support disk, then change the disk in B: drive for your data.

I have looked around for the complete all purpose desk top publication program which can be afforded. The best general purpose one seems to be Deskmate from Tandy. Before you let this program start have a lot of batch files that enable you to send printer codes to the printer that you can pull up from the DOS environment. You might want to use 8 lines per inch space to save paper, also to make graphics characters link up. The file to send this to the printer would name a short text file containing the codes and send them to the printer. Various things can be constructed using the DRAW facility and then pasted into the TEXT facility, which is very nice indeed as they can be moved and resized in th

MAIL FROM : ADVANCED

SENT ON Monday 27/11/95 at 12:43:04

I just had to log on again because somebody else was sending garbage characters up the line, I wonder how many times this annoys other users? I sent them a nice long control-G (beeeeeep!) and then switched the MODEM off. Well, I think I had got to the point where in TANDY DESKMATE which is cheap software you don't have to pinch or scrounge or register, it works right out of the box and comes with a licence, the Text facility can handle text you have saved with other wordprocessors. The idea is to use some other wordprocessor to set up and justify the text, then load into DESKMATE text. Before you load you should have saved a format giving it a name such as BIGPAGE for the number of columns and length and so on. I find 96 columns by 84 lines is the most you can reasonably read on an 11 inch form and gives the spacing for IBM GRAPHICS CHARACTERS to meet and form boxes, not dotted vertical lines, and then you load your pictures from the DRAW facility after you have saved the TEXT format you want plus any text in it you want to combine with pictures. Between each block of picture you can put a command to change the colour of the graphic which means provided the things you want to print are more or less in layers wonders can be performed. You can successively paste layers of various graphics one on top of another down the page, making a green tree with an orange trunk or giving Santa a red hat, purple face, yellow beard, or whatever. As I was trying to type when all the noise came onto the line, you can preset the printer to do 8 lines an inch by using AUTOEXEC.BAT to initialise it or have lots of little batch

files that print various commands to the printer, consisting of short text files of codes, the thing you find frustrating about DESKMATE apart from the CENTER button they never programmed developing it, is the problem that you cannot change the printer codes to get various linespaces and colours and things, the solution is to access them through the RUN option in the file menu, just remember their names or write yourself a short manual. I had thought I had mastered the screen environment until I tried to change the colour parameters in a nice shareware MODEM program that is really easy to use only to find that weird things happened when I put in ANSISYS parameters. The clue was that the program had been compiled from some archaic version of BASIC and the codes for colour parameters were different from the ANSISYS code so the complete user will have to write himself (or herself) a short manual on colour codes. The writing of one's own manual sooner or later becomes a part of a user's life. BASIC and ANSISYS equivalents to set screen colours are one thing in it. Now what have I left out? Data diskettes can be formatted to 420 k instead of 360 k, so the clue is to put the program and half of your CONFIG.SYS files on the 360 Boot Disk and have all the other utilities on the support disk, which you swap for a 420 k data diskette when things are loaded. Your AUTOEXEC.BAT file prints a special text file, COLOUR, which contains the codes to give pink lettering on a pale blue screen, or yellow on red, or whatever you fancy, the screen does not have to be like a blackboard, get out the manual and look up the ANSISYS codes for example [31;44m will put red text on a blue background, follow TYPE REDBLUE (the name you give [31;44m) with the command cls so that the whole screen clears the colour you want.

Back to the Texas Instrument machine, the peculiar advantage of using a Cassette Recorder is you can put voice prompts onto the tape and hear your own lovely voice coming out of the television set when you load the program! If you want to use a VCR it is obviously possible to program your own speech into something by putting it through a tape recorder and the computer to the VCR, so while some wonderful graphic that represents you, say an animation sequence, of something from PARSEC, or Buck Rogers, is being recorded on the VCR you can be adding deathless prose such as... While I, the last survivor of Praxis III which was conquered by the Velan Empire, was making my escape, I encountered....now witness the heroic action which ensued, ...the narrative could cover graphics from a lot of different modules, think up what play you want to present and stop the VCR WHILE YOU CHANGE MODULES. It seems to me that many users have failed to learn that the Cassette Port of the Texas Instruments machine can be used this way. There must be players other than myself who have exceeded 200,000 in Munchman or 2,000,000 in Parsec. It might just be possible to have a VCR KEEP ALL THE MOVES IN YOUR PRIZE WINNING GAME. It takes about 90 minutes to get to 200,000 in Munchman and to reach 2,000,000 in Parsec could fill a three-hour VCR tape. The trick is to pause the frame as the commentator comes on with his sports narrative. The commentary tape plays loudly into the Cassette Port and hence goes into the TV set and onto the VCR TAPE.

Teachers could put graphics and speech together on the TV set this way. Maybe there are some of you that think the only way to get a voice into the computer is to use the speech synthesiser and never realised that a microphone and a Cassette Recorder could do the job. A comment on Cassette Recorders; I have previously noted that the best results are often done with the cheapest machine. Well, there is an exception. Repeated use of the tape will get it wrapped around the capstan on a cheap machine. You need a \$100 machine from Tandy when they sell it at \$50 on special. These tape recorders give excellent computer upload, will handle data as well as programs, and don't get hungry for your favourite and irreplaceable tapes!

Don't forget to clean your connections. Some RPG and cotton buds work for most problems with cartridges. I am probably repeating myself, but the club should have touch-type ready for members to use, also there is an IBM equivalent called TYPEQUICK so users of this system can write their own deathless prose into the magazine. For example one of my

SO THIS

PROCRASTINATION THIEF OF TIME
 SUBMITTING THEE IS VERY CRIME
 WHAT IS FORGOT OR NOT PROPOSED
 (ELSE CONSTERNATION DUTY'S CLIME)
 CLAIM NOT AS BEING INDISPOSED
 DELIBERATION GUARD THE TIME!
 AND WHEN IN LIFE'S LONG UPHILL CLIMB
 THE BUSY MAN WOULD SNATCH THE TIME
 SOLUTION'S RUSE
 TO SNARE
 A MUSE!
 BUT SEARCH THE STOCK OF PRESENT THINGS,
 IMAGINATION SET WITH WINGS,
 CLIMB ONWARDS UPWARDS UNTO JOY,
 CLAIM VICTORY AS A MERRY TOY!
 IN PUNCTUAL ACTION GOOD EMPLOY.
 SO MOTE IT BE.

END OF ARTICLE 



FROM : ASHLEY

SENT ON Friday 08/12/95 at 23:53:15

Hey fellas what is going on out there? This BBS is a great way of keeping in touch with each other. Why is no one using it? I seldom get a chance to go to a meeting these days. I live a bit far away. How about leaving a note or two from the local meetings so those of us who are unable to get there?

Regards, Ashley

TI-99/4A RGB Interface Revisited

Which is the best?

by Lou Amadio

I was talking to Eric Ockenden at the December meeting about the various TI console to RGB monitor interfaces that have been proposed over the years. Apparently Eric has built them all and said that he was in a position to advise on which was the best. Of all the designs that he tried, including one from TI, Eric liked a hybrid that he made using a Peter Schubert design, described in the May 1988 TND, but using the Geoff Trott sync separator from the RGB design in the Feb 1990 TND.

Eric made me curious, so I convinced Geoff that we should look into it during the Christmas break. We used the console introductory screen for all of the comparisons.

First we looked at the colours produced with an 80 column card which uses the TMS9958 video chip. This chip produces sharp characters with brilliant colours, particularly in the reds. White, however, we thought had just the slightest trace of red in it. On measuring the R,G and B levels, we found that the R drive out of the chip was 50% higher than the other colours.

Next we tried Eric's hybrid design. Setting up proved to be particularly awkward as we had six pots to adjust. What was worse, there was some interaction between the pots and it was possible to cause some colours to saturate. Adjustment was difficult, even using a CRO. Geoff reminded me that it was the complexity of this circuit that prompted him to design his RGB interface in the first place! The final result was good, but not as good as that produced by the 80 column card.

Finally we tried Geoff's own design (Feb 1990). When set up as per the original article (2.76 volts at the base of the G-Y amplifier) the image was sharp, but colour saturation was a little low, particularly in the reds. Geoff said that the colour levels in his design were based on the specification in the TMS9929 manual. We then changed the output resistors from 330 ohms to 220 ohms for blue and green and to 150 ohms for the red. This brought the B and G to R colour ratio in line with that from the 80 column card (1:1.5). The results were more pleasing with respect to colour saturation and the image sharpness was just as good as before.

All in all then, the February 1990 RGB design by GWT was found to be the best for standard consoles and can be made even better with the small modifications described above. My thanks to Eric Ockenden for supplying the PCB and overlay used in this comparison.

EPROM RAMdisk Update

by Lou Amadio and Geoff Trott

I recently built another EPROM RAMdisk for my PEB from a kit supplied from the TIsHUG club shop. I opted for 512Kb RAM using 32Kb SRAM chips and made provision for a further 512Kb of EPROM file storage for a total of 1 Mb. The purpose of this note is to report on a modification devised by Geoff whereby we were able to avoid using any 74LS08 chips when setting up for EPROM storage.

Ordinarily, when adding EPROMS to a large RAMdisk, up to three 74LS08 chips are stacked over the U10 site on the PCB. Geoff was able to avoid using any 74LS08 chips provided that the RAM part of the RAMdisk used up all the outputs of U2A with 16 RAM chips (512Kb). We modified the wiring around the stacked 74LS154 chips at the U2 site as indicated below. The modification resulted in a neater final product which is much simpler to construct.

Modified Wiring for EPROM RAMdisk

Disregard any wiring associated with the 74LS08 chips as none are required. Ensure that a second 74LS154 (U2B) is in place. U2B is soldered on top of U2A and pins 12 and 24 are connected as per original HRD+ article. Do not solder pins 19 to 23 of U2A to 19 to 23 of U2B.

Connect pin 27 of each EPROM to pin 10 of U9A (pin 23 of U2A).

Connect pin 20 of each EPROM to pins 1 to 8 of U2B, in pin number order.

Connect pin 28 of each EPROM to +5 volts such as pin 24 of U2A, U2B.

Connect pin 18 of U2A to pin 15 of U20C

Connect pin 19 of U2A to pin 19 of U2B

Connect pin 20 of U2A to pin 21 of U2B

Connect pin 21 of U2A to pin 22 of U2B

Connect pin 22 of U2A to pin 23 of U2B

Connect pin 23 of U2A to pin 10 of U9A

Connect pin 18 of U2B to pin 14 of U20C

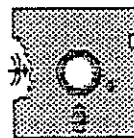
Connect pin 23 of U2A to pin 03 of U2

Connect pin 22 of U2B to pin 06 of U2

Connect pin 23 of U2B to pin 04 of U2

Connect pin 20 of U2B to ground

Note: Do not use pull up resistors on pin 20 of any of the EPROMS.



DISK BUG

END OF ARTICLE

TISHUG SOFTWARE FILE

February 1996

By Larry Saunders

December 1995

By Larry Saunders

Diskname AT152

Used= 357 Free= 1

TI-Artist Instances.

BEAR_I	37 d 80	CARD_I	42 d 80
CAROLS_I	34 d 80	COUPLE_I	67 d 80
CUPID_I	52 d 80	KLF_I	30 d 80
FLAG_I	49 d 80	FWORKS_I	46 d 80

Diskname AT153

Used= 346 Free= 12

TI-Artist Instances.

ANGEL_I	26 d 80	FROSTY_I	36 d 80
PRTRGI_I	26 d 80	PRTRG2_I	46 d 80
SNOWMAN_I	34 d 80	STOCKING_I	28 d 80
TREE_I	42 d 80	TRIKELF_I	41 d 80
VALEN_I	37 d 80	WINDOW_I	30 d 80

Diskname P154

Used= 337 Free= 21

Page Pro Christmas Pictures.

STOCKING	12 I 13	TREE	16 I 13
TRIKELF	16 I 13	WISEMAN	40 I 13
WREATH1	18 I 13	WREATH2	49 I 13
WREATH3	64 I 13	XBKAR	14 I 13
XBKLLS2	30 I 13	XBKLLS3	38 I 13
XBIRD	13 I 13	XMASTREE1	3 I 13
XMASTREE2	12 I 13	XMOUSE	12 I 13

Diskname P155

Used= 357 Free= 1

Page Pro Christmas Pictures.

ANGEL	13 I 13	CANDLE1	2 I 13
CANDLE2	7 I 13	CANDLE3	2 I 13
CAROLS	13 I 13	CENTERPCE	27 I 13
ELF	12 I 13	FROSTY	16 I 13
HOLCHERR	12 I 13	MRRYXMAS	6 I 13
ORNAMENT	13 I 13	PARTRIDGE1	27 I 13
PARTRIDGE2	58 I 13	POINSETTAS	17 I 13
REINDEER	14 I 13	SANTA1	13 I 13
SANTA2	15 I 13	SANTA3	12 I 13
SLEIGH	21 I 13	SNOWFLAKE1	4 I 13
SNOWFLAKE2	3 I 13	SNOWFLAKE3	3 I 13
STNICK	36 I 13	WINDOW	11 I 13

February 1996
By Larry Saunders

Diskname 156
Used 358 Free= 0
Page Pro Pictures

JEFFERSON	26 I 13	LADYFLAG	18 I 13
LANTERN	8 I 13	LBRELL	4 I 13
LINCOLN1	22 I 13	LINCOLN2	27 I 13
LIONS	9 I 13	MADEINUSA	5 I 13
MADEINUSA2	4 I 13	MARTIAN	49 I 13
METS	10 I 13	MRMAGOO	23 I 13
PICARD	44 I 13	PINKLLA	16 I 13
REDSOX	8 I 13	RELEE1	34 I 13
RELEE2	28 I 13	SHIKLD	8 I 13
SOLDIER	3 I 13	SOLDIER2	12 I 13

Diskname P157

Used= 351 Free= 7

Page Pro Pictures

SAILOR	7 I 13	SOLDIER3	34 I 13
STAMP1	22 I 13	STAMP2	41 I 13
STAMP3	22 I 13	SWAN	47 I 13
TROLLEY	28 I 13	USREAL	32 I 13
WASHINGTON	26 I 13	WHEELBARRW	24 I 13
XGARFIELD1	15 I 13	XGARFIELD2	16 I 13
XGARFIELD3	18 I 13	XGARFIELD4	19 I 13

Diskname P158

Used= 346 Free= 12

Page Pro Pictures

LOCKER	99 I 13	OWL1	21 I 13
S&A	73 I 13	SCHLHOUSE	68 I 13
SCIENCE	85 I 13		

Diskname P159

Used= 335 Free= 23

Page Pro Pictures

ENTERPRISE	36 I 13	EPLURIBUS	20 I 13
F14	67 I 13	PIPE&DRUM2	5 I 13
FLAG	7 I 13	FLAGCANNON	14 I 13
FLAGRAISER	14 I 13	FRANKLIN	28 I 13
GRANT	19 I 13	HENDRIX	32 I 13
HHOUSE	25 I 13	HORSESHOE	16 I 13
JACKSON	26 I 13	JEFFDAVIS	26 I 13

END OF ARTICLE 

HELP LINE

"USERS SUPPORT COLUMN"

We hope to be able to HELP anyone with problems, with programs, utilities, etc. In this column We are asking for those with answers to these problems to WRITE, RING or LEAVE a message on the BBS for the EDITOR, or SPEAK to me or any other Director of TISHUG.

The answers printed in this column are not the be all to end all, just answers merely to help each other with tried and used methods.

Question NO.1 *I am using Word 6.0 with Windows 3.1 When I call up a picture to incorporate with my text sometimes it works sometimes it doesn't, is this just me the operator, or is there a proper procedure to follow when editing text. The letter that I was using was the same letter just different days.*

Answer: I don't know what the real problem is but I will have some answers for you next month. (ED. Answer)

Question NO.2 *With my TI. System am I able to have the Peripheral expansion box sitting up on one side, without doing damage to the disk drives.*

Answer: I have seen these boxes on there sides and running. Could somebody help with an of answer (ED). whether this does do damage to the disk drives

END OF ARTICLE

FOR SALE

TOSHIBA T1100 LAPTOP WITH BUILT IN MODEM AND SINGLE 3 1/2 720K DRIVE (IBM XT) NO HARD DRIVE GOOD FOR BBS WORK AND CGA MONOCROME SCREEN.

\$50 .PLEASE RING JOHN ON 018 291674

TISHUG SOFTWARE TIPS FILE

By Larry Saunders

FEBRUARY 1996

Subject TI-Artist FONTS section.

Using TI-Artist FONTS. When In Edit mode you will notice on the far right side `MNC`.

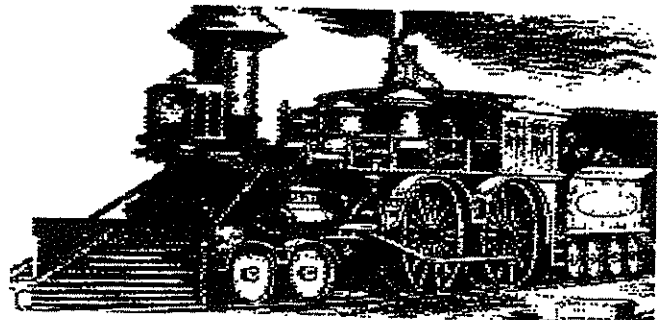
If you leave it as-is you get EG1. (standed font).

The `N` can be changed to `Y` and you get the effects of examples EG2 to EG4.

The third character is `C` CENTER, it can be changed to `L` LEFT or `R` RIGHT, examples EG5 and EG6.

EG1.	NNC
EG2.	YNC
EG3.	YYC
EG4.	NYC
EG5.	NNL
EG6.	NNR

END OF ARTICLE



Wanted To Buy

Black TI-99/4A Console

Must be in excellent condition

Contact Lou Amadio on 042-284906

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	THUR	FRI	SAT	SUN	MON	TUE	WED	THUR	FRI	SAT	SUN	MON	TUE	W																			
February 1996	1	2	3 TISHUG Meeting Sydney	4	5	6	7	8	9	10 TND deadline	11	12	13																				
March 1996		1	2 TISHUG Meeting Sydney	3	4	5	6	7	8	9	10	11	12																				
April 1996	MON 1 School Holidays	TUE 2 School Holidays	WED 3 School Holidays	THUR 4 School Holidays	5 Good Friday	6 TISHUG Meeting Sydney	7 School Holidays	8 Easter Monday	9 School Holidays	10 School Holidays	11 School Holidays	12 School Holidays	13 TND deadline	14	15	16	17																
May 1996		1	2	3	4 TISHUG Meeting Sydney	5	6	7	8	9	10	11 TND deadline	12	13	14	15	16	17															
June 1996						1 TISHUG Meeting Sydney	2	3	4	5	6	7	8	9	10 Queens Birthday	11	12	13	14	15	16	17											
July 1996	MON 1 School Holidays	TUE 2 School Holidays	WED 3 School Holidays	THUR 4 School Holidays	FRI 5 School Holidays	6 TISHUG Meeting Sydney	7 School Holidays	8 School Holidays	9 School Holidays	10 School Holidays	11 School Holidays	12 School Holidays	13 TND deadline	14	15	16	17	18															
August 1996				1	2	3 TISHUG Meeting Sydney	4	5 Bank Holiday	6	7	8	9	10	11	12	13	14	15	16	17	18												
September 1996	SUN 1	MON 2	TUE 3	WED 4	5	6	7 TISHUG Meeting Sydney	8	9	10	11	12	13	14 TND deadline	15	16	17	18	19	20													
October 1996		1 School Holidays	2 School Holidays	3 School Holidays	4 School Holidays	5 TISHUG Meeting Sydney	6 School Holidays	7 Labour Day	8 School Holidays	9 School Holidays	10 School Holidays	11 School Holidays	12 TND deadline	13	14	15	16	17	18	19	20												
November 1996					1	2 TISHUG Meeting Sydney	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20									
December 1996	SUN 1	MON 2	TUE 3	WED 4	THUR 5	6	7 TISHUG Meeting Sydney	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
January 1997			1 New Years Day	2 School Holidays	3 School Holidays	4 School Holidays	5 School Holidays	6 School Holidays	7 School Holidays	8 School Holidays	9 School Holidays	10 School Holidays	11 TND deadline	12 School Holidays	13 School Holidays	14 School Holidays	15 School Holiday	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

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18	20	21 Magazine Pasteup	22	23	24	25 Anzac Day	26	27	28	29	30					
17	18	19 Magazine Pasteup	20	21	22	23	24	25	26	27	28	29	30	31		
14	15 TND deadline	16	17	18	19	20	21	22	23 Magazine Pasteup	24	25	26	27	28	29	30
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18	19	20 Magazine Pasteup	21	22	23	24	25	26	27	28	29	30	31			
15	16 TND deadline	17	18	19	20	21	22	23	24 Magazine Pasteup	25	26	27	28	29	30	
20	21	22	23	24	25 Christmas Day	26 Boxing Day	27 School Holidays	28 School Holidays	29 School Holidays	30 School Holidays	31 New Years Eve					
17	18	19 Magazine Pasteup	20	21	22	23	24	25	26 Australia Day	27	28	29	30	31		
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Illawarra TI-99/4A User

Group History

by Geoff Trott

I cannot remember who told me about the Illawarra TI99/4A users group or even when. It must have been early 1984 when I went to my first meeting, one night at Shop 4 in Corrimal. I can remember being quite excited about going and feeling a bit out of it all as so many people were there who seemed to have at least a passing acquaintance with each other. I can also remember thinking that there were a lot of people who needed help of the most basic kind. Bob Montgomery was the leader of the group and was doing his usual excellent job of trying to educate the masses and entertain them at the same time. Everyone was friendly and so I kept going back.

My introduction to the TI99/4 computer started in early 1983 or late 1982 (I think). We were looking for a computer to provide stimulation for our son, who was a slow learner. I thought that a computer which was colourful, noisy and interactive could be good for him. We had seen the TI99/4 demonstrated in Nock and Kirby's and liked what it appeared to offer. We spent a day in Sydney looking at what Apple and Tandy had to offer and decided to buy the TI99/4. It was sold by Canberra Television Services at that time, whose main business was renting TV sets. The deal consisted of the console and a TV which had been modified to take composite video of the NTSC kind. This was our first colour TV, and it could do double duty as TV and monitor, but only had a VHF tuner. I still have the TV and have added a UHF tuner. It gave an excellent picture with the console, better even than the TI monitor that TisHUG uses. There was no modulator required.

In 1983 we went for a trip overseas and I saw the TI99/4A in a shop in London. When we returned home, the TI99/4 developed a VDP memory fault and so I decided to trade it in for a TI99/4A and buy a PEBox with disk drive at the same time. That was expensive. It was then that I decided to go to the user group to see what it was like and ended up hooked. After a few meetings and getting to know some of the regulars, I became more involved. I started to produce the newsletter and to give talks on Assembler Language. I guess I should confess that I am well trained in computer hardware and software, having to teach it at the University of Wollongong. I eventually joined the Sydney group and can remember many exciting Saturdays going up to the church near King's Cross in Bob Montgomery's yellow van with Lou and picking Rolf up half way up the hill under the bridge. I even took the whole family and the expanded computer system up to Sydney for an all day tutorial. What a day that was!

Meanwhile the Illawarra Users Group had to find a new meeting place as Shop 4 had moved to town and into smaller premises. We went first to St. John's church hall in Figtree for a few years. That was hard to find the first time, but was a great venue with lots of room. Then we

moved to Keiraville Primary School for a few years, with sometimes the key being mislaid and so trying out Phil Thomson's house instead. Now, the small group meets in my home, in the 'cellar'. Please do not all come back at once! We do not have much room in amongst all the TI99/4A parts! I remember some great Christmas parties over the years, and it shows that if you have a group of people who enjoy doing something in common, it is quite hard to give it all up.

END OF ARTICLE 

10 Year Reunion - Illawarra

TI-99/4A

Users Group - November 1995

The reunion of the Illawarra

TI-99/4A Users Group held on Tuesday the 14th of November 1995 was very successful. Some of those present were original members from the beginnings of the club (1984) which met at Shop 4 Computers of Corrimal. War stories were swapped all night until well after midnight. It was nice to see some of the members who live further away such as Tony Bell, Bob Relyea and Chris McCarthy. I was also nice to see some old friends again. Everyone agreed that this was a great club. Perhaps we should get together again some day not 10 years from now.

Lou Amadio

Present

Homero Torres	Bob Relyea
Geoff Trott	Tony Bell
Rolf Schreiber	Karel Kuit
Bob Montgomery	Harl Davis
Chris McCarthy	George Meldrum
Neil Williams	Phil Thomson
Graeme Lock Lee	Lou Amadio

Apologies:

John Mazziari
Fred Sirriani
Barbara Atkins
Michael Ball
John Meldrum

END OF ARTICLE 

Editorial for the Illawarra

TI-99/4A

User group reunion held in November 1995

by Lou Amadio

Welcome back to the Illawarra Users Group for the TI-99/4A home computer. 1995 is a vintage year for the TI-99, having been the focus of this group since 1983. I must apologise for missing out on the last few meetings (since 1990 I believe) but here we are.

The idea for this get together struck me one day when I was cleaning out the garage, a monumental battle that I face up to every now and then. I came across an old expansion system that someone left at my doorstep one dark night. The unwanted orphan was left in the garage under a pile of boxes until that clean up day many months (years?) later.

I connected up the system and switched on the monitor, PE box and console. To my surprise, everything worked as it should. Curiosity got the better of me and I started to look through the old software and spent some time remembering the fun that I had with the old TI.

Out came the old newsletters and it was soon full steam into the past. The TI for me will always be remembered as a special experience. I was my first computer, and a great one at that.

It did not take us long to realise that it was far ahead of its peers. I am not sure whether it was the fact that it was an orphan computer, but it captured the imagination of thousands of enthusiastic users world wide. The development of hardware and software, both professional and through the user groups, was unprecedented. We were able to communicate with users world wide who were more than willing to help some one that they never met, but had a common interest in the TI-99/4A.

The Illawarra User Group had its beginnings in a little computer shop down an obscure lane in the middle of the Corrimal shopping centre. It was the fourth shop along - hence the name "Shop 4 Computers". The shop was managed by Barbara Atkins and Ruby Jackson. Barbara offered the shop as a meeting place for the user group. More than 90% of those who attended those first meetings were new to computers. We were surrounded by amateurs, including ourselves!

It did not take long for the level of attendance to outgrow the small shop premises at Corrimal. The next meeting place was at St Mathews Church Hall in Mangerton.

Bob Montgomery was a very important member of the group in those days, organising meetings and running BASIC tutorials. He was an inspiration to all who attended. Other members who made significant contributions to the club were Geoff Trott for his amazing hardware and assembly programming expertise. Geoff invented, amongst other things, a device to test and diagnose faults in what was otherwise a dead console. This gave us the capability to repair our own consoles and reduced our dependence on the dwindling TI customer service department. Rolf Schreiber will be remembered

for his original thinking and hacking ability. Rolf was also a source of programmes, having perhaps the largest collection in Auhis understanding of the intricacies of commercial software. George gave cassette users the power of disk based systems.

Although computers have advanced more than tenfold in power over the old TI, none will ever be able to instil the level of camaraderie and self help that the TI did to its owners.

Have we come to the end of an era? The king is not dead. Long live the king.

END OF ARTICLE 

Rolf Schreiber and The Early Years of The Illawarra TI-99/4A User Group

by Lou Amadio and Geoff Trott

Due to unforeseen problems, Rolf was unable to write this article about his memories of the User Group. We will attempt the impossible and delve into his mind to reveal all that happened in the early years. Rolf met us at one of the early meetings at Shop 4, Corrimal. He was one of the first to put up his hand to be on the committee, with Bob Montgomery, and was always one to try and answer anyone's questions. It was Rolf's first brush with computers and he was eager to learn all about them and pass his knowledge on to everyone else. He has been a collector all his life and started his collection of software and hardware immediately. He was willing to take a gamble on any new item and be among the first to have one. Then, of course, when the price dropped, we heard the complaints! (Who bought a 500 Mbyte hard drive for the same price as a 1 Gbyte hard drive two months later?)

Rolf was the one who urged the formation of the libraries for the club, with both the book library and the cassette library at first with a module library and a disk library coming later. Rolf was very good at sourcing items for the library being constantly on the lookout for new books and anything else that could be used at a good price. This included disk drives, batteries, etc.

Rolf was also challenged by commercial software that could not be copied. He spent hours, no days, trying to find out how they did it and in the process learned so many things about how the system worked, which he then passed on to us all. Anything we wanted to know about, we would ask Rolf. He also got all of us, especially George Meldrum, involved in his ideas, which meant that more was accomplished. How often we saw where one of

the ideas Rolf had pursued was published by someone else in the USA, after the event. He was also good at writing to people overseas and getting useful information from them.

Rolf had his own unique way of setting up his system and wanted ways to make it easier to use. He had a selectable DSK1 to allow loading from a choice of different type drives, and one monitor servicing the TI99/4A or the Geneve. He even forgot how to connect up the monitor at one stage!

Rolf ended up with an enormous amount of TI99/4A equipment. He had every type of disk controller card, several systems running simultaneously, a room full of floppy disks including a complete set of Plato Courseware disks, a Geneve, and pristine copies of all documentation he could buy or copy.

Rolf is a good club member who involves himself in both the computing and social side of the activities. He is currently still interested in the friends he made in the TI99/4A club but is doing most of his computing on a PC.

END OF ARTICLE 

The Early Years of the Illawarra TI

User Group

by George Meldrum

The old Microbee computer just lacked that bit of zing. A new TI-99/4A with sprites and colour gave life to gameplay. The Microbee club had little in software and charged a lot whereas the local TI group were free with sharing the good stuff and had an enthusiastic bunch to boot.

Barbara and Ruby (Shop 4 Computers) shared their shop for meetings. Bob was the front man with good insight to music but computer (hardware) illiterate - later successfully made his computer sing. Rolf produced an epidemic type of enthusiasm towards the TI and could source out anything required in software or hardware. Lou made great advances in hardware ad-ons with Geoff's guiding hand. Many others took part and the club advanced the enthusiasm to learn about computers.

My most nostalgic thoughts of the TI group and the TI computer would have to be the people and the cassette tape. Some of my most enjoyable times in computing were during pirating of software.

Now I have an Amiga as a second orphan computer. The only thing we can be sure of is that all computers will become an orphan at some stage of their lives!

END OF ARTICLE 

Clocking The Groms

by Lou Amadio
Illawarra Regional Group

During the Christmas break Geoff Trott and I carried out an interesting experiment at the Wollongong University. We wanted to see how far we could push the GROM clock in frequency before the console refused to work. Amongst other things, we were hoping to show some improvement in speed with TI BASIC / XBASIC and GROM modules.

TI conveniently provided a link on the motherboard for isolating the clock line to the system GROMS. We lifted this link and injected a clock signal from an external signal generator.

The specification for the GROM clock frequency is approximately 440 kHz to 480 kHz. The console that we were experimenting with had a clock rate of 448 kHz - ie at the lower end of the range.

The experiment was carried out by switching the console off, adjusting the frequency on the generator and then switching the console back on again. We were amazed to find that we could reliably run the GROMS at up to three times their normal speed (1.3 Mhz). There was no abnormal overheating of any chips on the motherboard and the console ran quite happily at the maximum GROM clock speed. The only peculiarity that we noticed was a change in pitch in the reset tone.

Did it make any difference to the speed of the console? In a word, no. We ran a BASIC program which changed the screen colours and carried out some mathematical calculations but the results with and without the clock modification were very similar.

The bottleneck in speed must therefore be in a different area. We welcome any ideas on this subject.

END OF ARTICLE 





The IBM SHOP

with Cyril Bohlsen

20mB Conner HDD IDE	\$ 25.00
5.25" 1.2 mb FDD S/H	\$ 30.00
3.5" Disk storage box	\$ 10.00
5.25" Disk storage box	\$ 10.00
Parallel printer cable	\$ 5.00
Serial printer cable	\$ 5.00
3 Button mouse	\$ 14.00
Mouse pad	\$ 1.50
Power splitter cables	\$ 6.00
3.5" power adaptor cable	\$ 6.00
Mouse adaptors 25M to 9F/M	\$ 5.00
Mouse adaptor 25F/M to 9M	\$ 5.00
Keyboard 101 key	\$ 30.00
486 mother boards 256k cache S/H	\$ 45.00
Josstick "Blastick" (IBM)	\$ 20.00
CPU fan & heat sink	\$ 8.00
Sound card "Thunder Board" 8it	\$ 15.00
Telerom CD (Aust. phone book	\$ 15.00

1mb Simm 30 pin 70ns with Parity	\$ 55.00
256k Simm 30 pin with Parity	\$ 20.00

HP DESKJET PORTABLE PRINTER \$ 250.00

For any IBM components, please phone for prices and availability.

NOTE : All prices listed are at time of printing, and may change at any time. Prices do not cover posting and packaging.

For current pricing of items not listed please contact Cyril Bohlsen at the general meetings or Phone (02) 639 5847

TREASURER'S REPORT

by Cyril Bohlsen

Income for previous month \$ 6313.10
 Expenditure for previous month \$ 2804.88
 Profit for previous month \$ 3508.22
 Membership accounted for \$ 115.00 of income
 Shop sales \$ 6189.10 of income
 The expenditure was made up of the following :-

Administration \$ 219.83
 Printing and posting of TND \$ 0.00
 Shop purchases \$ 2572.58

The reason for this hefty profit for the month was made up from sales of IBM Computers and components plus outstanding debts to the club being paid.

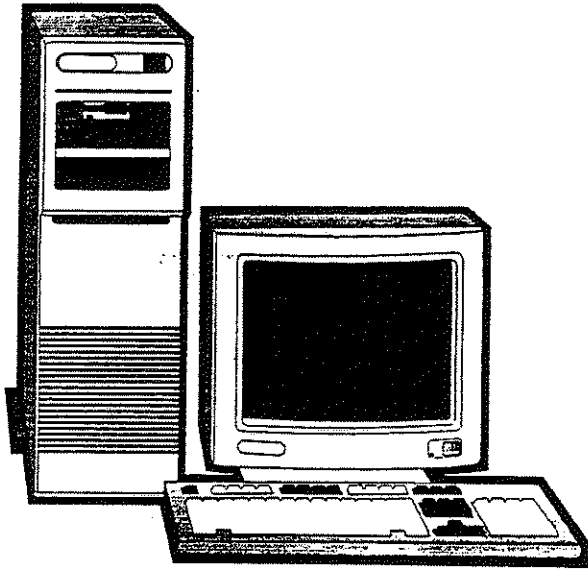
END OF ARTICLE

For Sale

TI PEB	\$50
TI RS232	\$25
TI DCC	\$25
250K RAMdisk	\$75
360K FDD (2)	\$10 ea
EA module	\$15
TI XBASIC	\$10
DM2 module	\$4
Multiplan	\$15
TEII module	\$8
TOD module	\$8
TIW module	\$4

Contact Lou on 042-284906

TECH TIPS



Speeding up a 486

Late last year, I decided to upgrade my 386DX/33 to a 486DX2/66, so I purchased a brand new 486-VL green PC motherboard, along with an Intel 486DX2/66 Overdrive chip installed. With the help of my friend, we assembled the new system.

After everything was in place, we turned the system on and it worked perfectly. One thing that we didn't expect was that the BIOS detected a DX2/80. Therefore we changed the clock jumper setting to 40MHz (which is labelled as 33MHz in the manual), and then it detected a DX2/66.

We ran Norton Sysinfo 8.0 to check the speed, and it gave me a reading of 144.1 at a clock speed of 66MHz. We also ran the Landmark speed test version 2.0, and it gave a reading of 220MHz, which is the typical speed of a 486DX2/66.

We then changed the jumper to DX2/80 mode, since everything worked

perfectly on that setting before, and the speed from the Norton speed test increased to 172.3, and the Landmark result increased to 288MHz — identical to an AMD 486DX2/80 CPU. I ran a couple of programs to verify this, like the game Doom2, and there was a noticeable speed difference, as the game ran much smoother.

I left it on this setting for a week, and it worked perfectly. Nothing froze up. Why does an Intel 486DX2/66 run at 80MHz, and is this safe to do?

Justin Chan

Running a processor at higher than its rated clock speed, commonly known as 'overclocking', has been a popular pastime since well before the first IBM PC appeared. But it became a lot more accessible to those without the confidence to use a soldering iron, when motherboard designers started to make boards which could accommodate the AMD versions of the 386, and later, the 486, as well as the Intel parts.

The AMD chip's top speed was 40MHz,

while the Intel part only ran at 33MHz. So some enthusiasts tried to run the Intel chip at the higher speed, and by and large, they found that the chip ran fine at the higher speed. The same applied to the 486DX2 chips, except that as clock doublers, the speed jumped from 66 to 80MHz.

As to whether this is safe, that's a question that you'll have to decide for yourself.

The main factor that limits the speed of a CPU, like any electronic circuit, is the capacitance present. Capacitance limits the speed at which a circuit can operate, because it stores electrical charge, which has to be moved about the chip whenever a zero changes to a one, or back again. This capacitance is a constant, and by increasing the speed at which the chip operates, you increase the risk that the voltages in the chip won't have enough time to stabilise at their correct levels by the time the next clock cycle starts. This doesn't harm the chip, but you eventually reach the point where the chip will start to produce erroneous results, or cease to operate altogether.

Also, running a chip at a higher clock speed will, all other things being equal, produce more heat. This is because heat build-up in chips comes almost exclusively when some signal in the chip changes state — from high to low, or vice versa. The faster the chip runs, the more state changes occur within a given time, and the more heat is produced.

I haven't heard of any cases where overclocking has actually damaged a processor, but that doesn't mean that it hasn't happened. The people who have damaged chips in this way probably don't want to admit it in public. Those who are game enough to do this tend to

increase the cooling on the chip (say, by adding a fan where there was only a heatsink before), but this is no guarantee that the extra heat output won't do some internal damage before it's able to be removed by the cooling system.

There are tolerances built into the chip design, to ensure a respectable yield from the manufacturing process. By overclocking, you push the chip's operation into this 'safety zone', and eventually either the speed itself, or the extra heat, will cause the chip to stop operating correctly. The speed at which this happens for a particular chip depends on its electrical characteristics. The manufacturing process includes the testing of each chip, to make sure that it will operate at its specified speed.

In short, it is possible to run a CPU at higher than its rated speed. But whether this can be considered 'safe' depends on the level of risk you are prepared to take.

Bear in mind also that those benchmarks you have used to compare the performance of the chip at the two speeds are low-level processor benchmarks, which take no account of other components in the system, and their affect on overall system speed. Whatever speed you run the processor at, the disk drive, video controller and system RAM are all still running at the same speed, and so the 20-odd percent jump in clock speed will manifest itself as a much smaller improvement in overall speed, perhaps as little as a few percent, depending on your application mix. Probably not worth the risk for such a small increase in performance.

CD-ROM errors

A few months ago, I installed a SB 16 Discovery Pack, which had to be the easiest multimedia upgrade I have ever done (hats off to Creative Labs), and purchased every magazine I could find with a CD on the cover to play with, as well as the applications that were bundled with the card itself, including Groliers Encyclopaedia.

Three months of flawless operation ensued, until some of these 'cover disks'

would not read correctly. By this I mean that I could log the drive, but could only see the root directory or I could move to a sub directory only to see it empty. Very strange. I put this down to these cover disks being of less than favourable quality, as my other CDs were not affected. That was until Groliers became unstable and would not load the main graphical menu screen, instead coming up with an error message: 'Incorrect Picture Format'. I forgot to mention that one of the disks looked as though the cat just sharpened its claws on it, thanks to my ankle biters.

I received my new copy of Groliers and reloaded and ran it, and guess what? It did it again! This was the first time that I ever felt like I wanted to hurt my friend Mr Computer, so I thought it best if I relax and listen to some soothing music on my billion dollar hi-fi CD Player. I put the CD in the drawer and waited for it to scan the tracks, and waited, and waited, until it gave up and stopped. It did this a few times until I thought I could faintly hear the theme from Twilight Zone in the background.

Being a bit of a fiddler I took the lid off of the thing and could not believe the dust inside including a lot on the laser lens. Being a bit of a photographer as well, I whipped out my trusty lens brush and cleaned the tiny little lens and hey presto! Now attention focused again on my CD-ROM drive.

This proved to be more involved than the audio player, but after much sweat and tears I had it back together and the Groliers icon in my face. I double clicked and it worked! I opened and closed it a few times just to make me feel warm inside.

A week later the family went on its weekly pilgrimage to buy a little food for lots of money, when I stumbled into Target and into the sound section of the store, there on the shelf amongst other weird cleaning devices for tape recorders and CD disks was a CD player cleaner! Titled 'High Performance Compact Disc Laser Lens Cleaner' made by Musicway for \$19.95, it quickly became mine.

I opened the package, and turned the

disc over to reveal a little line of brush hairs about mid way into the disc. I loaded the disk into the CD-ROM drive and followed the instructions, as it was not intended to be used for this purpose I was a little hesitant, but pushed on anyway. I loaded the CD music player and on playing the first track, I was presented with an introduction that explained the reason that the disk existed and then instructed me to jump to track 5 after hearing a tone. I did this, and then a voice said that drive cleaning was complete.

What it did was scan the disk to track five and made the brush hairs pass over the lens grabbing any rubbish with it. After removing and inspecting the little brush I was amazed to see so much dust collected.

Memmaker and the video monochrome region

My first DOS 6.x and Windows marriage was DOS 6.0 and Windows 3.1. I soon discovered Memmaker and immediately started to play with the custom set-up selecting 'Scan Upper Aggressively' which gave me an enormous amount of usable memory, then I chose 'Use Monochrome Region' and after running Mem I had even more UMB memory. This was great until I ran Windows.

Windows started in its usual way, with the RLE intro screen, then just a black screen, and a text message telling me to add an exclude line somewhere! I grabbed my thick dusty Windows tome and read that there was a fix file called monoumb.386 and instructions on how to configure this. I tried and tried but gave up.

We're in the present now and I have DOS 6.2 and WFWG 3.11 at the wheel and I'm feeling bored and lucky all at the same time so I go looking for this monoumb.386 file in Windows and I cannot find it. I said to myself, 'that's strange, they must have noticed that it was impossible to do in 3.11 so why bother in 3.11'. Feeling totally dumb I ran Memmaker again and selected 'Use Monochrome Region'.

END OF ARTICLE 

REGIONAL GROUP REPORTS

Meeting Summary For FEBRUARY

Central Coast	10/02/96	Saratoga
Glebe	08/02/96	Glebe
Hunter Valley	11/02	18/02/96
Illawarra	06/02/96	Keiraville
Liverpool	09/02/96	Yagoona West
Sutherland	16/02/96	Jannali

CENTRAL COAST Regional Group

Regular meetings are normally held on the second Saturday of each month, 6.30pm at the home of John Goulton, 34 Mimosa Ave., Saratoga, (043) 69 3990. Contact Russell Welham (043)92 4000.

GLEBE Regional Group

Regular meetings are normally on the Thursday evening following the first Saturday of the month, at 8pm at 43 Boyce Street, Glebe. Contact Mike Slattery, (02) 692 8162.

HUNTER VALLEY Regional Group

The Meetings are usually held on the second or third Sunday of each month at members homes starting at 3pm. Check the location with Geoff Phillips by leaving a message on (049) 428 617. Please note that the previous phone number (049)428176 is now used exclusively by the ZZAP BBS which also has TI support. Geoff.

ILLAWARRA Regional Group

Regular meetings are normally held on the first Tuesday of each month after the TISHUG Sydney meeting at 7.30pm, at the home of Geoff Trott, 20 Robsons Road, Keiraville. A variety of investigations take place at our meetings, including Word Processing, Spreadsheets and hardware repairs. Contact Geoff Trott on (042)296629 for more information.

LIVERPOOL Regional Group*

Regular meeting date is the Friday following the TISHUG Sydney meeting at 7.30 pm. Contact Larry Saunders (02) 644-7377 (home), After 10.30 PM or at work (02)708 1987 Liquorland YAGOONA for more information.

*** ALL WELCOME ***

9th JANUARY 1996 : MY PLACE

Bye for now Larry.

Liverpool Regional Co-Ordinator

SUTHERLAND Regional Group

Regular meetings are held on the third Friday of each month at the home of Peter Young, 51 Jannali Avenue, Jannali at 7.30pm. Peter Young.

TISHUG in Sydney

Monthly meetings start promptly at 2pm on the first Saturday of the month. They are held at the MEADOWBANK PRIMARY SCHOOL, on the corner of Thistle Street and Belmore Street, Meadowbank. Regular items include news from the directors, the publications library, the shop, and demonstrations of monthly software.

FEBRUARY MEETING - 3rd FEBRUARY

MARCH MEETING - 2nd MARCH

The cut-off dates for submitting articles to the Editor for the TND via the BBS or otherwise are:

10th FEBRUARY FOR MARCH magazine

These dates are all Saturdays and there is no guarantee that they will make the magazine unless they are uploaded by 6:00 pm, at the latest. Longer articles should be to hand well before the above dates to ensure there is time to edit them.